

# *The Loon*

SPRING 1993

VOLUME 65 – NUMBER 1



**The Loon**, Minnesota's magazine of birds, is published four times each year by the **Minnesota Ornithologists' Union**, the statewide bird club. Permanent address: J. F. Bell Museum of Natural History, 10 Church Street SE, University of Minnesota, Minneapolis, Minnesota 55455-0104. Anyone interested in birds may join. Any organization with similar aims may affiliate. All members receive our two publications: *The Loon* and the **MOUthpiece**.

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Terry Savaloja on Attu, 1985. Photo by Mark Lockwood.

## In Memoriam Terry Savaloja 1954-1992

Steve and Jo Blanich

The Minnesota Ornithologists' Union lost one of its most active and respected field birders with the death of Terry Savaloja on 25 June 1992, at his home in Minneapolis.

One of the most dominant forces in Minnesota and national birding, Terry ranked among the top five birders in Minnesota by the M.O.U. and nationally by the American Birding Association. He had observed 372 species in Minnesota and 792 species in North America (ABA area). Active in nu-  
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merous ornithological groups, he authored and co-authored articles for various publications, including many "Notes of Interest" for *The Loon*, was a seasonal report compiler and served on the Minnesota Ornithological Records Committee. He was a charter member of the Bee-Nay-She Council Bird Club, serving as president in 1977 and 1978. For many years, he led tours for several groups, including M.O.U. Weekends, Wings, Inc., and Attour of Chicago. His ability and knowledge made him well known in

the birding community.

Born in Wadena, Minnesota, on 27 May 1954, he grew up and went to school in Deerwood and Crosby, Minnesota. We first knew Terry as a very young teenager and found that he had an exceptional awareness of his total environment and an avid interest in birds. When he was not in the field birding and identifying nesting species and migrants, he was reading all available literature on bird identification and habits, resulting in the location of previously unknown birding hotspots in Minnesota.

Graduating from Crosby-Ironton High School, he enrolled in the travel program at Brainerd Area Vocational Technical Institute, with an eye toward combining his quest for birds with access to a means of getting to various locales.

Terry was the first to find breeding Yellow Rails in Aitkin County, which resulted in thousands of birders being able to add one of the most wanted and elusive species to their state and life lists. He also found nesting Sharp-tailed Sparrow, Connecticut Warbler, and Yellow-bellied Flycatcher in Aitkin County, plus first records for other species locally and statewide, such as Eurasian Wigeon, Red Phalarope, Little Gull, Yellow-billed Loon, nesting Solitary Sandpiper, and the first documented invasion of

Black-backed and Three-toed Woodpeckers. The first Green Sandpiper sighting in North America was made by Terry on Attu in 1978.

Terry, along with Kim Eckert, spent days and nights in northern Minnesota in the spring of 1978, attempting to find nesting Boreal Owls following an invasion of the owls during the previous winter. Their effort was rewarded when Terry found a Boreal Owl in a tree cavity on 6 May on the Gunflint Trail. This was to become the first nesting record for Boreal Owls in Minnesota. The documentation of the nesting and subsequent fledging of the five young owls is a special chapter in Minnesota birding history.

In January 1984, Terry was called to identify a bird coming to a feeder in Owatonna. He found it to be Minnesota's first Brambling and birders from all over the country came here to see this most unusual bird.

Terry received the 1992 Thomas Sadler Roberts Award for outstanding contributions to Minnesota ornithology, the highest honor awarded by the M.O.U.

A Terry Savaloja Memorial Award Endowment Fund has been established with an M.O.U. standing committee for administration and maintenance of the award and account. HC 61, Box 46D-3, Deerwood, MN 56444.

## Bird Surveys in Minnesota's Northwestern State Parks

Abby N. Powell

The 1992 State Park Bird Survey (SPBS) was initiated as a pilot project to evaluate the feasibility of conducting animal inventories in all of Minnesota's state parks (Powell 1993). These inventories complement the Minnesota County Biological Survey (MCBS), which focuses on remnants of natural plant communities (Stucker 1992). Baseline information such as animal inventories provides information necessary for effective management plans and interpretive programs

within Minnesota's state parks. Baseline data on park fauna is invaluable for comparing population trends not only within the parks, but also on a regional, national, and global basis.

The need for baseline data on bird populations is particularly timely due to the recent steady decline of neotropical migrants and loss of habitat in Minnesota and other regions (Coffin & Pfannmuller 1988, Wilcove 1988, Terborgh 1989, Sauer & Droege 1992). State parks often represent

isolated areas of natural vegetation surrounded by a variety of land uses and may act as important refuges for Minnesota's flora and fauna. In the case of birds, state parks may serve as critical nesting or wintering habitat and important stop-over sites during migration. Four state parks in northwestern Minnesota were chosen for this pilot study. Old Mill, Lake Bronson, and Hayes Lake State Parks are located in counties concurrently surveyed by MCBS in 1991 and 1992. Zippel Bay State Park was added to the survey because of its consideration by park resource managers as part of the northwestern region.

### Study Areas and Methods

Old Mill State Park is located in Marshall County, is small in size (287 acres), and surrounded by agricultural land uses. The park is a remnant of oak woodlands located along the Middle River. Small areas of native prairie are currently being restored in the park. In addition, the park has small patches of aspen forest, old fields, red and jack pine plantings, brush prairie and bottomland hardwoods.

Located in Kittson County, Lake Bronson (2422 acres) surrounds a created lake on the South Branch of Two Rivers. Vegetational communities include various stages of aspen forest, with smaller tracts of bottomland hardwoods, alder swamps, prairie, old fields, and cattail marshes. Surrounding land uses are primarily agricultural, but aspen woodland and some brush prairie adjoin the park to the north, east, and south-east.

Hayes Lake State Park (2118 acres) is located in Roseau County, is similar in size to Lake Bronson, and surrounds another created lake. However, the vegetational communities within this park are quite different, consisting primarily of jack pine and aspen forest and boreal hardwood/coniferous forest. Small tracts of alder swamp and old fields are also found within the park. Unlike Lake Bronson and Old Mill State Parks, the land use around Hayes Lake is primarily timber related because the park is surrounded by Beltrami Island State Forest to the east and north. Zippel Bay State Park was the largest park surveyed in the northwestern region (2825 acres) and is located along the shore of Lake of the Woods in

Lake of the Woods County. The park is composed primarily of aspen forest but includes large tracts of cattail marsh along the lakeshore and Zippel Creek. Unlike the previous three parks, the forest and marsh communities at Zippel Bay are in large, relatively undisturbed tracts. Land use surrounding the park is a mixture of agriculture and forested lands.

Bird surveys were conducted at the state parks between 1 June and 30 June 1992. In addition, incidental bird sightings were recorded for each park visit from 1 May through 30 June. Only survey personnel with advanced bird identification skills (able to identify Minnesota bird species by sound alone) were used to conduct surveys. Two individuals from the SPBS surveyed Lake Bronson, Hayes Lake and Zippel Bay State Parks. MCBS personnel surveyed Old Mill State Park.

We used a fixed-radius point count method to survey breeding birds (Wakeley 1987). Standardized methods were used to ensure that comparisons can be made between SPBS and MCBS surveys, and other statewide, national and international efforts for monitoring bird populations (Hutto et al. 1986, MCBS pers. comm.). Fifty meter radius points were established at least 250 meters apart, and were located along trails whenever possible for efficiency and ease of future replication. Censuses were conducted once during 1-15 June and again during 15-30 June at each individual point to include early and late nesting species. Point locations were recorded on maps of each park. Twenty points were established at Old Mill, 50 points at Lake Bronson and Hayes Lake, and 40 points at Zippel Bay.

Counts were conducted from sunrise until three to four hours later, and were not conducted during inclement weather. Each point was censused for five minutes and individual birds seen or heard during that period were counted only once. Birds seen or heard that were flying over but not using the habitat within the point were recorded separately, as were birds heard or seen between points.

Rivers and lakes within the parks were censused separately from the point counts, using direct visual counts. Aquatic surveys were usually conducted in the afternoon and evening, and focused on waterfowl, seabirds,

shorebirds and herons. We surveyed the large marsh area along Zippel Bay and the branches of Zippel Creek by boat. In addition, tape recordings were played at selected sites to elicit responses from nocturnal or secretive birds such as owls and rails. Playbacks were conducted at dusk and after dark. Efforts were made to determine the nesting status only for rare and listed species found within the parks.

### Results and Discussion

Most of the state-listed bird species in the northwestern counties breed in habitats not found within the parks. Examples include Sharp-tailed Sparrows and Yellow Rails, which nest in sedge fens in Roseau, Kittson and Marshall counties (Stucker 1992).

**Old Mill State Park:** A total of 89 bird species was recorded in the park in May and June, including three state-listed species; Sandhill Crane, Upland Sandpiper and Marbled Godwit (Table 1). None of the listed species was found nesting within the park. Eastern Bluebirds nested in nest boxes located within the park. Old Mill was the only park surveyed where Lark Sparrows were seen (Table 1).

Species associated with habitat edges (Cedar Waxwing, American Goldfinch, Northern Oriole, Rose-breasted Grosbeak, Song Sparrow, Blue Jay, American Robin, Gray Catbird and American Redstart) were common in the park as were species associated with human activity (House Wren, Eastern Bluebird, Tree Swallow, Brown-headed Cowbird). A relatively high percentage of the individual birds counted at Old Mill were flycatchers.

Two Cooper's Hawk nests were found within the park in 1992. One nest was located in the southeastern corner of the park in the jack pine plantation located there. The other nest was located in the scotch pine plantation on the northwestern side of the park. Both nests were thought to be active during the breeding season (MCBS pers. comm.).

**Lake Bronson State Park:** A total of 124 bird species was seen at Lake Bronson between May and June 1992. Eight species seen are listed as threatened, endangered or of special concern; American White Pelican, Osprey, Bald Eagle, Sandhill Crane,

Upland Sandpiper, Marbled Godwit, Common Tern and Forster's Tern (Table 1). One Bald Eagle nest was located on the south shore of the eastern end of Lake Bronson, and one chick was seen in the nest on 4 June. A pair of Upland Sandpipers were presumed nesting in a small prairie on the eastern side of the park, but neither chicks or eggs were found. A wide variety of waterfowl and other aquatic species were observed on Lake Bronson, but few species actually nested there (Table 1). Lake Bronson also had the greatest variety of shorebirds passing through in May (Table 1). There were no responses to tape recordings of American Bitterns or Sharp-tailed Sparrows in the cattail marshes at Lake Bronson.

A total of 62 species was recorded on survey points, with American Goldfinch, Brown-headed Cowbird, Clay-colored Sparrow, Yellow Warbler, and Least Flycatcher being the most abundant species. A large component of Lake Bronson's avifauna was made up of sparrows. This was due to the high abundance of Clay-colored Sparrows within the park. Lake Bronson had seven species of flycatchers, which as a group made up another significant component of the birds counted. Although there were relatively few wood warblers nesting at Lake Bronson, the densities of Yellow Warblers was fairly high.

A previously unknown Great Blue Heron rookery was located in the southeast section of the park in aspen parkland habitat. On 7 June, four heron nests were seen in close proximity high in mature aspen trees. A pair of Red-tailed Hawks nested within the heron rookery, but the contents of the nest were unknown. One Cooper's Hawk nest was located in the park, but it was unknown whether any young fledged. A Great Horned Owl nest was found near the eastern campground, and two fledged young were seen on 5 June. One Field Sparrow, which is uncommon in this area (Janssen 1987), was seen singing at point 36 on several occasions (Bardon 1992). It was not believed that the Field Sparrow had a mate.

**Hayes Lake State Park:** A total of 124 species was seen at Hayes Lake State Park between May and June 1992 (Table 1). State-listed species included American White Pelican, Osprey, Bald Eagle, Sandhill Crane, and Forster's Tern, but there was no evidence of

Species	Old Mill	Lake Bronson	Hayes Lake	Zippel Bay
Common Loon		X	X	X
Pied-billed Grebe		X	X	X
Red-necked Grebe			X	
Eared Grebe			X	
Western Grebe		X		
American White Pelican *		X	X	X
Double-crested Cormorant		X	X	X
American Bittern *				X
Least Bittern				X
Great Blue Heron		X	X	X
Green-backed Heron				X
Snow Goose		X		
Canada Goose	X	X	X	X
Wood Duck		X	X	X
Green-winged Teal		X	X	
Mallard	X	X	X	X
Northern Pintail		X		X
Blue-winged Teal	X	X	X	X
Northern Shoveler		X		X
Gadwall				X
Redhead			X	X
Canvasback		X		
Ring-necked Duck				X
Lesser Scaup			X	X
Common Goldeneye				X
Bufflehead			X	X
Hooded Merganser			X	
Common Merganser				X
Red-breasted Merganser	X		X	X
Ruddy Duck		X		
Turkey Vulture			X	X
Osprey *		X	X	X
Bald Eagle *		X	X	
Northern Harrier	X	X		
Cooper's Hawk	X	X		X
Broad-winged Hawk			X	
Red-tailed Hawk		X	X	
Rough-legged Hawk		X		
American Kestrel		X	X	
Spruce Grouse			X	
Ruffed Grouse	X	X	X	X
Sora		X	X	X
Common Moorhen *				X
American Coot		X	X	X
Sandhill Crane *	X	X	X	X
Semipalmated Plover		X		
Killdeer	X	X	X	X
American Avocet		X		
Lesser Yellowlegs	X	X		
Solitary Sandpiper	X	X		X
Spotted Sandpiper	X	X	X	X
Upland Sandpiper *	X	X		
Marbled Godwit *	X	X		
Least Sandpiper		X		
Pectoral Sandpiper		X		
Common Snipe		X	X	
American Woodcock			X	
Franklin's Gull	X	X	X	X
Ring-billed Gull		X	X	X
Herring Gull				X
Common Tern *		X		X
Forster's Tern *		X	X	X
Black Tern		X		
Mourning Dove	X	X	X	X
Black-billed Cuckoo	X	X	X	X
Great Horned Owl		X	X	
Barred Owl				X
Great Gray Owl			X	
Long-eared Owl				X
Common Nighthawk		X	X	X
Whip-poor-will		X	X	
Ruby-throated Hummingbird		X	X	X
Belted Kingfisher	X	X	X	X
Yellow-bellied Sapsucker	X	X	X	X
Downy Woodpecker	X	X	X	X
Hairy Woodpecker	X	X	X	X
Northern Flicker	X	X	X	X
Pileated Woodpecker	X	X	X	X
Olive-sided Flycatcher	X	X	X	
Eastern Wood-Pewee	X	X	X	X
Alder Flycatcher	X	X	X	
Least Flycatcher	X	X	X	X
Eastern Phoebe	X	X	X	X
Great Crested Flycatcher	X	X	X	X

Table 1. Birds of Minnesota's Northwestern State Parks (May - June 1992).

\* Species listed as endangered, threatened or of special concern in Minnesota.

Species	Old Mill	Lake Bronson	Hayes Lake	Zippel Bay
Eastern Kingbird	X	X	X	X
Horned Lark		X		
Purple Martin		X		X
Tree Swallow	X	X	X	X
Northern Rough-winged Swallow	X	X	X	
Bank Swallow		X		
Cliff Swallow	X	X	X	X
Barn Swallow	X	X		X
Blue Jay	X	X	X	X
American Crow	X	X	X	X
Common Raven		X	X	X
Black-capped Chickadee	X	X	X	X
Red-breasted Nuthatch			X	
White-breasted Nuthatch	X	X	X	X
Brown Creeper	X		X	X
House Wren	X	X	X	X
Winter Wren			X	
Sedge Wren	X		X	X
Marsh Wren		X		X
Golden-crowned Kinglet	X		X	
Eastern Bluebird	X	X	X	
Veery		X	X	X
Gray-cheeked Thrush		X		X
Swainson's Thrush	X	X		X
Hermit Thrush			X	X
American Robin	X	X		X
Gray Catbird	X	X	X	X
Brown Thrasher	X	X	X	X
Cedar Waxwing	X	X	X	X
European Starling		X	X	
Solitary Vireo	X		X	X
Yellow-throated Vireo	X	X	X	X
Warbling Vireo	X	X	X	X
Red-eyed Vireo	X	X	X	X
Golden-winged Warbler			X	
Tennessee Warbler	X	X	X	X
Orange-crowned Warbler	X		X	
Nashville Warbler	X	X	X	X
Yellow Warbler	X		X	X
Chestnut-sided Warbler		X	X	X
Magnolia Warbler			X	
Cape May Warbler			X	X
Black-throated Blue Warbler			X	X
Yellow-rumped Warbler	X	X	X	X
Blackburnian Warbler			X	X
Pine Warbler			X	
Palm Warbler	X	X		
Bay-breasted Warbler			X	
Black-and-white Warbler			X	
American Redstart	X	X	X	X
Ovenbird	X	X	X	X
Northern Waterthrush	X	X		
Connecticut Warbler			X	X
Mourning Warbler	X		X	X
Common Yellowthroat	X	X	X	X
Scarlet Tanager	X	X	X	X
Rose-breasted Grosbeak	X	X	X	X
Indigo Bunting	X	X	X	
Rufous-sided Towhee	X		X	
Chipping Sparrow	X	X	X	X
Clay-colored Sparrow	X	X	X	
Field Sparrow		X		
Vesper Sparrow	X	X	X	
Lark Sparrow	X			
Savannah Sparrow	X	X	X	X
Grasshopper Sparrow	X	X		
LeConte's Sparrow		X		
Fox Sparrow	X			
Song Sparrow	X	X	X	X
Swamp Sparrow	X	X		X
White-throated Sparrow	X	X	X	X
Harris' Sparrow	X			
Dark-eyed Junco		X		
Bobolink	X	X	X	
Red-winged Blackbird	X	X	X	X
Western Meadowlark	X	X	X	X
Yellow-headed Blackbird	X	X		X
Brewer's Blackbird		X		
Common Grackle	X	X	X	X
Brown-headed Cowbird	X	X	X	X
Northern Oriole	X	X	X	X
Purple Finch		X	X	X
Pine Siskin	X		X	
American Goldfinch	X	X	X	X
Evening Grosbeak		X	X	X
<b>Total Number of Species</b>	<b>89</b>	<b>124</b>	<b>123</b>	<b>112</b>

Table 1, continued.

nesting by these species. Sandhill Cranes and Marbled Godwits were frequently seen just outside of the western border of the park, and presumably nested nearby. A pair of Bald Eagles was frequently observed along the eastern portion of the Roseau River, but these individuals did not appear to be nesting in 1992. Several species of waterfowl, including three species of grebes, were observed on Hayes Lake, but none were known to have nested there (Table 1). Three species of shorebirds, Spotted Sandpipers, Common Snipe, and American Woodcock nested within the park. There were no responses to tape recordings of American Bitterns, Sharp-tailed Sparrows, Boreal Owls or Northern Saw-whet Owls in the park. Eastern Bluebirds were seen only in association with bluebird houses in the park. Hayes Lake was the only park surveyed where Spruce Grouse were seen.

Overall, Hayes Lake had the highest species diversity of the four parks surveyed, with a total of 66 species breeding within the park. This was due in part to the high diversity of wood warblers, with 14 species counted during point counts alone. Hayes Lake also had the highest proportion of vireos when compared to the other parks. Densities of several neotropical migrants were relatively high at Hayes Lake. Hayes Lake had the highest densities of Red-eyed Vireos, Nashville Warblers, Chestnut-sided Warblers, and Common Yellowthroats of the parks surveyed. Hayes Lake was the only park where Golden-winged, Blackburnian, and Black-and-white Warblers were nesting, and where Magnolia, Pine and Bay-breasted Warblers were seen (Table 1).

A Great Gray Owl was seen in a jack pine forest on 5 June, but was not seen again. A Cooper's Hawk was suspected of nesting in the jack pine plantation, but no nest was located. On 25 June a vagrant Western Wood-Pewee was heard singing just outside the entrance station to the park (Karl Bardon pers. comm.). This individual remained in the area for several days.

**Zippel Bay State Park:** A total of 112 species was observed at Zippel Bay in May and June. Because of its location on the shore of Lake of the Woods, Zippel Bay had the largest variety of waterfowl when compared to the other parks (Table 1). State-listed species included American White Pelican,

American Bittern, Osprey, Common Moorhen, Sandhill Crane, Common Tern and Forster's Tern. On the evening of 9 June, five to six American Bitterns were heard and one individual was seen in the large cattail marsh bordering the two branches of Zippel Creek. Three Least Bitterns were also heard during this survey. A pair of Common Moorhens was seen at a small cattail marsh near the park entrance. Both Barred and Long-eared Owls were heard in the park, but none were seen.

Of the 51 species counted on the points, the most abundant were Yellow Warblers and Least Flycatchers. Zippel Bay also had the highest densities of Veerys, Ovenbirds, and Northern Orioles, and relatively high densities of Great Crested Flycatchers, Red-eyed Vireos and Common Yellowthroats. This park had the lowest densities of Brown-headed Cowbirds. Zippel Bay was the only park where a Black-throated Blue Warbler was seen (Table 1).

Both species composition and abundance differed between the four northwestern state parks. These differences are a function of the size of the parks, their surrounding land uses, and their associated habitats. Although Old Mill State Park had the lowest number of breeding species and overall diversity indices, the park is one-tenth the size of the other three, and is completely surrounded by agriculture. These factors contribute to the high proportion of edge associated species including Brown-headed Cowbirds. In contrast, Hayes Lake State Park is relatively large, surrounded by large tracts of boreal forest and had high species diversity and lower densities of cowbirds. All of these factors have management implications when considering biodiversity. Future surveys will be especially important in light of the declining populations of many avian species including both neotropical migrants and several resident species (Sauer & Droege 1992).

### Conclusions

The preservation of large tracts of habitat is critical to many species. Not only do large patches of habitat have smaller proportions of edge (and thus less impact from edge associated predators and nest parasites), but they also provide critical habitat for area-sensitive species (Ambuel & Temple 1983). Species sensitive to habitat patch size in-

clude Great Crested Flycatchers, Red-eyed Vireos, Scarlet Tanagers, Rose-breasted Grosbeaks and Ovenbirds (Ambuel & Temple 1983, Blake & Karr 1987, Gibbs & Faaborg 1990). Ground nesting species, such as Ovenbirds, are particularly sensitive to the increase in predation associated with edges (Brittingham & Temple 1983, Gibbs & Faaborg 1990, Johnson & Temple 1990, Robinson 1992). Although area-sensitive species may be present in smaller fragments of habitat, they may not be able to successfully reproduce in these areas (Blake & Karr 1987, Gibbs & Faaborg 1990, Johnson & Temple 1990, Robinson 1992). This scenario results in "population sinks", where birds are attracted to a patch of habitat when returning from the wintering grounds, but are unable to successfully rear young there because of high rates of predation and brood parasitism. Eventually the area-sensitive species become extirpated from smaller habitat patches, while edge species may increase in abundance there. This may be occurring at Old Mill State Park.

If avian species diversity is to be considered as a component of park resource management, fragmentation of habitats of all kinds must be considered. Minnesota's northwestern state parks in are frequently "island" refuges surrounded by conflicting land uses. The parks themselves are often managed to introduce park users to a diversity of regional habitats. This may ultimately increase the amount of habitat fragmentation with an individual park. In the interest of maximizing the quality of breeding habitat for neotropical migrants, a possible solution would be to manage state parks for one or two representative habitat types instead of creating many small habitat patches within each park.

#### Acknowledgements

Funding for this project was provided by the Minnesota State Parks Nature Store Sales and Minnesota Department of Natural Resources. Pam Page's excellent birding skills and enthusiasm contributed much of the data in this report. Karl Bardon and Mike Hedemark (MCBS) not only surveyed Old Mill State Park, but also provided incidental bird lists of the parks from visits during 1991 and 1992. I thank all of the field personnel for their long hours of work.

Nancy Albrecht (MN State Parks) supervised this project, provided administrative support, and reviewed this report. Gary Barvels, Tom Remus, Dan Fischer, Chris Weir-Koetter and Doug Larson were enthusiastic advocates of this project.

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## Birds of the Falls Creek Scientific and Natural Area Washington County Part Two: 1992

William H. Longley

### Introduction

Results of the first year's breeding bird census on this SNA was reported in *The Loon* 64:40-43.

### Methods

1. The spot-mapping method was used as described in *The Loon* 62:46-50.

2. On 21 days during the period 24 March to 22 October 1992, beginning near dawn (usually at first light) and usually at seven to ten day intervals, I traversed the SNA, recording all birds noted. An average of 6.4 hours per trip, a total of 135 hours, were spent on the area, but from mid-April to the end of June, trips were from seven to ten and a half hours long.

### Results

1. I recorded 99 species of birds on or over the area in 1992, compared to 93 in 1991 (which was incorrectly reported as 98).

2. I estimated that 40 species were nesting on the area, compared to 37 in 1991, and that there were 106 pairs/territories,

compared to 100 in 1991 (Table 1).

3. Species recorded on or over the SNA, but probably not nesting there, numbered 34 in both years (Table 2).

4. Transient species numbered 25 (22 in 1991) (Table 3).

5. Based upon a minimum of 106 nesting pairs or inferred pairs, and an area of 135 acres, the population density was:

- 78.5 pairs over 100 acres (74 in 1991)
- 194 pairs over 100 hectares (189 in 1991)
- 502 pairs per square mile (474 in 1991)

### Discussion

Two snowstorms (31 October 1991 and 10 April 1992) damaged many white pines, breaking off branches and toppling several trees. Large oaks and maples suffered some of the same damage.

Ecological succession continues on the old fields, as giant ragweed and other annuals have almost disappeared, but there are still a few nearly bare spots caused by infertile soil. A small part of the south field was mowed, for no obvious reason, but the

## Table One Nesting and Inferred Nesting

- Ruffed Grouse: One drumming in April and May. Female with ±12 tiny chicks on 5 June.
- Mourning Dove: One pair present from 17 April to July 18. (+1)\*
- Red-bellied Woodpecker: Birds recorded on 16 trips. Two pair.
- Downy Woodpecker: Birds noted on 15 trips. Two pair.
- Hairy Woodpecker: Birds noted on 11 trips. One pair. (-1)
- Northern Flicker: Birds present from 17 April to 11 July. Male at new excavation on 5 May. One pair indicated. (-1)
- Pileated Woodpecker: Drumming male in NE quarter from 17 April to 18 July. Nest a few feet beyond SE corner with large, noisy young on 28 June. One pair plus one partial territory.
- Eastern Wood-Pewee: Two young noted on 18 July. Birds noted on 14 trips, 15 May to 27 August. Five pair plus one partial territory.
- Eastern Phoebe: One pair raised two broods, of four and of five young.
- Great Crested Flycatcher: Present from 5 May to 14 August. Two pair. (-1)
- Tree Swallow: Pair nested in bird house on fenceline. (+1)
- Northern Rough-winged Swallow: One nest with young in sandstone creek bank. (+1)
- Blue Jay: Three pairs.
- Black-capped Chickadee: Eight pair and two partial territories. (+1)
- White-breasted Nuthatch: Two pair and two partial territories. (-2)
- House Wren: Last song, 11 July. One brood noted on 28 July. Two pair, possibly three. (-1)
- Blue-gray Gnatcatcher: Last song, 28 June. Two or three birds noted on each of six dates, 15 May to 14 August. One pair plus one wandering male.
- Eastern Bluebird: One pair built nest in bird house on fenceline, but no young were raised. (+1)
- Wood Thrush: Last song, 28 July. One nest found after leaf fall. Five territories. (+1)
- American Robin: Two nests found. Last song, 28 July. Three pair and three partial territories. (+1)
- Gray Catbird: Last song, 6 August. Three pair plus two partial territories.
- Yellow-throated Vireo: Last song, 27 August. Two pair plus a partial territory. (+1)
- Red-eyed Vireo: Last song, 28 August. Eight pair plus three partial territories. (+2)
- Golden-winged Warbler: A male sang vigorously before dawn, an unusual song, on three dates in June, a quarter mile from last year's location. Last song, 28 June. One pair indicated. (+1)
- Pine Warbler: Last song, 22 June. Probably one territory, although there were three singers on 12 June.
- Cerulean Warbler: Last heard 12 June. Probably one territory, with two singers competing. (+1)
- American Redstart: One nest found. As many as six singers (28 June, 8 July). Last song, 27 August. Four territories apparent. (+2)
- Ovenbird: Last song, 18 July. Young with parent found in two places. Ten pair plus one partial territory. (-1)
- Louisiana Waterthrush: Pair present from 17 April to 14 August: Last song, 14 August. Pair with one or two young noted on three dates (5, 12, and 28 June). (+1)
- Scarlet Tanager: As many as six singers, on 18 July. Last song, 28 July. Four pair plus two partial and two impermanent territories.
- Northern Cardinal: As many as six singers, on 5 June. Last song, 14 August. Four territories, plus one partial. (+1)
- Rose-breasted Grosbeak: As many as seven singers, on 5 June. Last song, 14 August. Four territories, plus extra singing males. (+1)
- Indigo Bunting: The only young noticed was on 27 August. Last song, 20 August. Five territories, plus one partial territory. (+1)
- Chipping Sparrow: As many as six singers, on 18 July. Last song, 27 August. One nest located; young noted in two other places. Three territories, plus two partial territories. (+1)
- Field Sparrow: One singing 28 April to 28 July. One territory.
- Vesper Sparrow: One singing 28 April to 22 June. One impermanent territory indicated.
- Song Sparrow: Ten singers on 17 April, six on the 28th. Last song, 28 August. Only two or three thereafter. As last year, none present in August. One young on 22 June. Three territories, plus one impermanent territory. (-3)
- Brown-headed Cowbird: Birds present 17 April to 11 July. Probably only three females. Three pairs indicated. (-1)
- Northern Oriole: Birds present 5 May to 22 June. Three young on the latter date. One partial territory.
- American Goldfinch: Birds present 5 May to 27 August. Last song, 28 July. Sometimes three singers, but apparently only two pair. (+1)

\* (+) or (-) indicates change in pairs compared with 1991.

**Table Two**  
**Local Birds Recorded at the Area but Probably Not Nesting**

<p>Common Loon*: One flew over calling on 27 May. Great Blue Heron: One flew over on May 15. Wood Duck*: One hen along creek on 17 April and flying over 5 May, calling. Pair flew over on 27 May. Mallard: 40 flew over on 22 June. Turkey Vulture: One soaring overhead on 17 April and 14 August. Bald Eagle*: Two second-year birds soared overhead on 17 April. Cooper's Hawk*: One present on 17 April, 27 May, 6 August, and 10 September. Red-shouldered Hawk: One seen and/or heard on seven trips. An especially vociferous immature on 14 August. Broad-winged Hawk: Bird present, soaring or sitting, on five dates. Red-tailed Hawk: One or two on five trips, sailing over and calling. Peregrine Falcon*: One called, perched in tall white pine on 20 August. Wild Turkey: Hen with four poults flushed on 20 August. Sandhill Crane*: Two flew over on 24 March, calling. Killdeer: Two flew over on 24 March, calling. Black-billed Cuckoo**: Calling bird heard on 5, 22, and 28 June. Great Horned Owl**: Crows located one for me on 28 April and 15 May. Ruby-throated Hummingbird: One perched on phone wire on 5 June. Belted Kingfisher: One present in October, also heard earlier.</p>	<p>Yellow-bellied Sapsucker**: One on 17 April, 5 May, and 12 June. Acadian Flycatcher: One calling forcefully in the stream valley on 12 and 28 June. Least Flycatcher**: Three calling on 12 June. Eastern Kingbird: One flying over on two dates. Barn Swallow: One to three circling low over fields on four dates. American Crow: From March to 27 May, one or a pair in evidence. Up to ten migrants. Red-breasted Nuthatch*: One in March, April, and September; five or six in October and November. Sedge Wren*: One appeared in alfalfa-brome field on 11 July. Cedar Waxwing: Two on 22 June and one on 14 August. Blue-winged Warbler: Two quiet males on 15 May. One singer on 27 May, and on 5 and 22 June (possible territory). Common Yellowthroat: One on 22 June. Bobolink*: One singer on 15 May, two on 27 May. On 11 July, a singing male as well as a female and seven immatures in the alfalfa field. Red-winged Blackbird: Two to four present on four dates. Eastern Meadowlark: One heard in May. Common Grackle: Seen only twice, in migration. Pine Siskin: As many as six present from 24 March to 28 April and in October.</p>
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\*Species not recorded in 1991.  
\*\*Species listed as nesting in 1991.

**Table Three**  
**Transients (Migrants) Not Ordinarily Nesting in the Vicinity**

<p>Tundra Swan Sharp-shinned Hawk Ring-billed Gull Brown Creeper Winter Wren Golden-crowned Kinglet Ruby-crowned Kinglet Gray-cheeked Thrush Swainson's Thrush Hermit Thrush Solitary Vireo Tennessee Warbler Nashville Warbler Chestnut-sided Warbler</p>	<p>Yellow-rumped Warbler Black-throated Green Warbler Blackburnian Warbler Black-and-white Warbler Mourning Warbler Wilson's Warbler Fox Sparrow White-throated Sparrow* Dark-eyed Junco Purple Finch Evening Grosbeak</p>
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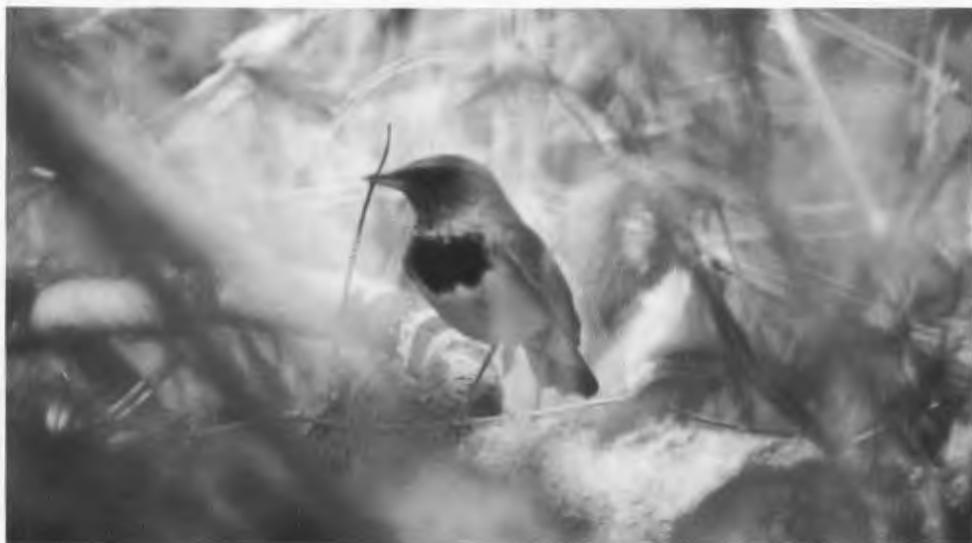
\*One was singing on 22 June.

thick growth of alfalfa-brome grass on the remainder of the field was attractive to Bobolinks.

In the two years of this study, 112 species of birds were noted on (or over) the

Spring 1993

SNA; 44 species were considered to have nested there; 18 species seen in 1992 had not been listed in 1991; eight species seen in 1991 were not recorded in 1992. 532 W  
Broadway, Forest Lake, MN 55025



Mourning Warbler, 7 June 1992, Aitkin Co. Photo by Warren Nelson.

## The Summer Season 1 June to 31 July 1992

Terry Wiens

For those of you that didn't care for the heat of some recent summers in Minnesota, the summer of 1992 was certainly welcome relief. Generally, the entire period was very cool and moderately dry. Not once did any region of the state report a temperature above 96° — compare that to the drought summers just a few short years ago! June saw temperatures of about one to three degrees below average. The month began cool, following a very cold snap in late May, then warmed by mid-month. A cool wave in the third week set the tone for the rest of the summer; frosts were reported in the north, with a low of 24° in the northeast on the 20th. Rainfall in June was average to slightly below average in most areas; there did not appear to be any unusual flooding or drought, although the southeast corner of the state received about two inches below average rainfall.

July of 1992 may be long remembered as one of the coldest on record. All regions of the state reported temperatures about six

to eight degrees below average. In most regions, the temperature never made it into the 90's; amazingly, only three weather stations in the entire state recorded a 90° temperature! In the northeast even 80° was hard to come by — Duluth, for example, had the coldest July on record with a high for the whole month of only 79°! Despite all this, there were no frosts reported in the state during the month — perhaps a saving grace for late-breeding birds (however, the cool summer may have had some deleterious effects on breeding — there were unconfirmed reports of many Eastern Bluebirds and Tree Swallows losing their young in nest boxes, and Purple Martins and Forster's Terns abandoning nests.) Compared to temperature, rainfall in July was very "normal" with every region of the state reporting near average totals. All told, a cool and pleasant summer!

No fewer than 88 observers submitted seasonal reports and/or breeding information for the summer. This number has

changed relatively little over the past several years — a tribute to the diligent work of many summer birders. A total of 263 species was observed, slightly fewer than the previous ten-year average of 266 and 10 fewer than last year. Contributors sent in 897 nest or brood cards, substantially more than in the past few years. Good work! Breeding data were collected for 155 species, the highest total since 1988. Special thanks go to the personnel conducting this year's Minnesota County Biological Survey: Karl Bardon, Steve Stucker, Mike Hedemark, Arlyne Johnson, Abby Powell, Pam Page, Ralph Hanson, Sharon Moen, Gary Swanson, and Gary Dulin. The MCBS staff produced 269 nest/brood cards and provided excellent coverage of Morrison, Dakota, and several northwestern counties. Also deserving recognition were the members of the Hiawatha Valley Audubon: Andy and Joyce Buggs, Virginia Kramer, Howard Munson, Anah Nelson, Carol Schumacher, Will and Betty Snyder, and Kay Shaw. The HVA volunteers contributed 35 nest/brood cards from Winona Co. Other top contributors of breeding information included Mark Newstrom/Jean Segerstrom (133), Jack Sprenger (62), William Longley (58), Erls Krueger (44), Karl Bardon (35), and Dave Neitzel (31). As always, a hearty thanks to all contributors for your excellent efforts. Each sighting and breeding record is important — keep up the good work!

Surely the most noteworthy birding event of the summer was the appearance of a Neotropical Cormorant (formerly named Olivaceous Cormorant) in Ramsey Co. This vagrant from the Gulf Coast was observed by many birders for over two weeks late in the season at Lake Vadnais in St. Paul. A first for Minnesota, this bird raised the total state list to 410 species (now 411.) In addition to the cormorant, three accidental species appeared this summer. A pair of Black-necked Stilts was spotted at the Old Cedar Avenue bridge birding hotspot in Hennepin Co., representing the third record of this species in Minnesota (the first two occurred in 1989). A singing Prairie Warbler was found in Rock Co. early in June, the fifth state record. And at the opposite end of the state, a Western Wood-Pewee was observed singing in a jack pine stand in Roseau Co., representing the sixth record for the state.

For the third summer in five years, a Clark's Grebe was carefully identified among many Westerns, this time at Diamond Lake in Kandiyohi Co. Two Trumpeter Swans, presumably from the Minnesota reintroduction program, (one was tagged), were observed in June at Moose Lake WMA in Aitkin Co. Hopefully both these species will be more commonly reported in the future as efforts to identify the recently split grebes increases and the swan population grows. Three other casual species seen this summer included a cooperative King Rail at the Bass Ponds in Hennepin Co., a Laughing Gull at the Ruthton sewage ponds in Pipestone Co., and a Carolina Wren present throughout the summer in Dakota Co.

A number of other sightings this summer were noteworthy. No fewer than 14 Rough-legged Hawks were observed in ten counties, an unprecedented number of reports for a species listed as accidental in summer. A few were found injured or dead, and of these all were poorly nourished — it is possible Rough-legged Hawks found no food (primarily small mammals) on returning to their breeding grounds in the spring, and returned south in desperation (D. Evans, pers. comm.). Just as unusual was the Snowy Owl found in mid-June in the farm country of Yellow Medicine Co., a bird capable of flight and appearing to be in good condition. A Greater White-fronted Goose, also apparently healthy, was seen in early July in Roseau Co. and represented only the third summer record for the state. Also lingering were Snow Geese in Otter Tail, Roseau, and Clay Counties. An Orange-crowned Warbler was observed in Cass Co. in mid-summer, well south of its breeding range and representing the first summer record in at least 12 years. A Northern Hawk Owl photographed in St. Louis Co. in July was not too surprising following the massive invasion of the previous winter.

For a number of species this summer, there were more reports than usual. In fact, species for which reports were up outnumbered species for which reports were down by about three to one. Much of this was probably due to the extensive MCBS work in several counties. For example, a number of breeding sites for Yellow Rails and Sharp-tailed Sparrows were discovered in Morrison Co., suggesting their breeding ranges ex-

tend farther south than previously known. Both species were also reported at several sites in the northwest. Another example is the Sandhill Crane, a species observed in six northwestern counties by survey workers. However, there were several species for which an increase in reports appeared to be more than just a result of increased coverage. The Turkey Vulture population appears to be expanding, and increases in Bald Eagles, Peregrine Falcons, and House Finches are well documented. There were increased reports statewide of several waterbird species such as American White Pelican, Green-winged Teal, Virginia Rail, and Caspian Tern. Noteworthy out-of-range nesting records were submitted for Cattle Egret (Marshall Co.), Blue-gray Gnatcatcher (Clay Co.), and Prothonotary Warbler (Sherburne Co.). And sightings of Wild Turkeys increased markedly, raising the question of their status ("established" or not?) beyond the five or so counties in extreme southeast Minnesota.

As always, a few species were conspicuous by their absence. Of concern was the lack of any reports of Bay-breasted Warblers, a species normally recorded in the northeast each summer. For the third straight year, no Piping Plovers were seen. Hooded Warblers, normally observed in Murphy-Hanrehan Park in Scott Co., probably were not reported this season because the usual observer for that locale was out of state. Other missing species that have been reported in seven or more of the past ten summers were Lesser Golden-Plover, Buff-breasted Sandpiper, Boreal Owl, Northern

Mockingbird, Rusty Blackbird, and Red Crossbill.

Whatever the reason (possibly the cool weather), for some species spring migration was late and/or fall migration early. Spring shorebirds in general were late, with a lot of migration continuing well into June. For example, there were several reports of Red-necked Phalaropes in late June; other species for which very late dates were recorded included Lesser Yellowlegs, Solitary Sandpiper, Hudsonian Godwit, and White-rumped Sandpiper. For fall migration, a few northern warblers were detected early in the southern half of the state. Olive-sided Flycatchers also migrated very early, and an unusually early movement of hawks was documented at Hawk Ridge on 26 July.

The format for the species accounts is the same as the past several years. The key to the seasonal reports is shown below. Breeding records are classified based on the criteria found in *The Loon* 58:22 or in Green and Janssen (*Minnesota Birds*, p. 7). Counties for which positive breeding is documented for the first time since 1970 are in italics and identified as such according to updated versions of Janssen and Simonson's breeding maps (*The Loon* 56:167-186, 219-239 and 57:15-34). Divisions of the state into regions (e.g. west central, southeast) are based on those delineated in Janssen (*Minnesota Birds*, p. 25).

A final thanks to all the summer season reporters who make it possible to document avian distribution and migration. Thanks also to Peder Svingen and Kim Eckert for their assistance in preparing this report.

## KEY TO SEASONAL REPORTS

1. Species listed in upper case (**PACIFIC LOON**) indicate a Casual or Accidental occurrence in the state.
2. Dates listed in boldface (**10/9**) indicate an occurrence either earlier, later or within the earliest or latest dates on file.
3. Counties listed in boldface (**Aitkin**) indicate either a first county record or an unusual occurrence for that county. City of **Duluth** also boldface when applicable.
4. Counties listed in italics (*Aitkin*) indicate a first county breeding record.
5. Brackets [ ] indicate a species for which there is reasonable doubt as to its origin or wildness.

### **Common Loon**

Nested in nine counties including Marshall MCBS, Chisago HH; probable nesting in Becker, Kandiyohi. Seen in 20 additional counties within breeding range plus Pipestone, Winona.

### **Pied-billed Grebe**

Nested in Marshall, Kandiyohi, Sherburne, Wright, Anoka, Le Sueur; probable breeding in McLeod, Rice. Seen in 33 other counties statewide.

### **Horned Grebe**

Only reports: Marshall, 7/15 St. Louis (L. Superior) KE.

### **Red-necked Grebe**

More reports than usual. Nested in Marshall, Lake of the Woods, Hubbard, Crow Wing; probable nesting in Clay, Becker, Morrison. Seen in 15 additional counties as far south as Blue Earth.

### **Eared Grebe**

Nested in Hennepin (French L.) DM, Marshall; probable breeding in Wilkin County. Seen in eight other western counties plus Wright.

### **Western Grebe**

Nested in Marshall, Kandiyohi, Hennepin; probable breeding in Nicollet, Faribault. Seen in seven other western counties plus Todd, Carver, Blue Earth.

### **CLARK'S GREBE**

One discovered among Western Grebes on 6/25 at Diamond L., Kandiyohi Co. RJ, RG (*The Loon* 64:163).

### **American White Pelican**

Fourth consecutive year of increased reports. Seen in 46 counties in all regions of the state, including St. Louis County in the northeast.

### **Double-crested Cormorant**

Nested in Marshall, Ramsey; seen in 37 other counties statewide.

### **NEOTROPIC CORMORANT**

First state record discovered on 7/16 at L. Vadnais, Ramsey Co. KB (*The Loon* 64:176-178).

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### **American Bittern**

Observed in 19 counties as far south as Lyon, Rice.

### **Least Bittern**

Reported in Lake of the Woods, Marshall, Polk, Renville, Meeker, Wright, Sherburne, Hennepin, Ramsey, Houston.

### **Great Blue Heron**

Nested in Kittson MCBS, Marshall, Beltrami, Hubbard, Meeker, Ramsey, Dakota; seen in 48 additional counties statewide, including five southwest counties.

### **Great Egret**

Nested in Ramsey (Pig's Eye). Seen in 22 other southern counties plus Otter Tail, Clay, Marshall, 7/25 St. Louis (fide KE).

### **Snowy Egret**

Only report: one bird on 7/12 in Pelican L. area, Grant Co. PB.

### **Cattle Egret**

Nested in *Marshall* (two nests, seven adults seen at Thief L. WMA; first nesting record north of Grant Co.) MCBS. Also seen 6/1 Washington WL, 6/25 Kandiyohi (7) RJ, 7/12-20 Grant (up to 17 in Pelican L. area) PB.

### **Green-backed Heron**

Probable breeding in Becker; seen in 40 additional counties as far north as Marshall, Beltrami, St. Louis, Lake.

### **Black-crowned Night-Heron**

Nested in Marshall, Ramsey; probable nesting in Le Sueur. Seen in 11 additional counties as far north as Grant, Morrison; plus Roseau.

### **Yellow-crowned Night-Heron**

Only reports: 6/3 Hennepin (Wood L. Nature Center) SC, 7/16 Ramsey PS.

### **Tundra Swan**

Single bird carefully identified on 6/25 in Wright MSt.

### **[TRUMPETER SWAN]**

Two birds (one tagged) observed on 6/3 at Moose L. WMA in Aitkin Co. PS; presumably birds from the Minnesota

reintroduction program.

### **Greater White-fronted Goose**

**Third summer record** for the state; one apparently healthy individual observed on 7/4 at Greenbush Sewage Ponds in Roseau Co. DNe.

### **Snow Goose**

Single birds seen in Otter Tail (throughout summer; probably injured) CSm, 6/10 Roseau PS, 7/12-20 Clay PB, KE.

### **Canada Goose**

Nested in 12 counties, probable nesting in Cottonwood; seen in 35 additional counties statewide.

### **Wood Duck**

Nested in 14 counties including Polk AB; probable breeding in six counties. Seen in 30 other counties statewide.

### **Green-winged Teal**

Many reports, for second consecutive year. No breeding reported but seen in 20 counties in all regions except west central and southeast.

### **American Black Duck**

Nested in Cook; also seen in Marshall, Polk, Pennington, Aitkin, Hennepin.

### **Mallard**

Nested in 15 counties including Red Lake DNe, Mower RRR; probable breeding in Becker, Cook, Anoka, Cottonwood. Seen in 31 other counties throughout state.

### **Northern Pintail**

Nested in Marshall; seen in five other northwest counties plus Lake of the Woods, Aitkin, Wright, Lyon.

### **Blue-winged Teal**

Nested in seven counties, probable nesting in Cottonwood; seen in 33 additional counties statewide.

### **Northern Shoveler**

More reports than usual; seen in 20 counties as far east as Lake DPV.

### **Gadwall**

Nested in Pennington; seen in 14 other

counties as far east as St. Louis MSt.

### **American Wigeon**

Nested in Marshall; seen in eight other northern counties plus Lyon, Hennepin.

### **Canvasback**

Nested in Roseau, Marshall, Clearwater, Clay; seen in five other northwestern counties plus Lyon, Hennepin, Dakota.

### **Redhead**

Nested in Beltrami FKS, Marshall; probable nesting in Cottonwood. Seen in 16 additional counties as far east as Morrison, Hennepin, Rice.

### **Ring-necked Duck**

Nested in Roseau, Marshall, Clearwater, Crow Wing and Anoka; probable nesting in Hennepin. Seen in 15 other counties in all regions except southwest and southeast.

### **Lesser Scaup**

More reports than usual; seen in 17 counties in all regions except west central and southeast.

### **Common Goldeneye**

Nested in Lake of the Woods, St. Louis, Lake; probable nesting in Cook. Also seen in Marshall, Beltrami, Clearwater, Hubbard, Morrison MCBS.

### **Bufflehead**

More reports than usual. Nested at Agassiz NWR, Marshall Co. DZ. Also reported 6/3 Hennepin SC, OJ; 6/6 Norman PS; 6/7 Aitkin WN, PB; 6/17 Washington WL; 7/18-19 Clay PB, KE.

### **Hooded Merganser**

Increased number of reports. Nested in Crow Wing, Meeker, Washington, Le Sueur; probable breeding in Becker. Seen in 19 additional counties statewide including Lincoln, Lyon, Rock.

### **Common Merganser**

Observed in Lake of the Woods, Hubbard, Koochiching, St. Louis, Lake, Cook; plus 6/6, 7/16 Dakota TT.

### **Red-breasted Merganser**

Seen in St. Louis, Lake, Cook; plus Lake of

the Woods (no date) MCBS.

### **Ruddy Duck**

Decrease in reports relative to previous two years. Nested in Marshall, probable nesting in Cottonwood; seen in 18 other counties as far east as St. Louis PS, TD and Winona CSu.

### **Turkey Vulture**

Many reports, for fifth consecutive year; seen in 32 counties in all regions of the state. Observations suggest this species is becoming more common statewide.

### **Osprey**

Nested in Otter Tail SDM, Anoka KB, Crow Wing, Aitkin, Winona; probable breeding in Becker. Seen in 17 other counties as far west as Kittson, Marshall and as far south as a line through Otter Tail, Carver, Olmsted.

### **Bald Eagle**

Increase in number of reports continues. Nested in seven counties including Kittson MCBS, Ramsey KB; probable breeding in six counties. Seen in 12 additional counties as far south as a line through Polk, Otter Tail, Dakota, Houston.

### **Northern Harrier**

Nested in Roseau MCBS, Red Lake MCBS, Becker LD, Marshall; seen in 28 other counties statewide.

### **Sharp-shinned Hawk**

Seen in six northern counties plus Sherburne (no date) SNWR, 6/25 Washington PC, 7/4 Dakota TT.

### **Cooper's Hawk**

More than double the usual number of reports. Nested in Marshall MCBS, Kittson, Anoka, Ramsey, Washington; probable nesting in Red Lake, Hennepin. Seen in 24 additional counties in all regions except northeast.

### **Northern Goshawk**

Only report from Roseau.

### **Red-shouldered Hawk**

More reports than usual. Nested in Hennepin DM; seen in 15 other counties roughly along a line from Mahnomen to Olmsted.

Spring 1993

### **Broad-winged Hawk**

Probable breeding in Crow Wing; seen in 21 additional counties as far south as a line through Clay, Kandiyohi, Rice, Winona.

### **Swainson's Hawk**

Nested in Red Lake MCBS; probable nesting in Kittson, Dakota. Seen in six additional western counties plus Brown, Rice, Washington, Olmsted, Mower.

### **Red-tailed Hawk**

Nested in Brown JS, Olmsted, Winona, Marshall; probable breeding in nine counties. Seen in 39 other counties statewide.

### **Rough-legged Hawk**

Record number of summer reports. At



**Rough-legged Hawk, 18 July 1992, Aitkin Co. Photo by Warren Nelson.**

least 14 individuals observed in ten counties; 6/6 Cook BBo, 6/6,21 Polk AB, PS, 6/7 Roseau FKS, 6/8,12 Red Lake MCBS, 6/13 Lake DPV, 6/17 Pennington MCBS, 6/18 Marshall MCBS, 7/19 Stearns KB; plus several July sightings of at least three birds in St. Louis and both June and July sightings of at least three birds in Aitkin.

#### **American Kestrel**

Nested in Aitkin; probable breeding in Anoka. Seen in 49 other counties statewide.

#### **Merlin**

Observed in Kittson, Koochiching, St. Louis, Lake, Cook.

#### **Peregrine Falcon**

Report from Midwest Peregrine Falcon Restoration Project (P. Redig, H. Tordoff) indicates continued increases in breeding activity, and a sharp rise in fledging success (18 young were fledged from the Twin Cities metro area alone!). Successful nesting in Hennepin, Ramsey, Washington, Olmsted, Sherburne, St. Louis, Lake; single territorial adults seen in Dakota, Itasca.

#### **Gray Partridge**

Decline in reports over past two years. Probable nesting in Clay, Cottonwood; seen in 14 western counties plus Nicollet, Martin, Rice, Freeborn, Goodhue, Olmsted.

#### **Ring-necked Pheasant**

Nested in Pipestone, Le Sueur, Rice, Washington; probable nesting in Cottonwood. Seen in 31 additional counties as far north as Marshall, Clearwater, Aitkin counties.

#### **Spruce Grouse**

Only reports from Roseau, Lake.

#### **Ruffed Grouse**

Many reports, despite population being at or near low point of ten year cycle. Nested in Pennington, Lake, Cook; probable breeding in Otter Tail. Seen in 18 other counties as far south and west as a line through Marshall, Kandiyohi, Rice, Houston.

#### **Greater Prairie-Chicken**

Observed in Marshall, Pennington, Red Lake, Polk, Clay.

#### **Sharp-tailed Grouse**

Nested in Pennington MCBS; also seen in Marshall, Red Lake, Aitkin.

#### **Wild Turkey**

Many more reports than usual. Probable breeding in Winona; also seen in Houston, Olmsted. There are additional records from areas where the status of the species is in question (most likely escapees or recently introduced birds): breeding in Crow Wing JS/MN, Goodhue HH; seen in Clay, Kandiyohi, Nicollet, Rice, Washington.

#### **Yellow Rail**

Discovered in many areas within the northwestern counties of Roseau, Pennington, and Marshall by MCBS personnel; also found at several sites within Morrison MCBS, and reported at usual McGregor Marsh area in Aitkin.

#### **KING RAIL**

**First summer record since 1984.** One bird present for most of summer at Minnesota River Valley NWR in Hennepin Co. (*The Loon* 64:170).

#### **Virginia Rail**

Most reports since the mid-1980's. Seen in 20 counties in all regions except west central and northeast.

#### **Sora**

Nested in Kittson MCBS, Marshall, Le Sueur; probable nesting in Anoka. Seen in 25 additional counties in all regions except west central.

#### **Common Moorhen**

Observed in Wright, Cottonwood, Blue Earth.

#### **American Coot**

Nested in six counties including Olmsted JB; probable breeding in seven. Seen in 17 additional counties in all regions except northeast.

#### **Sandhill Crane**

Many reports. Nested in Kittson, Marshall, Polk, Anoka; probable nesting in Pennington. Also seen in Roseau, Lake of the Woods, Red Lake, Aitkin, Morrison, Mille Lacs, Sherburne; plus three at Caron



**Sandhill Cranes, 11 July 1992, Caron Lake, Rice County. Photo by Dennis Driscott.**

L., Rice Co. on 7/11 DD.

**Black-bellied Plover**

Only reports: 6/6 Dakota, 6/10 St. Louis.

**Semipalmated Plover**

Migrants seen in Polk, Clay, Lake, Ramsey; plus late migrant 6/19 St. Louis, early migrant 6/27 Lake of the Woods MCBS.

**Killdeer**

Nested in seven counties including Chisago KB; probable nesting in four. Seen in 47 additional counties statewide.



**Partial albino Killdeer, 31 July 1992, Plymouth, Hennepin County. Photo by Harding Huber.**

Spring 1993

**BLACK-NECKED STILT**

**Third state record:** two birds were discovered on 6/4 at Minnesota River Valley National Wildlife Refuge (Old Cedar Ave. Bridge), Hennepin Co. SK (*The Loon* 64:166-167).

**American Avocet**

Only reports: Clay, 6/17 Dakota (Black Dog L.) DM, 6/22 Wright MSt.

**Greater Yellowlegs**

Fall migrants seen in eight counties; early migrant 7/6 Lake.

**Lesser Yellowlegs**

Seen in 25 counties. Late migrant 6/18 Wright MSt; midsummer records 6/24 Marshall and Pennington MCBS, 6/24 Washington WL.

**Solitary Sandpiper**

Migrants observed in 18 counties; late migrant 6/16 Brown JS, early migrant 7/3 Murray.

**Willet**

Only reports: 6/5 Clay KR, 7/25 Wilkin County MO.

**Spotted Sandpiper**

Nested in Clay; seen in 36 other counties in all regions except west central.

**Upland Sandpiper**

Fewer reports than usual. Nested in Marshall, Aitkin; seen in 11 other western counties plus Morrison, Wright, Ramsey, Dakota.

**Whimbrel**

Only reports: 6/1,3 Lake, 6/10 St. Louis.

**Hudsonian Godwit**

Late migrant 6/14 St. Louis TW; also reported 6/1 Hennepin, 6/8 Pennington.

**Marbled Godwit**

Nested in Marshall; also seen in Kittson, Pennington, Red Lake, Clay, Otter Tail.

**Ruddy Turnstone**

All reports: 6/5 Clay and Lake, 6/10 Goodhue.

**Sanderling**

Observed 6/1 Hennepin, 6/2 Red Lake, 6/5 Clay, 6/7 Lake.

**Semipalmated Sandpiper**

Observed in 16 counties; late migrant 6/14 Pipestone, early migrant 7/4 Winona.

**Least Sandpiper**

Fewer reports than in recent years. Seen in 14 counties; late migrant 6/8 Wright, early migrant 6/30 Pennington.

**White-rumped Sandpiper**

Spring migrants seen in nine counties, including late migrant 6/20 Rock PS; plus fall migrant 7/30 Yellow Medicine.

**Baird's Sandpiper**

Only reports: 6/5 and 7/19,20 Clay, 7/13 Polk.

**Pectoral Sandpiper**

Seen in 17 counties; late migrant 6/10 St. Louis, early migrant 6/30 Pennington MCBS.

**Dunlin**

All records: 6/5 Clay, 6/10 Roseau and St. Louis and Hennepin.

**Stilt Sandpiper**

All reports: 6/5, 7/18-20 Clay; 6/10 Roseau, 7/18 Renville.

**Short-billed Dowitcher**

Fall migrants observed in seven counties; early migrant 6/30 Pennington MCBS.

**Long-billed Dowitcher**

Only report: 7/30 Houston.

**Common Snipe**

Nested in Marshall; seen in 22 other counties in all regions except west central, southwest and southeast.

**American Woodcock**

Nested in Pennington MCBS, probable nesting in Lake; seen in six other northern counties plus Anoka, Rice, Le Sueur, Blue Earth.

**Wilson's Phalarope**

Nested in Marshall; seen in six additional northwestern counties plus Morrison, Hennepin, Blue Earth, Faribault. Also observed 6/7 Lake TBB, 6/10 St. Louis TD (probable late migrants).

**Red-necked Phalarope**

Many more reports than usual, including several extremely late migrants. Spring migrants seen in Hennepin, Norman, Kittson; late migrants 6/18 Wright MSt, 6/24 Pennington MCBS, 6/26 Red Lake MCBS, 6/28 Marshall MCBS. Also fall migrants 7/19, 20 Clay.

**LAUGHING GULL**

Third summer record in past ten years. One bird in definitive alternate plumage observed from 6/28 to 7/2 at Ruthton sewage ponds, Pipestone Co. (*The Loon* 64:178-179).

**Franklin's Gull**

Nested in Marshall; seen in 15 additional counties as far west as a line from Lake of the Woods to Hennepin to Cottonwood.

**Bonaparte's Gull**

Late migrants 6/4 Beltrami, 6/10 Washington WL; early migrants 7/23 Ramsey, 7/25 Beltrami. Mid-summer records: 6/26 Red Lake, 7/11,15 Hennepin OJ, SC, 7/18 Lake of the Woods SSt.

**Ring-billed Gull**

More reports than usual; seen in 44 counties statewide.

### **Herring Gull**

Observed in seven northern counties plus Wright, Hennepin, Ramsey, Dakota.

### **Caspian Tern**

Roughly twice the usual number of reports. Late migrants and mid-summer records from 23 counties in all regions except south central.

### **Common Tern**

Seen in Kittson, Lake of the Woods, St. Louis, Hubbard, Mille Lacs; plus late migrants 6/6 Pipestone, 6/7 Hennepin. Also several mid-summer reports from Meeker, Washington (most likely Forster's).

### **Forster's Tern**

Nested in Marshall; seen in 26 additional counties as far west as a line through Lake of the Woods, Ramsey, Winona.

### **Black Tern**

Nested in Marshall, St. Louis, Le Sueur, Winona HVA; probable nesting in Crow Wing, Cottonwood. Seen in 40 additional counties statewide (excluding Lake, Cook).

### **Rock Dove**

Seen in 45 counties statewide.

### **Mourning Dove**

Nested in six counties including Kanabec MCBS; probable breeding in five counties. Seen in 49 additional counties statewide.

### **Black-billed Cuckoo**

Probable nesting in Crow Wing; seen in 49 other counties throughout state.

### **Yellow-billed Cuckoo**

Nested in Brown; seen in 13 additional southern counties plus Aitkin and Clearwater.

### **Eastern Screech-Owl**

Nested in Le Sueur, probable nesting in Cottonwood; also reported in Lyon, Murray, Brown, Hennepin.

### **Great Horned Owl**

Nested in 11 counties including Roseau MCBS; probable breeding in Polk, Sherburne. Reported in 20 additional counties statewide.

Spring 1993

### **Snowy Owl**

**Second summer report for this century** (the first was in 1987). One adult male observed 6/13-14 near Cottonwood in Yellow Medicine Co. HK (*The Loon* 64:172).

### **Northern Hawk Owl**

First summer report since 1988; one observed and photographed on 7/1-3 near Tower, St. Louis Co. AH.

### **Barred Owl**

Nested in Aitkin WN, Brown; probable nesting in Anoka. Seen in 21 additional counties as far west as a line through Lake of the Woods, Otter Tail, Brown.

### **Great Gray Owl**

Reported in Marshall, Pennington, Aitkin, St. Louis, Lake.

### **Long-eared Owl**

Only report: nested in Marshall SSt, CSt.

### **Short-eared Owl**

Nested near Viking, Marshall Co. MCBS; also observed in Clay (Blazing Star prairie), Red Lake.

### **Northern Saw-whet Owl**

Only reports from Lake, Cook.

### **Common Nighthawk**

Nested in Lake, probable nesting in Cottonwood; seen in 33 additional counties statewide.

### **Whip-poor-will**

Reported in Kittson, Roseau, Marshall, Red Lake, St. Louis, Cook, Morrison, Anoka, Houston.

### **Chimney Swift**

Probable nesting in Cottonwood; seen in 40 other counties statewide.

### **Ruby-throated Hummingbird**

Probable breeding in Crow Wing, Morrison, and Houston; seen in 39 other counties statewide.

### **Belted Kingfisher**

Probable breeding in Washington; seen in 46 additional counties throughout state.

**Red-headed Woodpecker**

Nested in Aitkin; probable nesting in Morrison, Anoka, Le Sueur, Cottonwood. Observed in 44 additional counties in all regions except northeast.

**Red-bellied Woodpecker**

Nested in Winona; probable nesting in Kandiyohi, Anoka, Washington, Wabasha. Seen in 22 additional counties as far north as Otter Tail, Crow Wing, Aitkin.

**Yellow-bellied Sapsucker**

Nested in Red Lake MCBS, Crow Wing, Brown; probable breeding in Marshall, Becker. Seen in 25 additional counties in all regions except east central and southwest.

**Downy Woodpecker**

Nested in seven counties including Kittson DZ, Marshall DZ, Red Lake MCBS; probable breeding in six counties. Seen in 36 other counties statewide.

**Hairy Woodpecker**

Nested in eight counties including Carver JS/MN, Dakota MCBS; probable nesting in four counties. Seen in 34 additional counties statewide.

**Black-backed Woodpecker**

Over twice the usual number of reports. Nested in Lake of the Woods; probable breeding in Beltrami, St. Louis. Also seen in Clearwater, Hubbard, Cass, Itasca, Lake, Cook.

**Northern Flicker**

Probable breeding in Crow Wing, Washington, Le Sueur, Cottonwood; seen in 47 additional counties statewide.

**Pileated Woodpecker**

Nested in Kandiyohi AB, Brown, Washington; probable breeding in Pennington, Becker, Crow Wing. Seen in 34 other counties statewide, including Yellow Medicine and Lyon in southwest.

**Olive-sided Flycatcher**

Seen in eight northern counties within breeding range. Several late migrants reported from ten southern counties; latest date 6/13 Dakota. Also reported 7/22 Clay (probable early migrant), 7/29 Brown JS.

**WESTERN WOOD-PEWEE**

**Sixth Minnesota record**; last reported in summer of 1989. One singing bird observed 6/21-29 at Hayes Lake S. P. in Roseau Co. KB, mob (*The Loon* 64:179).

**Eastern Wood-Pewee**

Nested in Anoka, Wabasha; probable nesting in Marshall, Crow Wing. Seen in 42 additional counties statewide.

**Yellow-bellied Flycatcher**

Seen in Marshall, Pennington, Clearwater, Becker, St. Louis, Lake, Cook; plus late migrants 6/1 Hennepin, 6/8 Brown, 6/17 Washington PC.

**Acadian Flycatcher**

Roughly twice the usual number of reports. Seen in Houston, Goodhue, Dakota, Scott, Hennepin, Ramsey, Washington, Anoka; plus 6/6,8 Wright RJ, MSt and 7/12-25 Clay PB, mob (*The Loon* 64:164).

**Alder Flycatcher**

Seen in 16 northern counties within breeding range plus Sherburne, Anoka, Hennepin, Ramsey, Washington all through June Rice TB; also late migrants 6/1 Brown, 6/9 Grant.

**Willow Flycatcher**

Reported in 13 southern counties plus Kittson, Marshall, Polk, Pennington, Red Lake, Clay, Wilkin, Morrison.

**Least Flycatcher**

Nested in Brown, Crow Wing, Marshall, Kittson MCBS, DZ; probable breeding in Dakota, Ramsey, Becker. Seen in 34 other counties statewide.

**Eastern Phoebe**

Nested in seven counties, probable breeding in five; seen in 35 additional counties throughout state.

**Great Crested Flycatcher**

Probable nesting in Crow Wing, Anoka, Cottonwood; seen in 45 other counties statewide including Lake, Cook.

**Western Kingbird**

Probable breeding in Marshall, Clay, Dakota; seen in 23 additional counties as far east as a line through Kittson, Crow Wing,

Washington, Blue Earth.

### **Eastern Kingbird**

Nested in six counties, probable nesting in three; seen in 47 additional counties statewide.

### **Horned Lark**

Observed in 40 counties as far northeast as a line through Lake of the Woods, Morrison, Washington.

### **Purple Martin**

Relatively few reports for second consecutive year. Nested in Crow Wing, Washington, Le Sueur; probable nesting in Murray, Cottonwood. Seen in 38 other counties statewide.

### **Tree Swallow**

Nested in 12 counties including Kittson MCBS; probable breeding in four. Seen in 38 additional counties throughout state.

### **Northern Rough-winged Swallow**

Nested in Crow Wing, probable nesting in Marshall; seen in 34 other counties statewide.

### **Bank Swallow**

Nested in Kittson, Washington, Winona; probable breeding in Marshall, Anoka, Le Sueur. Observed in 29 additional counties statewide.

### **Cliff Swallow**

Relatively few reports for second consecutive year. Nested in five counties including Kittson MCBS; probable breeding in four. Seen in 33 other counties statewide.

### **Barn Swallow**

Nested in nine counties including Pennington SSt; probable breeding in Cottonwood. Observed in 47 additional counties statewide.

### **Gray Jay**

Probable breeding in Marshall, Aitkin, Lake, Cook; also seen in Roseau, Lake of the Woods, Beltrami, Clearwater, St. Louis, Carlton.

### **Blue Jay**

Nested in Pipestone; probable nesting in Spring 1993

Crow Wing, Anoka, Le Sueur, Cottonwood. Seen in 49 additional counties statewide.

### **Black-billed Magpie**

Most reports in ten+ years. Nested in Marshall, Beltrami SSt, Aitkin; seen in eight additional northwestern counties plus Lake of the Woods.

### **American Crow**

Nested in Kittson, Marshall, Pennington, Winona HVA; probable nesting in four counties. Seen in 48 other counties statewide.

### **Common Raven**

Nested in Marshall, Aitkin WN, Pine DW/CD (*The Loon* 64:176); probable nesting in Lake. Also seen in Kittson, Roseau, Lake of the Woods, Beltrami, Koochiching, St. Louis, Cook.

### **Black-capped Chickadee**

Nested in five counties including Roseau SSt, Marshall MCBS; probable breeding in eight. Seen in 36 additional counties statewide.

### **Boreal Chickadee**

Reported in Cass, Aitkin, St. Louis, and Cook.

### **Tufted Titmouse**

Only report from Houston.

### **Red-breasted Nuthatch**

Probable breeding in Cook. Seen in seven other north central and northeastern counties plus Roseau, Ramsey.

### **White-breasted Nuthatch**

Nested in four counties, probable nesting in four; seen in 40 additional counties statewide.

### **Brown Creeper**

Nested in Brown; also observed in Roseau, Lake of the Woods, Clearwater, St. Louis, Lake, Morrison, Isanti, Nicollet.

### **CAROLINA WREN**

First summer report since 1986; one bird discovered 5/30 and observed throughout period in Miesville Ravine, Dakota Co. RJ et al.

**House Wren**

Nested in 12 counties, probable nesting in five; seen in 42 additional counties statewide.

**Winter Wren**

Probable breeding in Beltrami and Cook counties; also seen in Roseau, Marshall, Clearwater, Hubbard, St. Louis, Lake, Carlton.

**Sedge Wren**

Fewest reports since 1984. Nested in Marshall MCBS; seen in 33 additional counties statewide.

**Marsh Wren**

Nested in Marshall MCBS, Red Lake MCBS; observed in 31 other counties in all regions except northeast.

**Golden-crowned Kinglet**

Probable breeding in Roseau; also seen in Marshall, Clearwater, Hubbard, Aitkin, Carlton, Lake, Cook.

**Ruby-crowned Kinglet**

Reported in Marshall, St. Louis, Lake, Cook.

**Blue-gray Gnatcatcher**

Most reports in ten+ years. Nested in *Clay* DZ, Brown at Buffalo River S.P.; probable nesting in Scott, Goodhue. Seen in 18 additional central, east central, south central and southeast counties; plus Otter Tail DZ, 6/11,24 Marshall MCBS, 6/28 Red Lake MCBS.

**Eastern Bluebird**

Nested in 13 counties including Meeker MSc; probable nesting in three. Seen in 41 additional counties statewide.

**Mountain Bluebird**

Observed in Marshall (no details) SDM, PS, MCBS.

**Veery**

Nested in Red Lake MCBS, probable nesting in Crow Wing; seen in 28 additional counties as far south as Otter Tail in west and Nicollet, Rice in east.

**Gray-cheeked Thrush**

Only report: 6/1 Becker BK.

**Swainson's Thrush**

Probable breeding in Cook; also reported in Roseau, St. Louis. Migrants 6/1 Washington; 7/13, 7/31 Hennepin SC.

**Hermit Thrush**

Nested in Roseau County MCBS; seen in ten other counties as far south as Becker and Aitkin.

**Wood Thrush**

Most reports in eight+ years. Nested in Beltrami DJO; probable nesting in Hennepin. Seen in 26 additional counties as far west as Renville, Brown in south and Clay, 6/11 Marshall MCBS in north.

**American Robin**

Nested in eight counties, probable nesting in five; seen in 42 additional counties statewide.

**Gray Catbird**

Nested in nine counties including Marshall MCBS, Red Lake MCBS; probable nesting in three. Seen in 44 additional counties statewide.

**Brown Thrasher**

Nested in Washington WL, Le Sueur; probable breeding in Crow Wing, Hennepin, Cottonwood, Winona. Reported in 46 other counties statewide.

**Cedar Waxwing**

Nested in Sherburne, Brown, Winona; probable breeding in five counties. Seen in 44 additional counties throughout state.

**Loggerhead Shrike**

Probable breeding in Washington, Dakota, Olmsted; also seen in Norman, Clay, Rock, Lyon, Kandiyohi, Sherburne, Le Sueur, Rice, Goodhue.

**European Starling**

Nested in four counties including Meeker MSc; probable nesting in four. Seen in 42 other counties statewide.

**Bell's Vireo**

Nested at two locations in Wabasha (lower Sand Prairie and McCarthy L. WMA); was also seen in Dakota, Goodhue, Winona and Houston.

**Solitary Vireo**

Probable nesting in Lake; also reported in Roseau, Marshall, Beltrami, Itasca, Hubbard, Crow Wing, Aitkin, Carlton, St. Louis, and Cook.

**Yellow-throated Vireo**

More reports than usual. Nested in Anoka; probable nesting in Pennington, Becker. Seen in 32 additional counties as far northeast as Lake of the Woods, St. Louis and as far southwest as Clay, Kandiyohi, Brown, Faribault; plus 6/14 Pipestone and Rock HK.

**Warbling Vireo**

Nested in Lake DPV, Wright; probable breeding in Marshall, Crow Wing, Anoka. Seen in 34 additional counties statewide.

**Philadelphia Vireo**

Probable nesting in Cook; also seen in Lake.

**Red-eyed Vireo**

Nested in Marshall MCBS, Crow Wing; probable nesting in Morrison, Brown. Seen in 45 additional counties throughout state.

**Blue-winged Warbler**

Reported in Anoka, Hennepin, Washington, Carver, Scott, Dakota, Nicollet, Rice, Wabasha, Winona, Houston.

**Golden-winged Warbler**

Probable nesting in Becker, Crow Wing; seen in 13 other counties within an area bounded by a line through Roseau, Marshall, Sherburne, Washington, Lake.

**Tennessee Warbler**

Seen in Koochiching, St. Louis, Lake, Cook, Aitkin. Migrants reported in five other counties, including early migrant 7/10 Hennepin SC.

**Orange-crowned Warbler**

Very unusual **mid-summer record**: one male seen on 7/6 near Leech L. in Cass Co. DL (*The Loon* 64:163-164).

**Nashville Warbler**

Probable breeding in Marshall, Crow Wing. Seen in 16 additional counties as far west and south as a line through Roseau, Becker, Hennepin; plus 7/17 Clay LCF.

**Northern Parula**

Reported in Becker, Clearwater, Beltrami, Hubbard, Koochiching, Aitkin, St. Louis, Cook.

**Yellow Warbler**

Nested in five counties, probable nesting in three; seen in 42 additional counties statewide.

**Chestnut-sided Warbler**

Nested in Becker, Crow Wing; probable nesting in Anoka. Seen in 16 additional northern counties plus Sherburne, Washington, 6/1 Hennepin, 6/2 Dakota.

**Magnolia Warbler**

Reported in Roseau, Aitkin, St. Louis, Lake, Cook; plus extremely early migrants 7/18 Hennepin SC, 7/27 Pipestone ND.

**Cape May Warbler**

Seen in Lake of the Woods, Aitkin, Lake.

**Black-throated Blue Warbler**

Only reports from Lake, Cook.

**Yellow-rumped Warbler**

Nested in Marshall; probable nesting in Lake, Cook. Seen in six north central counties plus St. Louis, Roseau, Morrison; also probable migrant 7/20 Clay mob.

**Black-throated Green Warbler**

Seen in ten northern counties plus late migrants 6/6 Scott, 6/9 Hennepin.

**Blackburnian Warbler**

Probable nesting in Cook County; also seen in Roseau, Marshall, Pennington, Clearwater, Koochiching, Aitkin, St. Louis, and Lake counties.

**Pine Warbler**

Seen in 13 counties roughly along a line from Roseau to Washington; plus St. Louis, Lake.

**PRAIRIE WARBLER**

**Fifth state record**: one singing bird was observed on 6/6 at Blue Mounds S. P. in Rock County DZ (*The Loon* 64:174-175).

**Palm Warbler**

Seen in Marshall, Koochiching.

**Cerulean Warbler**

Probable breeding in Ramsey; also seen in Morrison, Wright, Washington, Scott, Dakota, Rice, Brown.

**Black-and-white Warbler**

Probable nesting in Lake of the Woods. Seen in 14 additional counties as far south and west as a line through Marshall, Becker, Anoka; plus 6/5,12 Washington WL, 6/14 Scott TT, 7/10 Hennepin SC.

**American Redstart**

Nested in Crow Wing, Anoka, Winona HVA; probable nesting in Becker, Brown, Hennepin, Washington. Seen in 30 additional counties in all regions including 6/7 Rock, 6/28 Murray ND in southwest.

**Prothonotary Warbler**

Nested in *Sherburne* SNWR (extending known nesting range), Winona HVA; also seen in Hennepin, Carver, Dakota, Houston.

**Ovenbird**

Nested in Morrison MCBS, and Anoka counties; probable nesting in Becker, Crow Wing, Nicollet, Washington. Seen in 26 other counties as far west and south as a line through Marshall, Otter Tail, Brown, Houston.

**Northern Waterthrush**

Reported in St. Louis, Aitkin, Kittson MCBS, Marshall MCBS, Becker BK; plus migrants 6/1 Brown, 6/20 Anoka DZ.

**Louisiana Waterthrush**

Nested at Falls Creek SNA in Washington Co.; also seen in Houston, 6/15 Rice TB.

**Kentucky Warbler**

At least two birds seen 6/23-7/6 at Seven Mile Creek Co. Park in Nicollet Co. LF, MF.

**Connecticut Warbler**

Seen in Roseau, Marshall, Lake of the Woods, Clearwater, Aitkin, Carlton, Lake; plus late migrant 6/6 Rock.

**Mourning Warbler**

Reported in 14 northern counties including 7/2 Clay DZ; plus Sherburne, Ramsey, Washington. Late migrants 6/3 Dakota, 6/6

Scott, 6/7 Hennepin, 6/15 Rice TB.

**Common Yellowthroat**

Nested in Marshall, Crow Wing JS/MN; probable nesting in Morrison, Le Sueur. Seen in 50 other counties statewide.

**Wilson's Warbler**

Only reports: 6/6 Lake and Murray, 6/9 Grant, 6/12 Becker.

**Canada Warbler**

Most reports since 1986. Seen in Lake of the Woods, Clearwater, Carlton, St. Louis, Lake, Cook; plus late migrants 6/2 Brown, 6/6 Scott, 6/21 Carver DM.

**Scarlet Tanager**

Probable breeding in Marshall, Lake of the Woods, Anoka; seen in 32 additional counties statewide, including 6/7 Rock.

**Northern Cardinal**

Nested in Hennepin, Washington, Winona; probable nesting in Kandiyohi, Anoka, Nicollet, Le Sueur. Seen in 21 additional southern counties plus Morrison, Mille Lacs, Becker BBe.

**Rose-breasted Grosbeak**

Nested in Marshall MCBS, Red Lake MCBS, Becker RHu; probable breeding in five counties. Seen in 36 other counties statewide.

**Blue Grosbeak**

Usual reports from Rock, Murray, Pipestone, Nobles.

**Indigo Bunting**

Nested in Brown; probable nesting in Crow Wing, Anoka. Seen in 45 additional counties throughout state.

**Dickcissel**

Gradual decrease in number of reports continues, following irruption peak in 1988. Seen in 35 counties as far north as Marshall in west and Anoka in east.

**Rufous-sided Towhee**

Nested in Anoka. Observed in 17 additional counties roughly along a line from Roseau to Houston; plus Nicollet, Brown, Blue Earth.

**Chipping Sparrow**

Nested in eight counties, probable nesting in six; seen in 42 additional counties statewide.

**Clay-colored Sparrow**

Nested in Kittson, Marshall, Pennington MCBS; probable nesting in Crow Wing. Reported in 32 other counties as far south as Murray, Mower.

**Field Sparrow**

Nested in Anoka, Washington, Brown, Blue Earth; probable nesting in Winona. Seen in 17 additional southern counties plus Morrison, Crow Wing, Otter Tail, Clay; also one singing on 6/7-8 at L. Bronson S. P. in Kittson MCBS.

**Vesper Sparrow**

Nested in Marshall MCBS, Morrison MCBS, Clay, Olmsted; probable breeding in Cottonwood. Reported in 45 other counties in all regions, including St. Louis.

**Lark Sparrow**

Many reports. Nested in Anoka; probable nesting in Marshall, Clay. Also seen in Kittson, Red Lake, Becker, Sherburne, Washington, Renville, Scott, Blue Earth, Wabasha.

**Lark Bunting**

Two records, both unusually far north. One adult male observed on 6/4 just south of Thief L. WMA in Marshall Co. MCBS; another male seen on 6/5,6 at Felton Prairie in Clay Co. KR et al.

**Savannah Sparrow**

Nested in Marshall MCBS, Red Lake MCBS; seen in 42 additional counties statewide.

**Grasshopper Sparrow**

Probable breeding in Wabasha; seen in 30 other counties as far northeast as a line through Roseau, Morrison, Anoka, Washington.

**Henslow's Sparrow**

Only report: two singing males on 7/11 near Iowa border in southwestern Fillmore Co. BR (this species is reported to be regular in an Iowa prairie area located just south of

Spring 1993

the above sighting).

**LeConte's Sparrow**

Nested in Red Lake MCBS; seen in 11 other northern counties.

**Sharp-tailed Sparrow**

Reported in Roseau, Polk, Aitkin; plus June observations at several sites in Morrison MCBS (south of previously known breeding range).

**Song Sparrow**

Nested in five counties including Kittson MCBS; probable nesting in three. Seen in 48 additional counties statewide.

**Lincoln's Sparrow**

Only reports from St. Louis (lowest number of reports in 12+ years and in sharp contrast to the 11 counties reported from last year).

**Swamp Sparrow**

Probable breeding in Cook; seen in 40 other counties statewide.

**White-throated Sparrow**

Nested in Marshall MCBS, Aitkin; probable nesting in Crow Wing. Reported in 14 additional counties as far south as a line through Marshall, Becker, Morrison, Washington.

**Dark-eyed Junco**

Only reports from Roseau, Lake.

**Chestnut-collared Longspur**

Only report from usual Felton Prairie area in Clay Co.

**Bobolink**

Nested in Kittson MCBS; seen in 46 other counties statewide.

**Red-winged Blackbird**

Nested in six counties including Red Lake MCBS; probable breeding in four. Seen in 49 additional counties throughout state.

**Eastern Meadowlark**

Observed in 22 counties as far west as a line through Beltrami, Morrison, Brown.

**Western Meadowlark**

Reported in 47 counties in all regions,

including 6/6 Cook PB in northeast.

### **Yellow-headed Blackbird**

Nested in Marshall, Red Lake MCBS, Le Sueur; probable nesting in Wright, Cottonwood. Seen in 40 additional counties in all regions except northeast.

### **Brewer's Blackbird**

Observed in 31 counties as far south as Lyon in west, Faribault in central, Dakota in east.

### **Common Grackle**

Nested in four counties, probable nesting in four; seen in 49 other counties statewide.

### **Brown-headed Cowbird**

Bred in eight counties including Kittson and Pennington and Red Lake MCBS; probable breeding in five. Parasitized species included Least Flycatcher, Veery, Gray Catbird, Red-eyed Vireo, Yellow Warbler, Chestnut-sided Warbler, American Redstart, Scarlet Tanager, Indigo Bunting, Rufous-sided Towhee, Field Sparrow, Song Sparrow. Seen in 40 additional counties statewide.

### **Orchard Oriole**

Probable nesting in Clay, Pipestone; seen in 16 additional southern counties plus Pennington SSt, Marshall MCBS.

### **Northern Oriole**

Nested in five counties including Faribault AB; probable nesting in four. Observed in 46 other counties statewide.

### **Purple Finch**

Probable breeding in Crow Wing. Seen in 15 other counties as far south as a line through Marshall, Becker, Mille Lacs, Washington WL.

### **House Finch**

Population explosion continues. Nested in Winona, Aitkin WN, Olmsted JB, Pipestone JP, ND; probable breeding in Morrison, Hennepin, Brown. Seen in 20 other southern counties plus Clay, Otter Tail, Todd, Pine, Beltrami DJo.

### **White-winged Crossbill**

All reports: 6/15,23 Marshall MCBS, Beltrami, Cook.

### **Pine Siskin**

Relatively few reports. Seen in nine northern counties plus Washington, Brown.

### **American Goldfinch**

Nested in Crow Wing, probable nesting in Washington; seen in 54 additional counties.

### **Evening Grosbeak**

Probable nesting in Becker; also seen in Roseau, Lake of the Woods, Beltrami, Clearwater, Koochiching, Aitkin, St. Louis, Lake, Cook.

### **House Sparrow**

Nested in Washington, Le Sueur, Brown; probable nesting in Becker, Cottonwood. Observed in 43 additional counties.

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## Establishing Common Tern Habitat

Jeff Hines

Common Terns (*Sterna hirundo*) are a species of special concern in Minnesota, and they are known to nest regularly at only four locations in the state (McKearnan & Cuthbert 1989, Coffin & Pfannmuller 1988). Their preferred habitat is sparsely vegetative areas isolated from predators (Coffin & Pfannmuller 1988, Courtney & Blokpoel 1983) making islands ideal nesting sites.

One such location is in the Duluth Harbor where there has been a considerable effort by the Department of Natural Resources Nongame Wildlife Program (NWP) to en-

sure that suitable nesting habitat is available. Two islands were modified, and the terns have been nesting on one since 1989.

Fish Lake Reservoir, located 15 miles north of Duluth, is managed by Minnesota Power for hydroelectric energy. In 1987, this 3,260 acre reservoir had low water levels that exposed new littoral areas to the terns. A small rocky island which is usually submerged in about one to three feet of water was reported to have nesting terns in 1987. Since 1987, this area has again been flooded, but terns have continually been seen at Fish Lake. This paper summarizes subsequent ef-

forts by the NWP to re-establish nesting Common Terns on Fish Lake.

### Methods

In the summer of 1991, we conducted a survey of five islands in Fish Lake for their suitability as potential Common Tern nesting sites. Of the five, three were selected and ranked; that fall, I met with representatives of Minnesota Power and they graciously granted permission to the NWP to create nesting habitat for Common Terns, on the island which was ranked highest.

The forest on the two acre island would best be classified as an aspen-birch-balsam fir type. Infertile soils and a closed tree canopy resulted in little forest floor vegetation. Overnight camping and picnicking has left both ends of the island grassy and open.

In the winter of 1991-92, a Minnesota Conservation Corps crew removed trash and cut down all trees and brush on the island. The tops of the trees and the brush were cut, piled, and burned, and the larger logs were taken to a nearby island for use by summer visitors. Thirty tern decoys were set out to attract terns, and "No Trespassing" signs were erected to inform people that this area was for nesting terns. The island was sprayed with Rodeo herbicide (Monsanto Corp.) to prevent regrowth of vegetation and to kill the grasses and forbs.

### Results

A large group of terns was first seen using the lake on 21 May 1992. On 24 May, terns were seen around the island, and on 26 May 18 adults were seen on the island. On 17 July I approached the island and saw about 20 adults flying around and, upon closer inspection, found five nests. On 29 July I found three fledged young, three young that were still unable to fly, and two nests that contained eggs. It appears five to ten breeding pairs used the island this summer.

### Discussion

It was rewarding to have Common Terns nest successfully the first year, but the island will require continued management. With the overstory removed, vegetation became very heavy by the end of the summer. Rodeo herbicide should be applied in northern Minnesota in June; however, the birds

return in late May which prevents the effective use of Rodeo and necessitates the evaluation of alternative herbicides. This fall the two ends of the island that had grass were tilled, which may reduce the need for herbicide treatment. Future management will be to control encroaching vegetation, and monitor tern numbers.

The future for Common Tern use of Fish Lake Reservoir looks good, and with proper management the island should accommodate a population of 50-100 breeding pairs. Compared to other tern management projects, the Fish Lake project was an inexpensive endeavor. I believe there may be other areas within common tern breeding range in the state where the same techniques may be used. Areas where Common Terns are known to nest or have nested historically should be evaluated for further opportunities to create suitable habitat.

### Acknowledgements

I would like to thank the people at Minnesota Power, especially Bob Bohm for allowing us to use their land. Without their generosity this rare bird would have one less place to nest. To Rich Staffon and his staff at the Cloquet wildlife office for the help they provided in getting the island ready. Thanks to Bill Berg, Rich Baker, and Jack Mooty for reviewing an earlier draft of this manuscript. A special vote of thanks goes out to Jack Mooty who has given me the freedom to work on projects that I believe in, and is always there to provide me with encouragement and advice.

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# Proceedings of the Minnesota Ornithological Records Committee

Kim R. Eckert

There was a meeting of the Committee on 6 December 1992, and the primary item on the agenda was the official Checklist of Minnesota Birds, which is updated every five years. This list is scheduled for publication this year and will be distributed with the Summer 1993 issue of *The Loon*. (This list is normally included with the Spring issue, but the American Ornithologists' Union met in February to consider several changes in nomenclature and sequence, and it was decided to delay our Checklist until these changes could be included.)

The status of several species was changed from the 1988 Checklist:

- Gyrfalcon and Western Sandpiper, both formerly Regular, are now considered Casual.

- Red-throated Loon, Ross' Goose, Ruff, Carolina Wren, Worm-eating Warbler and House Finch, all formerly Casual, are now considered Regular.

- Snowy Plover, Pomarine Jaeger and Bewick's Wren, all formerly Casual, are now considered Accidental.

- Clark's Grebe, Eurasian Wigeon, Long-billed Curlew, Lesser Black-backed Gull, Least Tern, Western Wood-Pewee, Rock Wren and Sage Thrasher, all formerly considered Accidental, are now considered Casual.

- Trumpeter Swan, formerly on the Exterminated list, is now considered Accidental on the basis of the January 1991 record from Wabasha Co. (*The Loon* 63:147-150.) (Note, however, that all other Trumpeter Swans seen in recent years in Minnesota are still considered individuals from recently introduced populations; since these populations are not yet established in the wild, such individuals are not yet "countable".)

There were also votes on three records at the meeting:

- The frigatebird record from September

1988 in Clearwater Co. (see below) was discussed, and by a 9-1 vote it was decided to consider this individual a Magnificent Frigatebird, rather than frigatebird, sp. (When considering records of this type, all ten members vote.)

- A photo record of a Western Tanager on 30 May 1992 in Minneapolis, Hennepin Co. was found Acceptable (vote 7-0).

- The Barn Owls nesting during 1991 in Vermillion Twp., Dakota Co. were found Acceptable (vote 7-0).

The following records were voted on July - December 1992 and found Acceptable:

- Clark's Grebe, 3 May 1992, South Heron Lake, Jackson Co. (vote 7-0; *The Loon* 64:174).

- Clark's Grebe, 25-29 June 1992, Diamond Lake, Kandiyohi Co. (vote 7-0; *The Loon* 64:163).

- Worm-eating Warbler, 12 May 1992, Warner Nature Center, Washington Co. (vote 7-0; *The Loon* 64:166).

- Black-necked Stilt, 4 June 1992, Bloomington, Hennepin Co. (vote 7-0; *The Loon* 64:166-167).

- Lewis' Woodpecker, 10 May 1992, near Grand Marais, Cook Co. (vote 7-0; *The Loon* 64:160-161).

- Black-headed Grosbeak, 16 April 1992, Bemidji, Beltrami Co. (vote 5-2; *The Loon* 64:231-232).

- White-eyed Vireo, 10-23 May 1992, near Reno, Houston Co. (vote 7-0; *The Loon* 65:48-49).

- frigatebird, sp. (later accepted as Magnificent Frigatebird; see above), 22 September 1988, Lake Itasca, Clearwater Co. (vote 10-0). (All ten members vote on potential first state records; this record had previously been voted on and found Unacceptable — see *The Loon* 62:13).

- Laughing Gull, 28-30 June 1992, Ruthon, Pipestone Co. (vote 7-0; *The Loon* 64:178-179).

• Sprague's Pipit, 22 August 1992, Felton Prairie, Clay Co. (vote 7-0; *The Loon* 64:231).

• Neotropic Cormorant, 16 July - 4 August 1992, Lake Vadnais, Ramsey Co. (vote 10-0; *The Loon* 64:176-178). (All ten members vote on potential first state records.)

• Western Wood-Pewee, 21-28 June 1992, Hayes Lake S.P., Roseau Co. (vote 7-0; *The Loon* 64:179).

• Rufous Hummingbird, 21-23 August 1992, West Twin Lake, Crow Wing Co. (vote 7-0; *The Loon* 65:47-48).

• Clark's Grebe, 21-22 August 1992, Lone Tree Lake, Yellow Medicine Co. (vote 7-0; *The Loon* 64:233).

• Carolina Wren, late May - late August 1992, near Miesville, Dakota Co. (vote 7-0).

• Kentucky Warbler, 23 June - 6 July 1992, Seven Mile Creek County Park, Nicollet Co. (vote 7-0; *The Loon* 65:45-46).

• Rufous Hummingbird, 23-24 August 1992, Lake Mazaska, Rice Co. (vote 7-0; *The Loon* 64:235).

• Mississippi Kite, 11 September 1992, Pepin Twp., Wabasha Co. (vote 6-1; *The Loon* 64:234).

• Least Tern, 29 August 1992, Spring Lake, Dakota Co. (vote 7-0; *The Loon* 64:222-223).

• Sabine's Gull, 19 September 1992, Duluth, St. Louis Co. (vote 7-0; *The Loon* 65:46-47).

• Great Black-backed Gull, 9 November 1992, Duluth, St. Louis Co. (vote 7-0; *The Loon* 65:50-51).

• Great Black-backed Gull, 7 November 1992, Grand Marais, Cook Co. (vote 7-0).

• Painted Redstart, 30 September 1992, Wealthwood, Aitkin Co. (vote 10-0; *The Loon* 65:49). (All ten members vote on potential first state records.)

• Worm-eating Warbler, 1 October 1992, Olson Lake, Washington Co. (vote 5-2).

• Lesser Black-backed Gull, 21-22 November 1992, Lake Minnetonka, Hennepin Co. (vote 7-0; *The Loon* 64:232).

• Sedge Wren, 23 November 1992, near Luverne, Rock Co. (vote 7-0).

• Carolina Wren, 19 September - 31 October 1992, near Reno, Houston Co. (vote 5-2).

• Great Black-backed Gull, 16 December 1992, Duluth, St. Louis Co. (vote 7-0; *The*

*Loon* 65:50-51).

• Yellow-bellied Sapsucker, 7 March 1992, Cologne, Carver Co. (vote 7-0).

The following records were voted on July - December 1992 and found to be Unacceptable:

• Carolina Wren, 8-15 April 1992, near Eitzen, Houston Co. (vote 3-4). While this probably was a Carolina Wren, the majority voted not to accept this since the plumage description only mentioned a "conspicuous white eye stripe ... and white underparts," and since the song, on which the identification was partly based, was not fully described.

• Yellow-throated Warbler, 2 May 1992, Winona, Winona Co. (vote 2-5). The majority also felt this individual was probably correctly identified, but the description provided was incomplete: e.g., no mention was made of the presence/absence of side streaking or wing bars, nor was there any description of the upperparts, belly or tail.

• Hooded Oriole, 24-25 May 1992, near Grand Marais, Cook Co. (vote 1-9; all ten members vote on potential first state records.) To accept such an unusual record, it was felt the documentation should be flawless, which it was not in this case. The possibility of immature male Orchard Oriole, which the observers were apparently unfamiliar with, was not completely ruled out, and it was stated that the bird was "larger than Northern Orioles" — while this would seem to rule out the smaller Orchard Oriole, it also precludes Hooded Oriole which is smaller than the Northern Oriole.

• Common Nighthawk, 5 April 1992, near Detroit Lakes, Becker Co. (vote 3-4). The entire description only mentioned "a dark bird with fairly long, pointed wings ... white bars on each wing," and a tail that "was squarish with a slight V-shape." No mention was made of its manner of flight or size, nor was the size, shape and position of the wing bars described.

• Yellow-throated Warbler, 18 July 1992, Scandia Twp., Washington Co. (vote 0-7). The bird was only seen in silhouette and was identified only on the basis of its song, and the description of this song was not complete enough to indicate Yellow-throated Warbler and preclude other possibilities.

• Northern Wheatear, 15 May 1982, near

John A. Latsch S.P., Winona Co. (vote 2-8; all ten members vote on potential first state records; this record had previously been voted on, found Acceptable and published — see *The Loon* 55:151-153). This record was originally accepted on the basis of the painting of the bird, which was published in *The Loon*, and the unique tail pattern, and because no one could think of what else it might have been. However, doubts were raised about the accuracy of the painting, which apparently was made from memory long after the sighting (the field sketch included with the documentation is far less convincing); it was also unclear how the tail pattern could have been seen since the bird was apparently perched with wings folded over the tail the entire time. The record was also reconsidered because the wooded habitat in which the bird was seen is atypical for a wheatear, because the song heard does not seem to fit this species, and especially because the “serene” behavior of the bird is inconsistent with the active, tail-bobbing behavior which is distinctive in Northern Wheatear.

- Western Tanager, 19 August 1992, near Cambridge, Isanti Co. (vote 2-5). The entire description only mentioned a red head, wing bars, and that it had a “strong demarcation between the red and yellow colors.” Such a description is not complete enough to indicate the bird was even a tanager.

- Northern Saw-whet Owl, 15-28 May 1992, Leota Twp., Nobles Co. (vote 1-6). The identification of these nesting owls was based on their small size and apparent lack of ear tufts. However, any “eared” owl can depress these feathers and appear “ear-less”, and it was felt these were probably Eastern Screech-Owls.

- Ruff, 27 September 1992, Waterville, Le Sueur Co. (vote 0-7). The observers seemed to base their entire identification of the two birds on their orange legs, since they could find nothing else in their field guide to match the birds they saw. However, nothing else in the documentation favors Ruff over any other species, and it was felt these may have been Pectoral Sandpipers which were seen by others that day at this location but which the observers did not list among the species they saw.

- McCown's Longspur, 18 October 1992, Rothsay W.M.A., Wilkin Co. (vote 0-7). The

six individuals seen among a longspur flock were primarily identified on the basis of their “chestnut colored wing shoulder.” However, Vesper Sparrows and Horned Larks also have chestnut on their median wing coverts (i.e., “shoulders”); it is also possible the observer was actually seeing the chestnut greater coverts of Lapland Longspurs, a field mark he was apparently unaware of.

- White-headed Woodpecker, 26 October 1992, Minnetonka, Hennepin Co. (vote 0-10; all ten members vote on potential first state records.) The entire description only mentioned that “the bird was mostly black except for a white head.” However, such a description does not preclude a partial albino bird of some kind, and it was later learned that a partial albino Common Grackle with a white head was seen about the same time in this area.

- Lesser Black-backed Gull, 10-11 June 1992, Howard Lake, Wright Co. (vote 3-4). While it was originally agreed that this immature gull was possibly a Lesser Black-backed, it was decided to send the documentation to three out-of-state authorities since none of us in Minnesota has much experience with immatures of this species. On the basis of their review, the majority felt this was best left as unidentified, since the three authorities did not agree on the age of the gull: the mantle color, bill pattern, tail pattern and leg color did not clearly indicate if this was a one- or two-year-old bird. Two of the reviewers, therefore, had reservations about the record; one felt “80-90% confident of the identification,” citing the incomplete description of the back color and wing pattern, and the other was “uneasy about endorsing this record” because of uncertainties about the back color, tail pattern and leg color.

- Gyrfalcon, 15 October 1992, Martin Co. (vote 0-7). The documentation provided was lengthy but only included a brief and vague description of the bird seen, which was identified as an immature white morph Gyr. The possibility of the bird actually being a gull, Snowy Owl or other species of hawk is not clearly ruled out.

- Least Flycatcher, 18 October 1992, near Moorhead, Clay Co. (vote 1-6). The majority agreed this was acceptable as an *Empidonax*, sp., and was most likely a Least. However, though the “wit” call note de-

scribed would seem to rule out Alder, Acadian and Yellow-bellied flycatchers, the possibility of Willow Flycatcher or a stray western *Empidonax* are not precluded.

• Iceland Gull, 12 December 1992, Lake Harriet, Hennepin Co. (vote 1-6). This adult gull was identified only on the basis of its

overall size, described as "the size of a Herring Gull." However, this does not preclude the more likely Glaucous Gull, which can often look about the same size overall as a Herring Gull.

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**DISTRIBUTION AND TAXONOMY OF BIRDS OF THE WORLD** by Charles G. Sibley and Burt L. Monroe, Jr. Yale University Press, New Haven, Connecticut. 1990. xxiv + 1111 pp. \$125.

**PHYLOGENY AND CLASSIFICATION OF BIRDS** by Charles G. Sibley and Jon E. Ahlquist. Yale University Press, New Haven, Connecticut. 1990. xxiii + 976 pp. \$100.

**THE KNOWN BIRDS OF NORTH AND MIDDLE AMERICA: DISTRIBUTIONS AND VARIATION, MIGRATIONS, CHANGES, HYBRIDS, ETC., PART I, HIRUNDINIDAE TO MIMIDAE; CERCITIIDAE** by Allan R. Phillips. Denver, Colorado, published by the author. Available from Known Birds, 3540 S Hillcrest Dr. No. 5, Denver, CO 80237 (Checks payable to author). 1986. lxi + 259 pp. \$60.

**THE KNOWN BIRDS OF NORTH AND MIDDLE AMERICA, PART II, BOMBYCILLIDAE; SYLVIIDAE TO STURNIDAE; VIREONIDAE** by Allan R. Phillips. Denver, Colorado, published by the author. Available from Known Birds, 3540 S Hillcrest Dr. No. 5, Denver, CO 80237 (Checks payable to author). 1991. liii + 249 pp. \$64.

#### Current trends in avian systematics.

Allan Phillips once wrote (1959:23) that "Confusion is a mental affliction that affects many on the slightest provocation." As one of the many whom confusion has afflicted at one time or another (I refrain from noting the degree of provocation), it was with some trepidation that I began this rather broad review. It is one thing to play a small role as participant and observer; it is quite

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another to attempt an explanation of what is occurring in avian systematics<sup>1</sup> as a whole. Ornithological systematics and taxonomy<sup>2</sup> today are alive and well, exist in several different flavors, and will continue to evoke changes in our present conception of the class Aves. As our understanding of avian evolution and diversity improves, these changes will affect all who work with or are interested in birds.

It has been stated repeatedly by learned scientists that birds are a well known group, and that our knowledge of their diversity is reasonably complete. This concept is somewhat fallacious. Although Aves is perhaps the best known vertebrate class, our knowledge is nevertheless very incomplete. The higher-level systematics of birds are poorly known, and we do not have a firm grasp of avian diversity. The latter is very important to conservation efforts. I do not think that it is going too far to say that at this point we can only guess at the number of bird species that exist in the world today.

We are in the midst of what is likely to be a decades-long flurry of research, resulting in the upheaval of many long-cherished notions concerning avian relationships and diversity. These research activities are fueled by an understanding among avian systematists that our knowledge of birds is far from complete, and by the availability of new tools and new material. The new tools employed by systematists are conceptual (e.g., cladistics, species concepts), molecular (e.g., means of examining between-organism differences in nuclear and mitochondrial DNA), and computational (e.g., powerful computer-based analyses). The new materials are various components of birds: proteins, DNA, tissues, blood, skeletons, song, behavior, and skins. As we collect more material, more data, and examine various components more carefully, we arrive at a better idea of the true nature of avian interrelationships and diversity.

The four books reviewed here approach different realms of avian systematics and taxonomy. Sibley and Ahlquist deal exclusively with the history and systematics of beta taxonomy<sup>3</sup>. Phillips and his collaborators deal with systematics at and below the level of the genus; their most noteworthy contributions appear at the level of subspecies (gamma taxonomy). Sibley and Mon-

roe produce a taxonomy at the superspecies<sup>4</sup>, species, and (somewhat) at the subspecies levels. They follow the higher classification scheme outlined in Sibley and Ahlquist.

**"Distribution and Taxonomy of Birds of the World."** We now have a decent reference for the birds of the world in a single volume. The work consists of a brief, six page introduction, 724 pages of species accounts, 64 pages of a world numbering system, 25 maps of the regions of the world, a volume-specific gazetteer (32 pp.), a reference section (33 pp.), and a comprehensive index of species treated (English and scientific names included; 172 pp.). The authors recognize 9,672 species in 2,058 genera. The physical dimensions of the book are large: roughly 8.75" x 11.25" x more than 2.5" thick. Although attractively bound in ochre cloth with black and gold highlights, a heavier grade buckram would better suit a working copy.

The body of the text is devoted to species accounts. These accounts give the current scientific name, the year and author of the species' description, an English common name (sometimes with alternates), a code number for the species, a brief habitat description, the modern distribution of the species (necessarily brief), and often systematic and taxonomic notes. Codification of information is present, but is relatively simple and pertains to taxonomy. Species that are considered members of superspecies are denoted in the standard manner, with the superspecies group preceding the species name in square brackets.

Subspecies are treated in a rather odd fashion, probably reflecting current uncertainty over their nature (see debate in *Auk* 99[3], 1982; also Discussion below). The authors dance completely around the issue; the word "subspecies" does not appear in the Introduction under "Taxonomic approach for species." Instead, the authors use the nebulous terms "group" and "group-name" for those subspecies (and subspecies groups) falling below the somewhat subjective lines drawn below those subspecies that attain species status under a superspecies umbrella. The problem is clear; sidestepping the issue in such a fashion is a disservice (but, sadly, continues a precedent set by the 1983 American Ornithologists' Union [AOU] Checklist).

I sincerely hope that this is not a sign of things to come.

While clearly supporting the use of trinomial nomenclature, the authors seem to prefer to throw out new terms for subspecific variation rather than use the controversial term "subspecies". Granted, genetic evidence is repeatedly demonstrating that "subspecies" are frequently no such thing (i.e., not incipient biological species), but introducing new terms does more harm than good. "Subspecies" remain a convenient unit for taxonomists and students of geographic variation, as long as it is recognized that subspecies are not necessarily units of evolution (the old name "variety" would be more appropriate). If a subspecies was demonstrated to be an evolutionary unit, it would likely be given full specific status and be recognized as a member of a superspecies complex (this will become more common as we move away from the biological species concept<sup>5</sup> and toward a phylogenetic species concept<sup>6</sup>). It should be noted that Sibley and Monroe only consider groups (subspecies) "which have recently been considered species by some authors," although in the case of many species (e.g., *Catharus ustulatus*) it is apparent that "recent" was open to broad interpretation. Thus, the absence of subspecific treatment does not mean that the species considered is monotypic. In other words, the work does not attempt an even treatment of within-species diversity. Granted, this was not a goal of the work, but it does bring up a general problem in avian systematics. It seems that a certain aversion has developed to using subspecific designations, except in the more obvious or recently acknowledged cases.

Due no doubt to space constraints, there is no detailed presentation of nomenclatural history, other than the name of the species' describer and the year of the published description. The sources of these descriptions do not appear in the bibliography unless they are recent; if desired, most would have to be sought in a more comprehensive work, such as the 16 volume Peters et al. "*Checklist of Birds of the World*."

One of the book's goals was to produce a numbering system for the species of living birds (p. xix). The authors missed a chance to produce a really useful numbering system. As presented, their system (de-

veloped from P. W. Smith's "Bird Master Data File" program) does not allow one to sort a list of birds into the classification scheme they present. Also, their world system is in conflict with the current AOU system; numbers sometimes have to be changed when a species becomes a member of the AOU coverage area. Species already have a unique name; simply adding a unique number gives a user no new capabilities, whether the user is computer oriented or not. An added code/number can impart additional taxonomic information and be unique at the same time. This type of system would have been preferred. So far, only E. P. Edwards (in his two volume workbook of birds of the world) has produced a useful, widely available world numbering system. A tribute to forethought, Edwards' scheme is available on computer disk (if interested, write to Dr. E. P. Edwards, P.O. Box AQ, Sweet Briar, VA 24595).

Burt Monroe, Jr. is chairman of the AOU Classification and Nomenclature Committee. Many of the changes given in this book for North American avifauna will likely give the serious reader a preview of the next AOU Checklist (1993?).

**"Phylogeny and Classification of Birds: a Study in Molecular Evolution"** This is quite a book, although its subtitle is likely to deter the non-systematist. It is a large volume, attractively bound (binding quality suitable for volume size), and is divided into two parts. Part I is an introduction, which includes 17 chapters. The first nine of these chapters (117 pp.) familiarize the reader with DNA; the subsequent 8 chapters (149 pp.) describe details of DNA-DNA hybridization, how it is used to create phylogenies, factors affecting the data and analyses, and the methods of avian classification. Part II, "*Accounts of the Groups of Birds*" is the heart of the volume (436 pp.). Sections review characters, taxonomic histories, and the authors' DNA results for each major avian group. 307 melting curve figures are given following Part II, together with 28 FITCH and KITCH trees with data matrices and one UPGMA dendrogram. These 164 pp. represent (in part) an accession to earlier loud cries by critics to publish data along with their phylogenetic hypotheses (cf. Houde 1987). The Literature Cited section is an

impressive 97 pp., but still misses some important references (e.g., Houde 1987).

Buried among the introductory chapters is a very enjoyable, 62 page history of non-passerine classification, outlining major aspects from antiquity to 1982. Additional historical reviews are given with each of the major taxa treated (Part II), and the history of passerine classification is treated in a separate (24 p.) introduction to that order.

The task that the authors have completed is huge. In work spanning 11.5 years, they have completed a first-pass molecular survey of the class Aves, examining the DNA of approximately 1,700 species, a little more than 17% of the birds of the world. While their classification affirms many traditional relationships, it also espouses many new ones. This volume has been reviewed in most major professional systematic and ornithological journals, so I won't go into many details here. I will only point out that reviewers and other critics have detailed numerous problems in the work. Many of the detailed criticisms stem from the many changes that have occurred in molecular systematics during the past decade. The assumptions and analyses of the authors have failed to keep pace with these changes. Because of problems with assumptions, "corrections," data analyses, and interpretations (cf. Mindell 1992), the relationships proposed by the authors are generally considered working hypotheses, rather than the final word in higher level avian systematics. Independent data sets and analyses will likely support some of the new relationships, but others will undoubtedly fall.

Despite its problems, the book is nevertheless a landmark in avian systematics and provides a modern, baseline set of hypotheses for future testing. This book will have a lasting effect on avian systematics, and will serve as a standard reference for many years. The lasting contributions are likely to be the historical reviews, the phylogenetic hypotheses, and the controversy the authors have generated in the world of systematics.

**"The Known Birds of North and Middle America, Part I."** This work is important, in that it is the first thorough update attempted for the families treated since Ridgway's efforts early in this century (1904,

1907). The North and Middle American representatives of the following families are considered: *Hirundinidae* (swallows and martins), *Corvidae* (jays, crows, and ravens), *Laniidae* (shrikes), *Paridae* (chickadees and titmice), *Aegithalidae* (long-tailed tits and Bushtit), *Remizidae* (verdins and penduline tits), *Sittidae* (nuthatches), *Troglodytidae* (wrens), *Cinclidae* (dippers), *Pycnonotidae* (bulbuls), *Timaliidae* (wrentits and babblers), *Mimidae* (mockingbirds, thrashers, and catbirds), and *Certhiidae* (tree creepers). Phillips' purpose is "to set forth the broad outlines of present knowledge of the birds of North and Middle America — and by the same token, what is not yet known." As his title suggests, Phillips understands that there is a great deal of work yet to do if we are to fully understand avian diversity on this continent. Subspecies are reviewed and treated (generally) more thoroughly than in the 5th AOU Checklist (1957). Subspecific treatments include only subspecies represented in North and Middle America.

There are three collaborators (R. W. Dickerman, A. M. Rea, and J. D. Webster), who contributed some of the species accounts.

The book has a 27 page introductory section which should be read by anyone interested in birds. Here the reader will find the author's view of the world laid out in plain English. The six subheadings (e.g., "Apologia: ornithology today," "Why we can not trust our eyes in science," "The Tasks Ahead — For All") together form a treatise on what is wrong with ornithology today and how we might get back to studying birds. Phillips' style is unique. For one, he does not beat around the proverbial bush, but calls things as he sees them. The text can be very enjoyable, and is a source of many good quotes, both pithy and humorous. It occasionally becomes somewhat difficult to follow, however, for two reasons. All citations occur within the text, rather than in a separate bibliography, as is usual these days. (The Subject and author index allows one to recover the pages where authors are cited, so it is possible to retrieve the actual citation with little difficulty.) The other reason that the text can become difficult to follow is that Phillips knows birds and the avian literature very well, and in places appears to expect the reader to stay with him as he

makes tangential references or quick leaps. Most of these places are sprinkled with references, though, so one can make the effort to catch up.

There is much rancor scattered throughout the text as the author takes aim at persons and groups who have committed errors in the past. To people not familiar with the levels of animosity that can occur among taxonomists, systematists, and biogeographers, this may seem peculiar. In reality, these sorts of barbs and darts can be found at any professional meeting, but are the sorts of things that get weeded out by editors. If taken as they are, these frequent remarks can serve as educational lessons to anyone working with birds: be careful in your work, and be sure of your facts when writing your contributions. Phillips points out his own errors in several places (e.g., xvii-xviii, xxv, xxvi), usually when making a case for why specimens are crucial to the proper study of avian diversity and distribution.

Birders may find particularly interesting Phillips' long diatribe against the AOU's seemingly senseless juggling of English common names with the 1983 Checklist (beginning p. xix; see also pp. 220-221 of Part II). Two color plates show the plumages of *Stelgidopteryx* (including Phillips' proposed *S. ridgwayi* [Ridgway's Swallow]), and Middle American *Microcerculus* (nightingale-wrens).

Families are introduced with a copious reference section: dense lodes of relevant literature ranging from accounts of the family and its relationships to detailed accounts of species and their relationships. References are given in a condensed format with brief reference to subject matter (users of Ridgway will find the style familiar). The species accounts make up the bulk of the work (over 200 pages), and are arranged in a rather traditional sequence ("not unlike the Ridgway-Hellmayr sequence"). Species accounts begin with the scientific name, the reference to its original description, the type locality, common names in English, Spanish, and French, and an alphanumeric code fitting that of the AOU. Next appears a description of the species' breeding or resident distribution. If migratory, a wintering range is then described, as are migrations, especially Middle American migrations, which he considers as "summarized correctly

for the first time". Casual and Accidental records are considered, and Dubious and Erroneous reports from the literature are also brought up. In general, the reader will probably find the range descriptions to be more accurate than those given by any other source.

Where geographic variation is recognized, subspecific accounts are given. These are similar to species accounts, except that brief descriptions are given to help distinguish subspecies from one another (this is very helpful, and often includes measurements). Subspecies are given their recognized common names when they are "so distinctive as to be obvious in the field". The reader will find an update of synonyms, if there are any (updated from the full synonymies given by Ridgway and Hellmayr). Thirty-four new subspecific names are proposed, representing 31 races described here for the first time and 3 name changes for previously recognized taxa. There are many cases where a supposedly new subspecies might exist, but for which adequate museum material does not. These are given separate (necessarily brief) accounts.

The index, unfortunately, is broken into five parts: Subject and Author, Scientific Names, and English, French, and Spanish names.

Aside from the description of new subspecies, Phillips recognizes several species not currently considered full species by the AOU (1983 and four subsequent supplements). These are: *Stelgidopteryx ridgwayi* (Ridgway's Swallow; considered part of the Northern Rough-winged Swallow [*S. serripennis*] by the AOU), *Aphelocoma floridana* (Florida Scrub Jay), *A. californica* (Western Scrub Jay), *A. insularis* (Santa Cruz Jay; the three latter are considered parts of the Scrub Jay, *A. coerulescens*, by the AOU), *Corvus sinaloae* (Sinaloa Crow, tentatively recognized; AOU considered it part of the Mexican Crow, *C. imparatus* until 1991 [38th supplement], when it separated the two), *M. luscinia* (Northern Whistler-Wren) is tentatively separated from *M. marginatus* ("Nightingale Wren" = Scaly-breasted Wren), *Troglodytes beani* (Cozumel Wren; considered part of "musculus group" of *aedon* [House Wren] by the AOU), "*Thryothorus*"? *albinucha* (Cabot's [or White-browed] Wren; considered by the

AOU as part of the Carolina Wren, *T. ludovicianus*, but Phillips questions whether the two are even congeners), and *Mimus magnirostris* (Large-billed Mockingbird). The latter is the only remnant of the Tropical Mockingbird, for Phillips lumps *M. gilvus* (Tropical Mockingbird) with *M. polyglottos* (Northern Mockingbird).

All of the specific cases noted above represent ripe ground for systematic studies; Phillips is careful to note many others in the text.

**"The Known Birds of North and Middle America, Part II."** Also an important work, following the approach developed in Part I. It treats the families *Bombycillidae* (waxwings and silky-flycatchers), *Sylviidae* (Old World warblers, gnatcatchers and kinglets), *Muscicapidae* (thrushes and solitaires), *Prunellidae* (accentors), *Motacillidae* (wagtails and pipits), *Sturnidae* (starlings), and *Vireonidae* (*incertae sedis*; vireos, peppershrikes, greenlets, etc.). There is a 37 p. introduction, which in many respects continues topics from the introduction in Part I, but also adds many new points, references, anecdotes, and complaints. Again, required reading for anyone interested in birds.

The family treatments and species accounts follow the format and detail of Part I. Also included are eight keys to various groups of birds: Old World *sylviids* occurring in North America; *Poliophtila*; *Turdus*; *Catharus*; *Muscicapinae*; races of North America *Motacilla*; *Anthus*; and *Vireonidae* (excluding *Hylophilus*). These keys include the species (and sometimes races) occurring in the region treated. Part I included three keys (*Microcerculus*, *Troglodytes*, and *Hirundinidae*). These keys are potentially very useful, in that they highlight differences between the species treated that identification guides generally do not consider.

Four collaborators have contributed portions of the work (D. D. Gibson, K. C. Parkes, M. A. Ramos, and A. M. Rea). Five color plates include details of some groups where changes are proposed as well as the facts and consequences of color changes in the plumage of museum specimens.

Forty-six new names are proposed. Of these, 45 are new subspecies and one is a new genus (*Readytes*). Differences between Part II and the AOU are: "*Sylviidae*," rather

than "*Muscicapidae: Sylviinae*". The Olive Warbler (*Peucedramus taeniatus*) is considered a member of *Sylviidae*, rather than *Parulinae*, where the AOU still places it. *Ramphocaenus rufiventris* (Long-billed Gnatwren) is recognized as specifically distinct from the South American *R. melanurus* (Straight-billed Gnatwren). Phillips retains the genus *Erithacus*, rather than merging it with *Luscinia*. He uses the genus *Geocichla* rather than the later *Ixoreus* for the Varied Thrush, and removes the Aztec Thrush from the monotypic genus *Ridgwayia* to *Geocichla*. The Dusky Thrush (*Turdus eunomus*) is given probable species status (lumped by AOU with *T. naumanni*; Naumann's or Dusky Thrush). *Turdus graysoni* (Grayson's Robin) is treated as a species distinct from *T. rufopalliatus* (Rufous-backed Robin). *Turdus phaeopygus* is used for *T. assimilis* (White-necked Thrush). *Hylocichla* is merged with *Catharus* (without comment, but follows Winker & Rappole 1988, *Auk* 105:392-394). *Catharus bicknelli* (Bicknell's Thrush) is raised to probable species status (AOU retains it as part of *C. minimus*). *C. griseiceps* (Gray-headed Nightingale-Thrush) is given probable species status (separated from the Orange-billed Nightingale-Thrush, *C. aurantirostris*). In the latter two cases the uncertainty of full specific status is firmly denoted with a preceding question mark. *Sialia arctica* (Mountain Bluebird) is used rather than *S. currucoides*. *Myadestes* and *Vireonidae* are treated as *incertae sedis*. Phillips considers the Yellow-green (or Scrub) Greenlet (*Hylophilus viridiflavus*) a full species (lumped with *H. flavipes* by the AOU). The genus *Vireosylva* is retained for several vireos (considered by the AOU to be in the genus *Vireo*, subgenus *Vireosylva*): *hypochrysea* (Golden Vireo), *magister* (Belize Vireo), *altiloqua* (Black-whiskered Vireo), *virescens* (= *olivaceus*) (Red-eyed Vireo), *flavoviridis* (Yellow-green Vireo, here raised to probable species status), *philadelphica* (Philadelphia Vireo), *gilva* (Eastern Warbling Vireo), *swainsonii* (Western Warbling Vireo; raised to probable species status), *amauronota* (Mexican Brown-capped Vireo; here considered a species distinct from *V. leucophrys*, with which it is lumped by the AOU), and *leucophrys* (Southern Brown-capped Vireo). Finally, in the addenda and corrigenda for Part I,

Phillips discusses the need for recognizing the Carolina Wren (*Thryothorus ludovicianus*) as a representative of a unique genus. Since substitute generic names are unavailable, he proposes *Readytes*.

Phillips uses Edwards' coded numbers for species in Part II, and retroactively gives them for Part I. As noted above, Edwards' codes are probably the most useful available for birds of the world. For those wanting a condensed version of Phillips' views of modern ornithology (see introductions to Parts I & II), his "Conclusions" to Part II (220-221) delivers some of the points most frequently touched upon in a very lucid, levelheaded manner.

The most enjoyable aspect of Parts I and II is that we get the author's best shot at the complete body of knowledge concerning each species and subspecies treated. Phillips has been seriously studying birds since the early 1930s; his grasp of ornithology is remarkable, and his memory is no less so. While he clearly has an axe to grind with respect to the multitude of errors he has seen committed within the field he loves so dearly, he has also committed himself to delivering the best treatments that he can. The value of the work embodied in the species accounts is tremendous, both as a delivery of extant knowledge and as a guide to further investigation. In the latter regard these volumes will have a profound effect. A successful synthesis is as much a summary of what is known as it is a description of what remains unknown. Because Phillips provides such a great number of questions that remain unanswered, I predict that North American specific and subspecific systematics during the next 10-15 years will be biased toward investigations of the groups treated in these two volumes.

Unfortunately, there will be no Part III. Because of the tremendous cost and effort required to bring each part out (even with the help of collaborators), and because no firm outside support has materialized, Phillips has decided to spend his time producing shorter manuscripts (letter of 16 October 1991).

### Discussion

All four of the books reviewed here are monuments to collecting and collections use. Phillips (Part I: xvii-xiii) goes to great

lengths to explain to a broad audience why we need more collecting and more open-eyed investigation of the natural world. All of these books are also expensive, yet all should be on the shelves of working ornithologists. Because of their scope, Phillips' two volumes will be the most useful to ornithologists concerned with North American species. Nevertheless, the two volumes by Sibley and Monroe and Sibley and Ahlquist are very useful as well, particularly to those whose interests extend beyond North American birds.

Because systematics and taxonomy are usually viewed as very dry subjects by those not directly involved, it is likely that most readers of this review will never get closer to these or any other books on avian systematics. As a consequence, I will use the rest of this discussion to address some general aspects of the field.

What implications will current trends in avian systematics have for the non-systematist interested in birds? Certainly changes in our understanding of avian diversity will have a greater effect upon this group than changes in our knowledge of relationships above the species level (though both areas are important). How is our knowledge of diversity changing? The answers are complex, because we have both new data and a conceptual change occurring in the definition of species. There are valid arguments for abandoning the biological species concept and using instead a phylogenetic species concept. To crudely summarize, under the biological species concept some "species" contain groups that are quite separable and are on different evolutionary trajectories. Under the phylogenetic species concept such groups would be separated and called different species. The major advantage of the phylogenetic species concept is that all species would be equal (truly basal evolutionary units). See Cracraft (1989) and McKittrick and Zink (1988) for more discussion of these concepts.

A change in species concepts will have a strong effect on our understanding of avian diversity. Cracraft (1989:32) stated that the biological polytypic species concept was developed to reduce "an undesirable glut of species names". Regardless of whether this was its purpose, it did have a profound effect. Mayr (1982:290) noted that the appli-

cation of the polytypic species concept to birds reduced the number of recognized species from over 20,000 in 1920 to about 9,000 in 1982. A phylogenetic species concept would re-establish many former species now considered subspecies. But new data can also cause new species to be recognized, independently of species concepts (see, for example, the abstracts for the 1991 AOU meeting).

The forthcoming changes will not be simple. For one, there is no consensus on how genetic data might be used to define species. To end-users of taxonomic information, changes may often seem capricious. As a possible example, both Sibley and Monroe and Phillips treat the "Warbling Vireo" (*Vireo gilvus* [= *Vireosylva gilva*]) as two species: the Western Warbling Vireo (*V. swainsonii*) and the Eastern Warbling Vireo (*V. gilvus* [or *gilva*]). This split may come as a surprise to persons whose understanding of *gilvus* is based on the 1983 AOU Checklist, where no variation was discussed.

Baird (1866) treated "*Vireosylva swainsonii*" as a separate species; *swainsonii* was ignored completely in the first two AOU Checklists (1886, 1895) (*vide* Coues 1903:365, who questioned its validity as a subspecies, thinking it to be "simply a dull-colored race"). Ridgway (1904; see also references therein) considered *swainsonii* (sic) a subspecies, and it has been treated so in subsequent AOU Checklists (except the 1983 Checklist, which generally did not treat subspecies). Sibley and Monroe gave it full species status based on personal communication from Dr. Jon Barlow (Royal Ontario Museum, Toronto), a widely acknowledged expert on vireos. This history is brought up for two reasons. First, it demonstrates that our understanding of diversity is open to change and different interpretations. The AOU Committee on Classification and Nomenclature is not immune from committing errors (a casual reading of Phillips, especially Part I, makes this abundantly clear). Secondly, the knowledge that we do possess of avian diversity is not readily available to the lay public and policy makers.

There is an aspect of avian systematics that is becoming increasingly important as the world's natural habitats fall to human development. This is the practical, day-to-day application of our knowledge of avian

diversity to guide development and conservation efforts in an attempt to maintain biological diversity. I do not think that the North American ornithological community in general is doing an adequate job of making this information base available. Given our concern with conservation, it seems that we should present our knowledge of avian diversity to the best of our ability.

Whether we like it or not, the North American bird world dances to the taxonomic tune set forth in the current AOU Checklist and its supplements. With the 6th edition (1983), subspecies were largely dropped from consideration for the first time. The reasons for doing so were set forth clearly (p. xiii), and plans were made to produce a full revision (including subspecies) with the next edition. Unfortunately, these plans have been abandoned. Instead, the forthcoming 7th edition (due in 1993) will focus on divulging taxonomic changes occurring since 1983 (including updates on range), fitting North American species into a world numbering system (why this is needed is not explained), and modifying habitat descriptions (see Ornithol. Newsletter 85:2, Dec. 1991). We will no doubt be referred again to the 1957 Checklist (and its supplements) for subspecific treatments. This is unsatisfactory.

The Checklist should (but will not) represent our current working knowledge of birds in North America. It is not unreasonable to look to the AOU (spokes-entity of North American avian systematics) for this information. My concern is that the continued sweeping of previously recognized diversity under the carpet by neglecting to mention it does North American ornithology more harm than good. It is understandable that the Committee cannot critically evaluate all of the subspecies in the current Checklist area (AOU 1983: xiii). This should not prevent them, however, from presenting our current understanding of the birds in the coverage area — even if it should mean re-publishing the portions of the 1957 Checklist that have not been re-evaluated. A company planning a development on San Francisco Bay should be able to find in the current AOU Checklist that the Song Sparrow (*Melospiza melodia*) is not simply a very widespread North American sparrow (AOU 1983:711), but a sparrow for which

San Francisco Bay is a particularly important area of subspecific (=phenotypic) diversity (AOU 1957:635). Why is there not a book in print that adequately covers our understanding of North American avian diversity? Browning (1990) provides a useful review of new taxa proposed during the 30 years following the 1957 Checklist (within the old coverage area), but no overall summary of North American avian diversity exists.

It seems that we are caught abandoning a system before another is in place and functional. Because we do not understand it, we currently have no satisfactory framework for subspecific variation. While in some respects frustrating (e.g., should endangered or threatened subspecies receive special protection?), it is also exhilarating: we have a lot of very interesting work to do to achieve a satisfactory understanding of avian diversity (and thus, evolution). Will the concept of subspecies survive changes in our understanding of subspecific variation? Probably, but subspecies will hold a less prominent place in avian taxonomy — simply because the most robust subspecies will be elevated (in many cases re-elevated; e.g. Bicknell's Thrush, *Catharus bicknelli*; 1991 AOU abstracts) to full species status as we acquire more data and move toward a more objective species concept.

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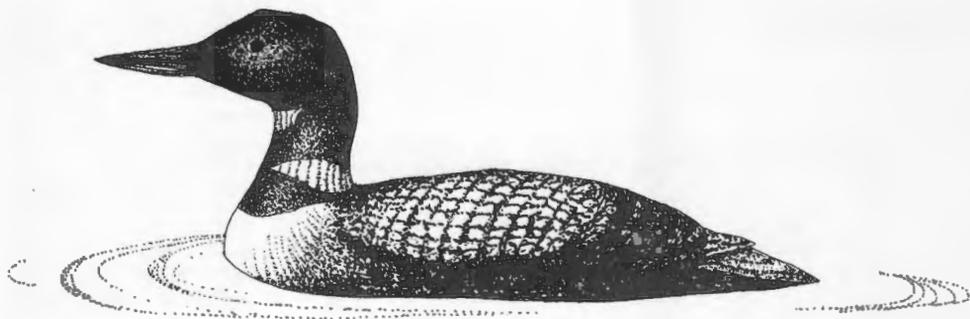
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**Glossary**

- <sup>1</sup>Systematics — the study of organismal diversity and interrelationships.
  - <sup>2</sup>Taxonomy — the description, naming, and classification of organisms.
  - <sup>3</sup>Beta taxonomy — the classification of species into higher taxa (e.g., genera, families, orders).
  - <sup>4</sup>Superspecies — two or more species separated in geographic space which are descended from the same common ancestor and, although clearly closely related, are distinct enough to warrant recognition as full species.
  - <sup>5</sup>Biological species — a group of actually or potentially interbreeding natural populations isolated genetically from other groups.
  - <sup>6</sup>Phylogenetic species — the smallest diagnosable cluster of organisms with a parental pattern of ancestry and descent.
- Kevin Winker, National Zoological Park, Conservation, & Research Center, Front Royal, Virginia 22630.**



## NOTES OF INTEREST

### LARGE CONCENTRATIONS OF GREATER WHITE-FRONTED GEESE IN WESTERN MINNESOTA

— While on a birding trip to western Minnesota on 4 April 1992, Parker Backstrom and I observed two large concentrations of Greater White-fronted Geese. The first concentration we found was located at Perch Lake, Lincoln County. An estimate was made, conservatively, of 400 birds. They were located in two large “strings” on the water and were in constant motion, preventing an actual count of individuals, while those birds located on the shore or in stationary groups were counted individually. The second concentration was located at Salt Lake, Lac Qui Parle County, and numbered a conservatively estimated 1500 birds. This group was

gathered along the northern and northwestern shoreline, with smaller numbers located elsewhere along the shore and in the water. The largest single group was along the northern shore and was composed of birds lined up two and three deep in a solid mass extending more than 100–200 yards. While Greater White-fronted Geese are regular migrants in Minnesota, Janssen (*Birds in Minnesota*, 1987) describes their occurrence in spring as “Encountered in small groups of a few birds or up to 10–15, usually in company with other goose species; however, individual flocks of 50–75 birds are occasionally observed.” This is quite different from the large groups that Parker and I observed. Interestingly, considering the large number of White-fronted Geese observed, we saw only one large concentration of Snow Geese, located at the same Perch Lake location. Unfortunately, they had taken flight just prior to our arrival, so an accurate count was impossible. **Kim W. Risen, 5756 Brunswick Ave. N, Crystal, MN 55428.**



### KENTUCKY WARBLER IN NICOLLET COUNTY

— On the sunny morning of 23 June 1992, with the temperature rising from 56°, I was birding alone at Seven Mile Creek County Park in Nicollet County near the Minnesota River. I was walking Trail 2 near a small tributary to Seven Mile Creek. This trail follows the stream valley through heavily wooded hillsides. At 8:15 A.M., right at the junction where Trail 3 goes up the hill from Trail 2, my attention was drawn to a pair of very active birds. They were flitting through the undergrowth and up into low tree branches, uttering a constant chep-chep call. With their constant motion and movement through the

vegetation, they were at first difficult to see. After a few minutes, however, I was able to see them well as they came near and clear of the dense vegetation. They appeared to be

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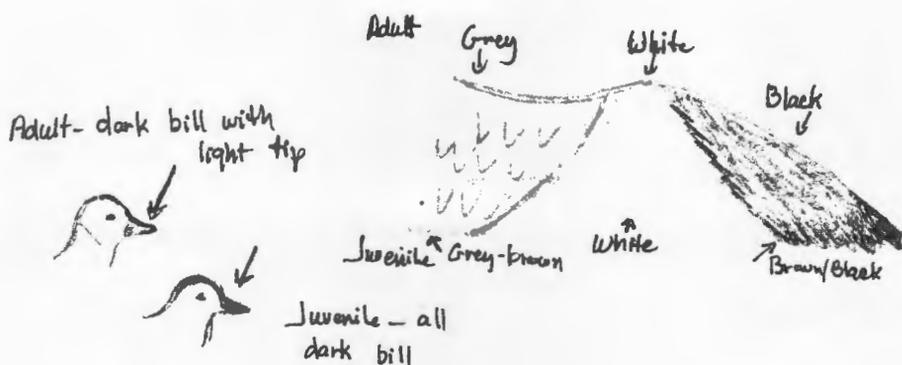
warblers, but a species with which I was not familiar. They were strikingly marked black and yellow with an olive back. There was black about the eye and down the side of the neck, but with a thin strip of yellow around the eye, particularly above the eye. The entire underside, including throat, breast, and under the tail, was yellow. Both birds were similarly marked. I then consulted my Peterson's field guide and immediately concluded they were Kentucky Warblers. I realized these were very rare birds in this area. I watched them for about 35 minutes. During that time, they sometimes came down onto the wood chip trail, acting as if they were trying to lead me away. Upon returning to my office, I phoned a few of my local birding friends to alert them to my discovery. Later that day and the next, they found the birds and agreed with my identification. Unfortunately, repairs were going on at the trail, with heavy equipment regularly passing the birds' location. After being informed of the presence of the unusual birds, the park manager agreed to discontinue the construction activity at that location; however, I was later informed by my birding friends that the birds were no longer there. On 29 June, I rediscovered them across the creek and a little upstream. I last saw these birds on 6 July. During this time, Merrill Frydendall was apparently able to confirm the presence of a juvenile Kentucky Warbler with the parents. I understand this would be the first evidence of Kentucky Warbler nesting in Minnesota. Lawrence W. Filter, 604 Lakeview Ave., North Mankato, MN 56001.

**TWO SABINE'S GULLS IN DULUTH** — On 19 September 1992, in the late afternoon



on Hawk Ridge weekend, Charlie Greenman, Peter Neubeck, and I decided to return to the airport to see a Whimbrel that had been spotted earlier. There we met Bill Stjern, Bill Litkey, and Ed Lins, who obligingly had the bird in their scopes for us. The light was still good, so we moved over to the lake side of Park Point to look for jaegers. Through my binoculars, I spotted two gulls, an adult and an immature, 200 yards out, swimming in tandem, parallel to the shore. The adult had a dark hood and the juvenile appeared a mottled brown. Knowing there were Bonaparte's Gulls around,

I assumed that was what I was seeing. I called them to the attention of the others, who were all gazing through their scopes much farther out on the horizon. The juvenile didn't look quite right, but I thought it could be in some variable plumage that gulls are so



famous for. Bill Litkey questioned the Bonaparte's call, saying the juvenile was too brown.

We began to "think big." Next, he commented on the light bill tip of the adult, which we could all see through our scopes. The birds then obligingly rose briefly, and several observers saw the large black wedge on the primaries. The birds set down again and fed for about five more minutes. When they again rose, our eyes were fixed on the wing pattern that confirmed our Sabine's Gulls. We were able to see clearly the distinctive three-toned wing pattern — the outer coverts and primaries were black, forming a dark wedge, followed by a white triangle from the inner primaries to the secondaries, with the remainder of the wing coverts gray on the adult, brown on the juvenile. All eyes followed the two small gulls as they made their way out into the lake and beyond the power of our scopes. Only then did we congratulate ourselves and each other. Two Sabine's Gulls! The "Bills" celebrated by dancing around in the dunes and exchanging high fives. Ed was a bit more sedate. Charlie and Peter were chattering. I was stunned. This experience taught me two valuable lessons; first, if something doesn't look quite right, pursue it. (I later learned that Sabine's Gulls do not molt until they reach their wintering areas, thus the dark hood. Bonaparte's usually begin their molt by mid-September, the time of our sighting. A little knowledge is helpful, too.) Secondly, if you want to find rarities, hang around Bill Litkey. He has the reputation of being a very lucky guy. **Bonnie Mulligan, 11421 Live Oak Dr., Minnetonka, MN 55305.**

#### **RUFIOUS HUMMINGBIRD IN WEST TWIN LAKE, CROW WING COUNTY —**



As I was talking on the phone the evening of 21 August 1992, I saw a hummingbird with a rusty tail at the feeder 24" on the other side of the window. He appeared twice while I was talking, but as light was dimming, I called it an "illusion." However, just to be sure, I sat in the window opening inside the house the next morning. This put me 16" to 36" away, should the bird appear — which it did sporadically from 7 to 10 A.M. He never came alone, but always wildly chasing and jabbering at a Ruby-throated Hummingbird. He would fly at the other bird, then hover and tail-spread until the second bird left. He would drink for several seconds and buzz off. The obvious feature was the spread rusty tail; the back was also rusty appearing. The top of the head seemed greenish with a rusty cast. There was rust on the sides and the gorget was



**Rufous Hummingbird, 21 August 1992, West Twin Lake, Crow Wing County. Photo by Jean Segerstrom.**

red. He was never present for more than 20 seconds at a visit. He came about once an hour  
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from 2:00 to 4:00 P.M. and then made several visits from 6:00 to 8:00 P.M. On Sunday, the 23rd, he made visits from 8:00 to 9:00 A.M., but never returned after this. I worked on a hummingbird banding project at Ramsey Canyon, Arizona, for three years, so I have removed Rufous Hummingbirds from nets and held them in the hand. The only hummingbird with similar coloring is the Allen's, and I don't know that they ever occur in Minnesota. Binoculars were not needed, as our distance was 16" to 36". Even though my daughter and her husband are not birders, they could readily see the rusty tail and sides, and the differences between this bird and our familiar Ruby-throated. **Jean Segerstrom, Box 228, Nisssa, MN 56468.**

#### **LARK BUNTING AT THE FELTON PRAIRIE, CLAY COUNTY** —



Audubon Chapter of Minneapolis field trip on 5 June 1992 to western Minnesota and North Dakota, I found a Lark Bunting at the Felton Prairie, Clay County. While driving the "longspur road" approximately two and a half miles north of Clay County 26, a longspur-sized bird flew from the eastern grassy edge of the gravel roadway to the western, and then to a fenceline perch on the west side of the road. The overall black plumage with large white areas on the wings identified it as a male Lark Bunting even in flight. The bird remained perched for only 30-45 seconds. One

photograph was obtained while the bird was on the ground, before it flew toward the fields to the east. Janssen (*Birds in Minnesota*, 1987) states that the Lark Bunting in summer is "a casual resident mainly in the southwestern and southern portions of the west-central region along the western border of the state from Rock County in the south to southern Traverse County in the north." The presence of a male Lark Bunting, in addition to being north of its documented casual summer range, in its preferred habitat of dry prairie during the summer season, is certainly intriguing. **Kim W. Risen, 5756 Brunswick Ave. N, Crystal, MN 55428.**

#### **GULL GAMES** —



On 12 October 1992, I noticed some Ring-billed Gulls diving into the water very close to shore at the Forest Lake Municipal Bathing Beach. Nearly 50 gulls and 200 Canada Geese were standing about on the shore and lawn. Six to eight gulls were acting strangely, diving into the shallow water from only a few inches or as much as a few feet in the air, or from a swimming position, just thrusting the upper body quickly downward underwater, picking up small objects and dropping them. Mostly, a gull would fly up from the water, fly a few feet, and then drop the object. Sometimes it would drop it from a floating position. But always it would

immediately dive to pick up the object again. I moved closer, hoping to identify the objects. Strangely enough, the objects were pebbles! It was quite a show these birds put on, while I watched from about 4:17 P.M. to 4:27 P.M. A bird might drop and retrieve one pebble six to eight times as he flew just a short distance. (Pebbles appeared to be 1/4" to 1" in diameter.) My thought at first was that the gull was having difficulty keeping hold of some edible object, but as I watched one after another dropping and chasing such objects, it appeared they were playing a game. **William H. Longley, 532 W Broadway, Forest Lake, MN 55025.**

#### **WHITE-EYED VIREO SEEN AGAIN IN HOUSTON COUNTY** —



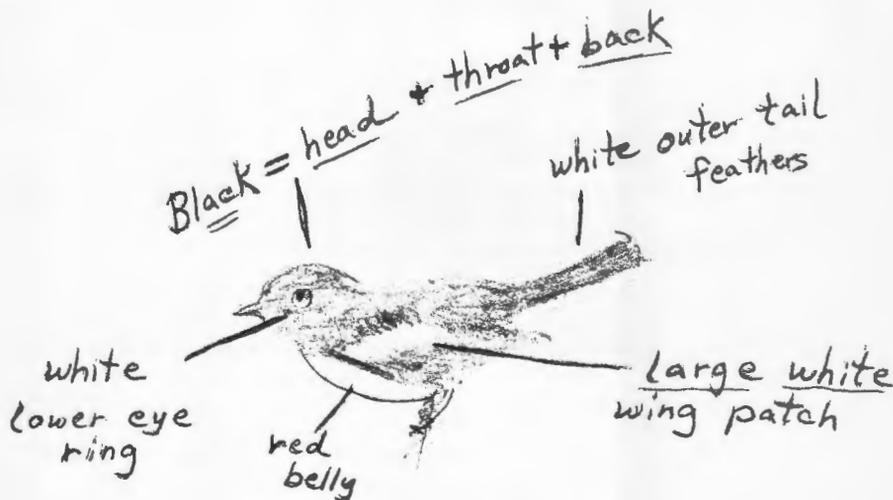
On 10 May 1992 I saw one White-eyed Vireo in a plum thicket approximately 200 feet south of the entrance road to the lower campground near Reno in Houston County. This location is only a few hundred feet south and down the hill from where several White-eyed Vireos were seen into the summer of 1991. I located the single bird by its song, which is a rapid vireo song usually beginning with an "explosive" "chick" or "chuck". The other rapid, short vireo song, that of the Bell's, lacks the introductory note. I saw the yellow eye "spectacles" and two white wing bars from 50-60 feet with

Leitz 8x40 binoculars. The bird was in and out of the thicket tops and backlighted. The eyes were light in color even if not exactly white. The bird was present 17 and 23 May, but absent by the first week in June. Fred Leshner, 509 Winona St., La Crosse, WI 54603.

**MINNESOTA'S FIRST PAINTED REDSTART** — Waves of warblers, mostly yellow-rumps, were moving along the north shore of Mille Lacs Lake, Aitkin County. I was in the garage about 10:20 A.M. on 30 September 1992, when I heard an unusual call. The bird was flitting about in the maple tree in front of the garage. The black head and red breast immediately got my attention. Its size was comparable to the yellow-rumps. The white wing patch was very noticeable, a very stark white on a black bird. The red on the breast and belly was a brilliant bright red. The partial white eye ring under the eye seemed like a white line, it was so apparent. I was aware of the outer white tail feathers, but did not see the bird fan its tail. Because so many



of the fall warblers are in subdued colors, the bold black, bright red, and stark white were truly awesome. The bird was being a typical fall warbler, constantly moving from one tree to the next, and mostly staying high. I got many good looks during the ten minutes the bird stayed in my yard. My binoculars and I were truly in the right place at the right time. Maurita Geerts, Rt. 1, Box 135, Aitkin, MN 56431.



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**BLACK-THROATED SPARROW, WILKIN COUNTY** — It was Wednesday, 25

November 1992, when I first spotted the Black-throated Sparrow. It was 3:30 P.M. when I looked out my kitchen window, which faces southeast, and saw the bird on the ground under my chalet-style feeder. It was feeding along with some House Sparrows. At first glance, the white eye stripe was very prominent and immediately told me this was an unusual sighting. The bird was identified with the help of my field guide (*Birds of North America* - Robbins, Bruun, Zim, Singer). It appeared the next day and at first seemed to prefer ground feeding. However, in the days since, it has regularly fed directly on the chalet-style feeder, as well as on a tube-style feeder which contains millet seed. The chalet contains black-oil sunflower seed. It has been



roosting in a three-foot high juniper bush, as well as a ten-foot high evergreen. The feeders and these bushes, as well as the evergreen, are all within a 40' area. We've also noticed this bird not being as "flighty" as the House Sparrows. There doesn't seem to be a preferred time to feed, as it appears at the feeders off and on all day. As of 15 December, the bird is still here on a regular basis. **Bernice Wanek, Doran, MN 56530.**

Editor's Note: This individual was last seen at the Wanek's feeder on 26 December 1992. This is the third record for the Black-throated Sparrow in Minnesota and the first away from the north shore of Lake Superior. The first record was from Stony Point, St. Louis County, on 20–23 September 1974 (*The Loon* 46:100–101), and the second was seen on 7 October 1980 in Duluth Township, St. Louis County (*The Loon* 53:52).

#### ADDITIONAL GREAT BLACK-BACKED GULL SIGHTINGS —



With records at Grand Marais, Knife River, and in the Twin Cities during the winter of 1991–92, and another in November 1992 at Grand Marais, the casual Great Black-backed Gull (*Larus marinus*) has seemed more like a regular species recently. During November–December 1992, two additional Great Black-backed were seen in Duluth, the fifth and sixth in Minnesota during the past 12 months. The first individual, a first-winter immature, was seen 9 November at Canal Park near downtown Duluth. This bird was observed swimming on Lake Superior relatively close to shore, as it fed on the remains of a waterfowl floating on the lake. With three first-winter Herring Gulls nearby for direct size and plumage comparison, the identification was straightforward. Its overall size was much larger than the Herring Gulls, as was its thicker bill, which appeared entirely black. Its head, neck, and underparts were paler than the Herring Gulls and contrasted more with its darker back, scapulars, and wing coverts; the bases and centers of these feathers were blackish and contrasted with the whiter edges of these feathers, forming a "checkerboard-like" pattern. The folded outer primaries were black, but since the gull was not seen in flight, its spread wing, tail pattern, and leg color were not visible. Because of some minor plumage differences with the first-winter Great Black-backed I had also seen on 7 November 1992 in Grand Marais, this individual in Duluth was not the same as the Grand Marais bird. However, it was likely the same first-winter bird which had been seen in October and early November just southeast of here at Wisconsin Point in Superior, Wisconsin. The second Great Black-backed Gull was also seen at Canal Park and probably had also been previously seen at Wisconsin Point. This individual was essentially in adult plumage, presumably a fourth-winter bird, and was spotted on 16 December as it swam on the lake about 50 yards from shore in the company of several Herring Gulls. Its overall size was only slightly larger than the adjacent Herring Gulls in the water, suggesting it was probably a female. However, in flight, its wing span appeared noticeably longer than the Herring Gulls, and when it later stood on a breakwater next to some Herring Gulls, its superior height was evident. At rest, its back, coverts, and folded primaries were entirely black, with white "mirrors" visible on the tips of the primaries. The back and coverts were a slightly paler shade than the primaries; even though field guides typically show these areas to be the same shade of black, many of the adult Great Black-backed I see each summer in Nova Scotia and Newfoundland have backs and coverts which are slightly but clearly paler than the folded primaries. The head, neck, and underparts were entirely white; the yellow bill had both a reddish spot on the lower mandible and a black mark or "ring" on both mandibles (which suggests its age to be fourth-winter); and the legs and feet were a pale, washed-out, dull pink. Through my 40X Kowa TSN-4 spotting scope, both irides looked dark brown at the distance involved (about 50 yards); although it was overcast at the time, the light was good enough to see the irides of all the nearby adult Herring Gulls were yellow. Although this eye color would seem inconsistent for an adult or sub-adult Great Black-backed Gull, note that the Great Black-backed in the Twin Cities in November–December 1991 also had dark irides. (See *The Loon* 64:12–15; it is interesting that this gull was apparently a fourth-winter bird as well, with a similar bill pattern, was

also a relatively small individual, and it had a similar "two-toned" black mantle.) When the gull flew, I was unable to see the exact pattern of the primary tips well enough to preclude other "black-backed" gulls, except to see it lacked the distinctive pattern of the Slaty-backed Gull (*L. schistisagus*). Leg color eliminates the possibilities of Lesser Black-backed (*L. fuscus*) and Yellow-footed (*L. livens*) gulls. The Western Gull (*L. occidentalis*), especially a dark-eyed northern individual, might remain as a remote possibility, although the size of the gull, its similarity in appearance to the 1991 Twin Cities gull, and the relative geographic ranges would more strongly suggest it was a Great Black-backed Gull. **Kim Eckert, 8255 Congdon Blvd., Duluth, MN 55804.**

#### **AN EXCITING VISIT WITH A BARRED OWL** — On 13 January 1993, we found we



were entertaining a very friendly Barred Owl that I guessed to be a small male. At first, we found it concentrating its attention on our bird feeders and we wondered if we were in for some losses to our bird populations. But we soon realized that the owl was not threatening the birds at all, but was waiting patiently for a mouse or shrew to appear from under the snow where I had cleared an area and scattered finely cracked corn and white millet seed, mainly for the ground-feeding juncos. Calling the owl patient was a real understatement, since it spent nearly all of its time for several

days without any apparent success. But late on the third day, we noticed the bird gazing intently at a wide open expanse of snow at least eight or ten inches deep, where there were no tracks or disturbances indicating the presence of life of any kind, but still the owl appeared poised for action. Suddenly it pounced down into the soft snow and came up with a Short-tailed Shrew. It then flew back to its perch and immediately swallowed its prey. Its remarkable ability to spot this hidden prey was an excellent example of the functioning of the owl's binaural hearing. An owl's two ear openings are slightly different in shape and transmit different messages to the bird's brain. These differing messages enable the owl to determine the exact source of any sound, visible or not; the squeaking or chewing of the shrew beneath the snow must have been the sound that was detected in this case. After this small success, the persistent owl remained on various perches about our yard well into the third day, giving me chances for numerous photos, some as close as eight feet. About 2:00 P.M. on the afternoon of the third day of its visit, we noticed it peering intently at a Gray Squirrel feeding on the ground beneath one of our bird feeders. Was he really planning on attacking such large prey? It had seen several squirrels at close range throughout its stay with no obvious attempts to disturb them. The squirrel being watched continued to feed near the feeder. The pole supporting the feeder I had protected from squirrel access by wrapping loosely with a large sheet of thin aluminum. After several minutes, the owl decided to attack. It plunged down, tackled the animal, and a real tussle ensued; the squirrel attempted to escape by crawling up inside the aluminum guard, but the owl held on and succeeded in pulling it free, only to lose its grip, allowing the animal to dash a short distance toward some protective bushes. But the owl, not giving up, darted after it and appeared to get a secure hold on its prey. After a short struggle, all was quiet and for about five minutes, the bird crouched on the doomed squirrel, alertly looking about for any approaching interference with its endeavors. This seemed to end the squirrel's struggles, and the owl took off, flying about 40 feet with its heavy load and alighting in the snow for a brief rest. Then in three or four short flights, it reached the edge of the river bank. Surprisingly, it flew up to a perch six or eight feet above the ground, still clinging to its prize. After a brief rest, it flew down the river bank and out of my sight. This must be near the maximum weight of prey that Barred Owls are capable of tackling. In checking numerous weights recorded for Barred Owls and Gray Squirrels, I found that the prey in this case must have just about equaled that of the owl. In my nearly 90 years, I have never before been lucky enough to see the entire episode of a raptorial bird attacking and securing its prey. This friendly owl appeared again a couple of days after the squirrel episode and we again saw it capture a shrew by diving into deep, undisturbed snow. **W.J. and Dorothy Breckenridge, 8840 W River Rd., Minneapolis, MN 55444.**

## PURPOSE OF THE MOU

The Minnesota Ornithologists' Union is an organization of both professionals and amateurs interested in birds. We foster the study of birds; we aim to create and increase public interest in birds; and to promote the preservation of birdlife and its natural habitat.

We carry out these aims: through the publishing of a magazine, *The Loon*; sponsoring and encouraging the preservation of natural areas; conducting



field trips; and holding seminars where research reports, unusual observations and conservation discussions are presented. We are supported by dues from individual members and affiliated clubs and by special gifts. The MOU officers wish to point out to those interested in bird conservation that any or all phases of the MOU program could be expanded significantly with gifts, memorials or bequests willed to the organization.

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## SUGGESTIONS TO AUTHORS

The editors of *The Loon* invite you to submit articles, shorter "Notes of Interest," and color or black/white photos. Photos should be preferably 5x7 in size. Manuscripts should be typewritten, double-spaced and on one side of sheet with generous margins. Notes of Interest should be generally less than two typewritten pages double-spaced. Whenever possible, include a copy of your manuscript on a 3 1/2 inch MS/DOS or Macintosh disk saved in text (ASCII)

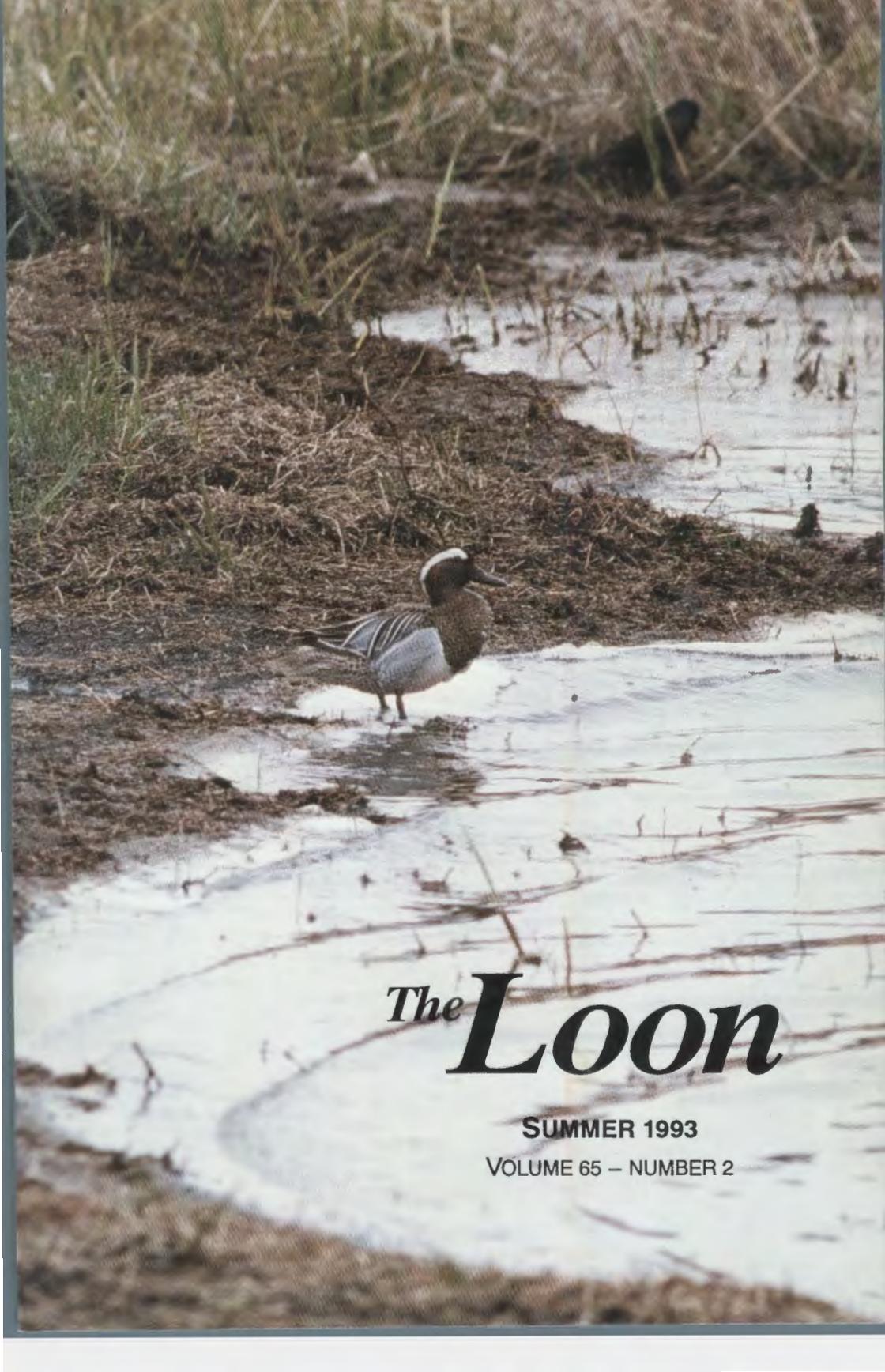
file format. If reprints are desired, the author should so specify indicating the number required. A price quotation on reprints will be sent upon receipt of information.

Club information and other announcements of general interest should be sent to the Newsletter editor. See inside front cover. Bird-sighting reports for "The Season" should be sent promptly at the end of February, May, July and November to Peder Svingen. See inside front cover.

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*The* **Loon**

**SUMMER 1993**

**VOLUME 65 – NUMBER 2**

**The Loon**, Minnesota's magazine of birds, is published four times each year by the **Minnesota Ornithologists' Union**, the statewide bird club. Permanent address: J. F. Bell Museum of Natural History, 10 Church Street SE, University of Minnesota, Minneapolis, Minnesota 55455-0104. Anyone interested in birds may join. Any organization with similar aims may affiliate. All members receive our two publications: **The Loon** and the **MOU**piece.

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"The Season" section of **The Loon** publishes reports of bird sightings throughout Minnesota. We particularly invite reports from parts of the state that have been neglected or covered lightly in past reports. To become a contributor to "The Season" request the report form from the Editor of "The Season," Peder Svingen, 151 Bedford St. SE, Minneapolis, MN 55414.

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**LAKES AREA BIRDING CLUB** - *President:* Roger Moltzan, RR 4 Box 470, Frazee, MN 56544  
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**WETLANDS, PINES & PRAIRIE AUDUBON SANCTUARY** - *Representative:* Joe Gartner, WPPA Sanctuary Rt. 2, Box 45A, Warren, MN 56762  
**ZUMBRO VALLEY AUDUBON SOCIETY** - *President:* Joel Dunnette, 4526 County Road 3 SW, Byron, MN 55920

# Minnesota's Second Record of Garganey

Parker Backstrom

On the evening of 1 May 1993, Lakefield, Minnesota resident Blake Rossow was traveling along Jackson County Road 14. As he passed a small pond about four and a half miles east of the town of Lakefield he noticed a duck that was unlike the other waterfowl (mostly Blue-winged Teal) that were present. Being a waterfowl breeder, Mr. Rossow was familiar with a variety of exotic as well as native ducks. He was immediately able to identify the bird as a male Garganey in alternate (breeding) plumage. Unaware of Mr. Rossow's find, Jackson County Bird Club president Maureen Hendrickson, also of Lakefield, independently identified the bird the next morning. A number of local birders and birders around the state were contacted on the evening of 2 May and several, including the author, made a trip to Jackson County to look for the bird on 3 May. The bird was relocated on the same pond late that morning and the following notes were made.

The bird was slightly smaller than the nearby Blue-winged Teal with which it would, at least loosely, associate (several observers did see the bird direct courtship behavior toward a female Blue-winged Teal). The most striking field mark was a broad white stripe running horizontally along each side of the head, starting from just above and in front of the eye and tapering to a down-curved point toward the back of the head. The head, neck, back and breast were a rich reddish brown, finely streaked with black on the head and neck, boldly spotted with dark on the breast and back. The sides were silvery white with extremely fine vertical vermiculations of dark gray. There were five or six long, sickle-shaped scapular feathers hanging down along each side of the body. The scapulars were dark centered and edged with white

and light gray. The rear of the flanks, the undertail coverts and the uppertail coverts were "bleached out" light brown with large dark spots. The folded primaries were a warm brown color. The rectrices were brown, the outermost rectrices edged with light gray. The bill was a rich dark brown with a black tip and the eye was brown. The head had a rather unique shape, a bit elongated with a somewhat of a "blocky" appearance. Occasionally the ducks took flight and wheeled around the pond before settling back down. In flight the Garganey had a less contrasting upper wing pattern than the Blue-winged Teals, the secondary wing coverts ("shoulders") being pale gray rather than powder blue. The speculum was dark (I was unable to detect a color) edged with white. The belly was unmarked white contrasting sharply with the dark breast.

The Garganey spent most of its time feeding in the middle of the pond. There was clearly an insect hatch in process as thousands of small winged insects could be seen flying just above the surface of the water. The Garganey was seen swimming about, twisting and turning, catching insects in its bill. On several occasions it swam to the edge of the pond and walked along the shore feeding in the shallow water. This allowed an opportunity to photograph the bird (see cover) and to look for the presence or absence of leg bands — none were seen. On at least one occasion it was seen lurking in weeds on one end of the pond.

The Garganey was last seen on the evening of 5 May. This is the second record of this Eurasian duck in Minnesota. The first record was of an alternate plumaged male seen on Goose Lake in Waseca County from 29 April through 2 May 1987 (*The Loon* 59:111-112).

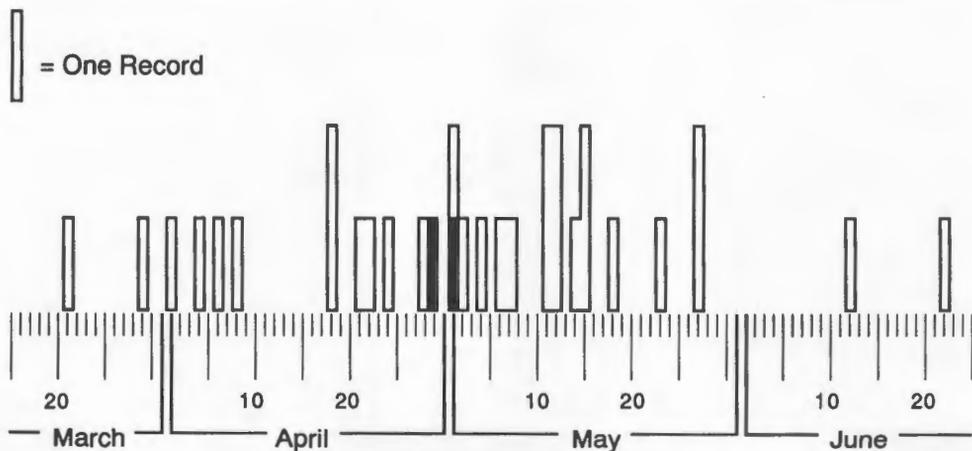
The Garganey is a widespread summer

visitor across most of Europe and central Palearctic Asia, breeding primarily in central and eastern Europe and central Asia (Madge and Burn, 1988). They migrate northward to their breeding grounds largely from February through April (Madge and Burn, 1988; Jonsson, 1992) with most arriving on their breeding grounds by May (Spear, *et al.*, 1988). Garganeys winter almost entirely in the northern tropics, primarily in west, central and eastern Africa, and in tropical Asia from Pakistan eastward to southern China and south to the Philippines (Madge and Burn, 1988). They migrate southward to their wintering grounds largely from August through September (Madge and Burn, 1988; Jonsson, 1992).

There have been roughly 72 records of Garganey in Canada and the continental United States (away from Alaska where the species is considered rare to uncommon in the Aleutian Islands; Armstrong, 1990) since 1957. According to Spear, *et al.* (1988) and records published in *American Birds* (summer 1985 through fall 1992),

Alberta, Arizona, Colorado, Idaho, Illinois, Iowa, Kansas, Manitoba, Michigan, Minnesota, Montana, North Dakota, Oklahoma, Ontario, Saskatchewan, Tennessee and the Yukon Territory. This group accounts for approximately 32 of the 72 individuals. Garganey has also been recorded in Arkansas (DeSante and Pyle, 1986); this record, however, has not been included in the figures above, due to a lack of substantiating information.

There is now a well-documented pattern of Garganeys occurring in North America at about 30 degrees north latitude in March, about 40 degrees north in April and about 50 degrees north in May (Roberson, 1984); both Minnesota Garganey records have occurred at roughly 44 degrees north. All 32 interior records have fallen between 21 March and 22 June (dates first seen if present for more than one day) with a majority of these (75%) falling between 18 April and 27 May. Both Minnesota records fall near the middle of this mean period (see Fig. 1).



**Fig. 1. Timing of Garganey records from 17 interior states and provinces (n=32). The two Minnesota records are shaded black.**

Garganeys have been reported from at least 33 states and provinces including 17 interior (i.e. non-coastal) states and provinces:

A vast majority of the records of Garganey for North America have come during the spring migration period. There

have been approximately nine reports of birds in non-alternate-male plumage, the majority of these from California (as published in *American Birds*). This demonstrates that there is some movement of this species through North America in the fall. Garganeys almost certainly occur more often in fall than records indicate. The lack of more records from this season is certainly due, at least in part, to the difficulty of separating non-alternate birds from similarly plumaged Blue-winged Teal. Compounding the problem, Spear, *et al.* (1988) states that male Garganeys are in basic plumage for as long as nine months of the year.

While there is no question about the identity of this distinctive and well-marked bird, questions about the "wildness" of such a species in North America always arise. Garganeys are kept at least irregularly in captivity. Although out of date, Dick Ryan's frequently cited article on North American waterfowl escapes (1972) states that Garganeys are "rather rare and expensive but kept by several breeders" and they "stand a good chance of being genuinely wild birds when observed in a wild state." Meanwhile, Todd (1979) summarizes the status of Garganeys in captivity as "common in Europe but rare in America (less so in recent years). Breeds fairly readily but is more difficult than most teal". In Minnesota, Garganeys are kept only very rarely in captivity. According to Steve Oehlenschlager, one of the most active and knowledgeable waterfowl breeders/collectors in Minnesota, the small number of Garganeys kept in captivity is due to the Garganey's duration of plumages. Because male Garganeys hold their alternate plumage for only three to four months per year, the species is not highly prized by waterfowl breeders/collectors, a majority of whom keep birds for ornamental purposes. It is estimated that no more than five people in Minnesota possess Garganeys in collections (Steve Oehlenschlager, pers. comm.).

The relative scarcity of captive Garganeys in Minnesota combined with the increasing number of Garganey records from across the continent, as well as the

fact that an early May appearance fits well into an established pattern for this species in North America, strongly suggests that the Garganey seen in Jackson County, Minnesota was a genuinely wild vagrant. Furthermore, this species should be considered a likely candidate for further appearances in the state.

#### Acknowledgments

I'd like to thank Don Roberson for his review of and helpful comments on an earlier draft of this paper. I'd also like to thank Ron Scovell for information he provided about Garganey sightings in Ontario, and Steve Oehlenschlager for his insight on captive Garganeys in Minnesota. Finally, I'd like to thank Anthony X. Hertzell for design and production of the incorporated figure.

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- 3409 Emerson Ave. S., Minneapolis, MN 55408

# Nesting Northern Hawk Owls

Steve Wilson

The winter of 1991–92 saw record numbers of Northern Hawk Owls turn up in northern Minnesota (*The Loon* 64:189–195). I wasn't too surprised, then, when Robin Vora, a Superior National Forest biologist, reported seeing this species on 2 and 3 March 1992, near Giant's Ridge in St. Louis County (T59N, R16W, S. 10, S 1/2 SE 1/4). Intriguing, though, were the two individuals seen there together on the latter date. Could this perhaps be a nesting pair? According to Janssen (*Birds in Minnesota*, 1987), most of the half-dozen nesting records for the state apparently occurred in the wake of major winter "invasions" of this species.

On the afternoon of 21 March, Mary Shedd and I visited the site and immediately located a single bird in the same vicinity described by Robin — perched near the middle of a 38 acre, recently cutover area with a good number of live and dead trees intentionally left standing by the Forest Service for wildlife habitat. The bird seemed unaffected by our presence, remaining perched in a dead tree as we walked immediately beneath it.

For the next hour, we enjoyed leisurely views of this bird while we searched for cavities in nearby trees, thinking we were observing a male "standing watch" over an occupied nest cavity. We soon learned otherwise when a second bird — the male — flew to a nearby tree carrying a Meadow Vole in its talons. The female responded by chattering excitedly as she flew into a cavity in a large dead trembling aspen 40 yards from her perch. She positioned herself with her head looking out the cavity entrance and continued vocalizing; initially mostly a soft, slightly ascending chatter/toot— somewhat resembling the prolonged staccato song given by male Boreal Owls from the nest cavity, but lasting only about one sec-

ond. Soon she alternated the chatter/toot with an ascending screech ("wreeEEEEP!"), reminiscent of a Red-tailed Hawk.

The male eventually flew to the crown of the cavity tree and, after 5–10 minutes, transferred the vole to his beak and dropped down to the cavity entrance. He remained there briefly, clinging to the tree woodpecker-fashion amongst much excited vocalizing, before flying off to a nearby tree, leaving the vole lying in front of the female in the cavity entrance. At this point she switched almost exclusively to the screech call, though louder than before and more emphatically rising at the end. She remained in the cavity a few minutes before picking up the vole in her bill and flying to her original perch. She called from this perch for ten minutes, then moved to a 13-foot tall aspen snag 80 yards from the cavity tree, screeching several times as she flew. Upon alighting on top of the dead aspen, she purposefully stuffed the vole down into a cranny in the splintered top of the tree, looked around as if to be sure no one was watching (we were, from barely 20 yards away), repositioned the vole, then, still screeching, flew back to her original perch. The male, meanwhile, left the area shortly after giving two short bursts of a relatively loud, flicker-like rattle ("flicker call").

My second visit to the site was on 4 April. I located the female at noon, perched on a broken branch in a large white pine, 50 yards from the cavity tree. She remained on this perch for nearly one and one-half hours and vocalized only three times: a short "flicker call"; a screech call; and two short episodes of three to four evenly spaced individual notes, like those given during the "flicker call", but not rapid fire.

When the male finally flew into the cutover, he announced his arrival by commencing a variety of vocalizations, includ-



**Map of Saint Louis County showing the approximate location of nest site.**

ing the “flicker call” and a fairly melodious rapid tooting, very similar to the male Boreal Owl’s staccato song. The female responded with both screech and “flicker calls” and flew into the same cavity occupied on the 21st.

This conversation continued as the male moved closer to the cavity tree. Several minutes after his arrival, the male flew from the white pine nearest the cavity tree to the cavity entrance with a small mammal in his bill, where he remained for 30 seconds. Unlike on the 21st, though, he left the cavity tree still holding the prey item and flew to the crown of a nearby aspen, leaving the female still screeching from the cavity. Within one minute she left the cav-

ity and flew to the same tree; within two minutes they were side-by-side on the same branch. Although the female begged aggressively by giving frequent screech calls, the prey transfer didn’t occur until 30–40 seconds after she reached the male’s side. The male then retreated to another part of the aspen crown, leaving the female screeching, although less frequently than before the prey transfer. A Hairy Woodpecker, apparently attracted by all the fuss, landed and scolded her from above for a minute, with no apparent effect.

Beginning at 1:33 P.M. and for ten minutes thereafter, the female ripped apart and ate the small mammal. During this time her vocalizations were reduced to an occasional soft screech or rattle. About the time she finished eating, the male flew out of the aspen, low and fast, towards a stagnant spruce bog on the edge of the cutover. Within moments several loud outbursts of Gray Jay chattering could be heard from the bog’s edge. A few minutes later, the male Northern Hawk Owl glided back into the cutover, pursued by a scolding Gray Jay. I could not tell if the owl was carrying anything.

I next visited the site on the morning of 10 April. A fierce, wind-driven snow made the unsheltered expanse of the cutover a rather unpleasant place to be; still, the male (presumably) sat perched on limb of a live white pine not far from the cavity tree. What was likely the female briefly peered out from within the cavity when I scratched on the tree (using a long stick to avoid leaving a scent trail to the tree).

The next afternoon, Mark Martell and I accompanied 15 participants on a Raptor Center field trip to the Northern Hawk Owl site. We found the male perched on top of a dead tree within 100 yards of the cavity tree. During the next 25 minutes he vocalized infrequently (toot/rattle), and moved only once or twice to other perches in the immediate vicinity. His behavior changed, though, about the same time we noticed muffled screech calls coming from the cavity. For the next 25 minutes the male switched perches much more frequently and adopted a hunting posture, often staring

intently at the ground. Finally, he made a direct, fast flight from his perch to a spot 35 yards away and hovered kestrel-like, six feet above a grassy opening, before plunging to the ground. Seconds later he flew to a perch, a vole clutched in his talons.

The shrieking from the cavity grew louder, and the male obliged by flying to the cavity entrance. He remained only seconds before leaving without the vole. The female's head then appeared in the entrance, the vole grasped in her bill. Slowly the rest of her emerged, until she was standing, crouched over, in the cavity entrance. There she engaged in a strange weaving and bobbing motion that would have given Muhammad Ali pause, before flying to a nearby aspen snag. She ate the vole and disappeared back into the cavity within two to three minutes, leaving only her tail still visible in the cavity entrance. When we left the area, the male was still moving from perch to perch in the cutover.

My last visit to the site was on the evening of 8 June. A successful nesting attempt was evidenced by two begging fledglings located in a large, live white pine 90 yards from the nest tree. Their breasts and wings were covered by contour feathers, but natal down still clung to their heads. One was noticeably larger. When an adult hawk owl appeared nearby, this fledgling emitted repeated ascending, raspy calls, similar to the adult female's screech call. The smaller fledgling did an entirely different vocalization; fairly rapid sets of loud, sharp "cheeps". At one point an adult flew to the young and, judging by all the commotion, fed one of them. I departed the area after a half hour, leaving an adult perched in the top of a nearby white pine, the fledglings still in their original perches.

The birds were last seen on 23 July by Larry Puchalski, a botanist doing a sensitive plant survey in a spruce/tamarack bog adjacent to the cutover. Neither adult was seen, but two young-of-the-year hawk owls were found around noon, screeching loudly and frequently, on a small upland island in the bog 0.5 mile southwest of the nest.

The habitat at the nest site caught my eye because it's similar to the habitat at Bo-

real Owl cavity trees I have studied: cavity in a large deciduous tree (usually aspen), in an upland with a light to moderate forest cover of older, larger deciduous and coniferous trees, adjacent to a conifer lowland. The Northern Hawk Owl nest was in a 28 inch dbh (diameter at breast height) trembling aspen that had died within the previous year. The tree was heavily infected with *Phellinus igniarius*, a fungus that causes heart rot in older aspen and is usually present before cavities are formed naturally or constructed by woodpeckers. Several fungal fruiting bodies near the cavity entrance suggested the presence of rotted wood in the interior of the tree. The cavity entrance was a large, irregular-shaped natural (unexcavated) opening facing SSE at a height of 32 feet. Less than seven months after nest completion, the cavity tree snapped off five feet above the cavity.

The nest tree was centrally located in a 38 acre cutover harvested in 1989 and regenerating back to trembling aspen and balsam fir saplings. The cutover was bounded on three sides by mature forest; on the south side, 140 yards from the nest tree, lay a sprawling, 2000+ acre spruce/tamarack bog. Thirty-five yards east was a one-acre, artificially created, grassy wildlife opening in which the male was seen catching a vole.

The cutover was unusual in the number of old, large trees left standing in the wake of the logging operation — especially in the vicinity of the nest tree. About 10–13 trees/acre remained standing here: these included mostly live white pine; dead, dying and live trembling aspen and paper birch; and a few balsam fir. These "wildlife trees" were left standing by the U.S. Forest Service to provide habitat for species that otherwise would not be found in a cutover. This strategy worked nicely, because the trees were frequently used as hunting, feeding, loafing, and calling perches by the hawk owls, and likely played an important role in the birds' choice of this site. This is a good example of how the habitat needs of certain wildlife species not normally associated with young forests can be accommodated during timber harvesting. 7170 Lamppa Lane, Embarrass, MN 55732

# Birds of the St. Croix Savannah Scientific and Natural Area, Washington County, 1992

William H. Longley

## I. Description of Area

The St. Croix Savannah Scientific and Natural Area (SNA) lies in Sections 14 and 15, T. 29 N., R. 20 W. and adjoins the town of Bayport, at the southwest corner of the town, and is approximately 85 acres (34.4 hectares) in extent. It was established in 1989, formerly having been part of the Bayport Wildlife Management Area. The area occupies a gullied St. Croix River bluff, which rises about 130 feet. The southwest-facing slope has been seriously eroded by recreational vehicles, challenging the steepness of grades up to 40%. Vegetative features include oak forest, alluvial forest, grassy old fields, and savannah on the southwest slopes. About half the area is wooded. The east slope and adjacent part of the top are rather densely wooded with bur oak and northern pin oak, with smooth sumac in old clearings. The same type covers a part of the southwest slope, but with much deeper ravines, at the north end. A railroad cut along the west wall of the valley demarks the southwest boundary line of the SNA, along which the land drops sharply to the east through a narrow band of oak forest to the alluvial forest containing tall cottonwoods, American elm, box elder, and green ash. About 12 acres of old fields on the top at the north are covered with smooth brome grass with some invasion of smooth sumac. The dry southwest slopes are covered with prairie grasses and forbs, scattered bur oak, and a few young red cedars, and there is some open land from the base of the slope to the edge of the dry wash. The soil is droughty loamy sand.

## II. Methods

1. The spot-mapping method was used to determine the status of bird species, as de-

scribed in *The Loon* 62:46-50.

2. On 16 days during the period 30 March - 1 October 1992, starting near dawn, I walked through the area, following trails and field edges, and recorded locations of all birds. Information included sex of individuals, whether in pairs or flocks, singing males, and important activities. Trips averaged 6.3 hours (seven to nine hours each during May and June).

## III. Results

1. I recorded 93 species of birds at the SNA.

2. Nesting and inferred nesting species numbered 28, with 80 pairs represented (Table 1).

3. Local species recorded on or over the area, but probably or evidently not nesting there, numbered 41 (Table 2).

4. Transient species (migrants) numbered 24 (Table 3).

## IV. Discussion

1. St. Croix Savannah SNA is being managed for prairie vegetation. In 1991 and 1992, Tordon was used to control leafy spurge and a considerable amount of sumac was cut by hand. Then in 1992, a disease and a beetle affected some stands of sumac, resulting in considerable mortality. On 28 April 1992, a prescribed burn took place on the southwest slope. Some effort was made to reduce, by cutting, the black locust which may have been planted some years ago to control erosion at the south top and southeast slope.

Note: This and previous breeding bird studies on SNAs reported in *The Loon* beginning in 1990 were conducted under the Minnesota Department of Natural Resources Volunteer Program.

**Table One**  
**Nesting and Inferred Nesting**

<p>Ring-necked Pheasant: Hen with about 12 two-week-old chicks flushed from grassy field on 24 May. Possibly the nest was north of the SNA boundary on the Bayport Wildlife Management Area, where a cock was earlier crowing.</p> <p>Mourning Dove: Birds present on 15 of 16 trips from April to October. Three pair.</p> <p>Red-bellied Woodpecker: Birds present on eight trips. One pair indicated.</p> <p>Downy Woodpecker: Birds noted on most trips. Nest with loud young in nest 28 ft. up in birch snag on 4 July. Two pair.</p> <p>Hairy Woodpecker: Birds seen on 13 trips. Two nests with young noted on 4 July. Two pair.</p> <p>Northern Flicker: Birds seen on 11 trips. Mating witnessed on 22 May. Apparently two territories.</p> <p>Eastern Wood Pewee: Birds noted from 10 May to 8 September. Two widely separated territories.</p> <p>Great Crested Flycatcher: Two territories within, and two partially within, SNA boundaries.</p> <p>Blue Jay: At least three detectable territories plus one or two partially within the SNA.</p> <p>Black-capped Chickadee: Two nests found; one successful. Seven, possibly eight, territories.</p> <p>White-breasted Nuthatch: Two pair.</p> <p>House Wren: Four territories. Three young noted on 4 July.</p> <p>Eastern Bluebird: One pair attempted to nest. Last seen on the territory 9 July.</p> <p>American Robin: Three nests found. Six territories.</p> <p>Gray Catbird: One or two singers present in scattered locations on six trips. Probably</p>	<p>one territory.</p> <p>Brown Thrasher: Three singers on 1 and 10 May, but only one thereafter. Nest found on 10 May produced four young.</p> <p>Red-eyed Vireo: Six singers on 22 May; three on 9 June; only one on two dates in July. Probably one territory.</p> <p>Ovenbird: Two territories.</p> <p>Scarlet Tanager: Three singers on 1 and 18 June. Two territories into mid-July.</p> <p>Northern Cardinal: As many as six singing males (1 May). Nest found on 23 April was soon abandoned. Nest found on 1 May produced three young. Probably five territories, plus one partially in the SNA.</p> <p>Rose-breasted Grosbeak: As many as six singers (22 May); five on 24 June; four on four other dates; but apparently only three viable territories.</p> <p>Indigo Bunting: Six singers on 9 June, but probably four territories thereafter.</p> <p>Field Sparrow: Five nests found. Ten singers on 4 July, but apparently nine territories.</p> <p>Lark Sparrow: One singer on 9 June; two pair on 18 June; only one singer/pair thereafter.</p> <p>Song Sparrow: Present on 14 of 16 trips. Five singers on 23 April and 1 May, but only two thereafter. Probably five territories.</p> <p>Brown-headed Cowbird: Probably four females at most.</p> <p>Northern Oriole: Four singers on 10 May, plus two migrating through; also four on 9 June. Female building nest on 22 May. Female with young on 14 July. Two pair.</p> <p>American Goldfinch: Three pair on 22 May and 9 June; one or two thereafter. Probably two "territories."</p>
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**Table Two**  
**Birds Recorded at the Area but Probably Not Nesting**

<p>Common Loon: Two flew over on 6 April.</p> <p>Double-crested Cormorant: 300 flew over on 1 May.</p> <p>Great Blue Heron: One flew over on 14 April.</p> <p>Great Egret: One flew over on 22 May.</p> <p>Mallard: Three flew over on 6 April. On 23 April, a pair alit on sandy road in the south. On 1 May, a female, and on 22</p>	<p>May, a pair flew around north field as if on nest search.</p> <p>Blue-winged Teal: On 22 May, 11 flew over.</p> <p>Turkey Vulture: On 10 May, three soared above the bluff. On 9 June, a pair perched a long time atop an electric pole.</p> <p>Cooper's Hawk: One present on 6 April and 4 July. Nested nearby.</p>
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- Broad-winged Hawk: One circled over and through woods, calling, on 23 April, 1 May, and 9 June.
- Red-tailed Hawk: One present on 23 April, 22 May, and 1 October.
- Wild Turkey: Fresh tracks noted on three dates in April and May.
- Killdeer: One or two flew over and around on five dates; only once, one alit in the open south sandy area.
- Black-billed Cuckoo: One on 26 July.
- Great Horned Owl: One present on 26 July and 1 October.
- Ruby-throated Hummingbird: One on 8 September.
- Belted Kingfisher: On three dates in spring, a pair rattled around the northwest corner, where a quarry cutbank and pond are just a couple of feet west of the SNA boundary.
- Yellow-bellied Sapsucker: One present on 6 and 14 April.
- Pileated Woodpecker: One present on 23 April and 1 May.
- Willow Flycatcher: One heard on 8 September.
- Least Flycatcher: One on 22 May and 9 June.
- Eastern Phoebe: One present 30 March to 10 May, and two others on 6 April. Nest found just beyond boundary.
- Eastern Kingbird: Pair present on 22 May and 1 June. Three, including one or two young, on 26 July.
- Purple Martin: Three flying over on 22 May; one on 4 July.
- Tree Swallow: Two on 1 May.
- Northern Rough-winged Swallow: Two to four present from 10 May to 26 July. Nesting sites within a few feet of boundary.
- Bank Swallow: As many as 16 over northwest corner from 10 May to 4 July. Large colony in adjacent cutbank.
- American Crow: One to seven frequented the area.
- Sedge Wren: One in grassy field on 1 October.
- Blue-gray Gnatcatcher: One singing on 1 May.
- Cedar Waxwing: Small flock (six to eight birds), on 22 May and 9 June. Singles on three days, 24 June to 26 July. Flock of 22 on 8 September.
- European Starling: Six flew over on 6 April.
- Yellow-throated Vireo: One only on 26 July and 8 September.
- Warbling Vireo: One on 22 May, 14 July, and 8 September.
- Yellow Warbler: Two singers on 22 May.
- American Redstart: Two on 8 September.
- Chipping Sparrow: Three singers on 1 May. One from 10 May to 24 June at scattered locations.
- Clay-colored Sparrow: One on 1 May.
- Vesper Sparrow: One singer on 22 May.
- Red-winged Blackbird: A few flew over on five dates. One fed on area 9 June.
- Eastern Meadowlark: One singer from 6 April to 1 May.
- Common Grackle: A few flew over on five dates. Seven fed on acorns on 1 October.

**Table Three**  
**Transients (Migrants) Not Ordinarily Nesting in the Vicinity**

Ring-billed Gull  
Olive-sided Flycatcher  
Alder Flycatcher  
Brown Creeper  
Golden-crowned Kinglet  
Ruby-crowned Kinglet  
Swainson's Thrush  
Hermit Thrush  
Tennessee Warbler  
Orange-crowned Warbler  
Nashville Warbler  
Chestnut-sided Warbler  
Magnolia Warbler

Yellow-rumped Warbler  
Black-throated Green Warbler  
Blackburnian Warbler  
Palm Warbler  
Black-and-white Warbler  
Mourning Warbler  
Canada Warbler  
Fox Sparrow  
White-throated Sparrow  
Dark-eyed Junco  
Common Redpoll

532 W Broadway, Forest Lake, MN 55025

# The Fall Season

## (1 August to 30 November 1992)

Steve Carlson, Oscar Johnson, Kim Risen and Dick Ruhme  
Foreword by Peder Svingen

What a dramatic difference a year can make! Following the spectacular fall of 1991 with its numbing array of rarities, comparisons between years are inevitable, especially along the North Shore of Lake Superior where three first state records were discovered in 1991. Such comparisons are unfair and not particularly useful, since year-to-year fluctuations in migration are common and expected. More important was the putative impact of a dry spring and an exceptionally cool summer on nesting success in 1992 which apparently skewed fall migration patterns. Many observers commented on the relative lack of juveniles seen during migration, especially among the passerines, with suspected early departure of adults from breeding areas after failed nesting attempts in some cases and unusually late nesting attempts in others. Unfortunately, hard data to support or refute such impressions are few. One such analysis by Dennis Meyer, based upon banding studies at Hawk Ridge Nature Reserve in Duluth, suggested low reproductive success only for thrushes and Red-eyed Vireos among the species sampled (*Hawk Ridge Annual Report*, April 1993, pp. 14-15).

August continued the cool pattern of preceding months with an average of 65.9° for the entire month in the Twin Cities and below normal temperatures throughout the state. Most of the precipitation fell during the first and last weeks of August. It finally seemed like summer arrived in mid-September! It remained relatively dry and balmy until a dramatic cool down in mid-October, followed by a gradual warmup and another cooling trend toward the end of the month, with much of the season's snow-fall during the first few days of November. The real story in November was the ab-

sence of sunshine throughout most of Minnesota. It was the second cloudiest November in modern times for the Twin Cities, where the sun could be found during only 15% of daylight hours. The cloudiness did keep temperatures close to or above normal after the first week.

Among the waterfowl, another Clark's Grebe was discovered which further contributes to understanding of its true status in Minnesota. The "sea ducks" made news when an extremely early Harlequin Duck appeared in Duluth and numerous records of scoters and Oldsquaw accumulated through October and November in locations other than Lake Superior, where they were also frequently reported. It was a very poor year for jaegers but gulls and terns produced some excitement. The Little Gull in Polk County was most unusual for fall and the brief appearance of two Sabine's Gulls in Duluth raised hopes for an organized "pelagic" trip on Lake Superior the following day, which failed to relocate them. Karl Bardon's outstanding discovery of an adult Least Tern feeding a juvenile in backwaters of the Mississippi River on 29 August was a lesson in observer persistence and should encourage additional searching in future years, since suitable habitat already exists in many areas and can be created on "spoil islands" if they are neither flooded by high waters nor inundated by predators and people as waters recede. Nesting of the endangered interior Least Tern has still never been confirmed in Minnesota.

Although aspects of fall migration were disappointing, it was certainly not all quiet along the North Shore. Hawk Ridge Nature Reserve, with Frank Nicoletti returning for a second year as official counter, reported record high numbers for Osprey, Bald Eagle, Cooper's Hawk, Golden Eagle,

American Kestrel and Peregrine Falcon. In addition, two Gyrfalcons were included in the official count and at least two others were reported elsewhere. The fall flight of Prairie Falcons in western Minnesota was modest compared to last year's excellent showing.

Hummingbirds provided some excitement again this fall. Two adult male Rufous Hummingbirds were reported at feeders and an immature male Ruby-throated was identified on 7 November in Meeker County, a record late date for this species. Reports of Black-backed and Three-toed Woodpeckers were up which encouraged some observers to look for them throughout the winter. Some of the flycatchers appeared to wander south early while others lingered, such as the record late Least Flycatcher that was documented with photographs in Otter Tail County on 25 October. Swallows lingered in some areas as well; perhaps the insectivores found food more easily during the milder weather in late autumn!

Early indications were that finches might be scarce during the upcoming winter, so an apparent "invasion" of solitaires gave winter birding enthusiasts some hope. The **nine** Townsend's Solitaires were the most ever reported in fall (seven individuals were found in autumn 1981) and almost double the average of five individuals reported in each of the three preceding autumns. The always welcome Varied Thrush appeared in five counties. Two non-singing Sprague's Pipits at the Felton Prairie in late

August were presumably migrants, since this area had been thoroughly birded earlier in the year; however, this species is also notoriously difficult to detect during the summer months. Loggerhead Shrikes were reported from six counties this fall, including seven individuals in Dakota County. Shrikes are declining and may be sensitive indicators of environmental quality, so the value of reporting all shrike sightings cannot be overstated.

Although the paucity of passerines along the North Shore in October was startling, not everyone experienced a poor migration. Steve Carlson felt that warbler migration was about average in the Twin Cities and Carol Schumacher reported a good migration in the Winona area during September. Among the remainder of the passerines, two outstanding records deserve mention as justification for backyard birding. Maurita Geertz heard an unfamiliar call among the stream of Yellow-rumped Warblers moving along the north shore of Lake Mille Lacs and came out of the garage to find Minnesota's first Painted Redstart! Kudos to Bernice Wanek in Doran, Wilkin County, for recognizing the sparrow at her feeder as unusual and worthy of reporting, and especially for tolerating the dozens of observers who subsequently came to see the state's third Black-throated Sparrow. This seasonal report contains much more data for readers to synthesize; it makes excellent back porch reading since almost anything is possible in Minnesota!

## KEY TO SEASONAL REPORTS

1. Species listed in upper case (**PACIFIC LOON**) indicate a Casual or Accidental occurrence in the state.
2. Dates listed in boldface (**10/9**) indicate an occurrence either earlier, later or within the earliest or latest dates on file.
3. Counties listed in boldface (**Aitkin**) indicate either a first county record or an unusual occurrence for that county. City of **Duluth** also boldface when applicable.
4. Counties listed in italics (*Aitkin*) indicate a first county breeding record.
5. Brackets [ ] indicate a species for which there is reasonable doubt as to its origin or wildness.

**Common Loon**

Late north 11/8 Aitkin WN, 11/18 Becker BK, 11/20 Itasca TL; late south 11/8 Carver MB and Martin BBo, 11/23 Olmsted JB, 11/30 Hennepin SC, KB.

**Pied-billed Grebe**

Late north 10/24 Aitkin WN, 11/10 Becker BBe, 11/15 Beltrami DJ; late south 11/14 Mower RJ and Wabasha DWM, 11/15 Hennepin *fide* PB.

**Horned Grebe**

Late north 11/1 Beltrami DJ, 11/7 Pine RG, 11/19 Mille Lacs KB; late south 11/10 Mower RRR, 11/19 Carver DM, 11/24 Hennepin SC.

**Red-necked Grebe**

Late north 10/31 Todd RJ, 11/18 Cook KE, 11/30 Duluth DBE; late south 10/2 Hennepin SC, 11/17 Ramsey RG, 11/19 Carver RG.

**Eared Grebe**

Late north 9/29 Pine RG, 10/9 Lake MH, 10/17 Duluth DBE; late south 11/8 Rice TB, 11/18 Ramsey KB, EL, 11/26 Carver DM.

**Western Grebe**

Late north 10/9 Pennington SSSt, 10/11 Otter Tail DS; late south 11/6 Hennepin SC, 11/8 Carver MB, 11/22 Kandiyohi CJ.

**CLARK'S GREBE**

Reported 8/21-23 Yellow Medicine KE, mob.

**American White Pelican**

Late north 9/20 Clay LCF, 10/10 Lake of the Woods RJ, 11/13 Duluth *fide* KE; late south 11/4 Murray ND, 11/6 Ramsey *fide* PB, 11/27 Dakota PB, RH.

**Double-crested Cormorant**

Late north 11/18 Cooke, 11/22 Duluth TD, FN, 11/26 Otter Tail SDM, MO; late south 11/22 Winona CS, 11/23 Olmsted JB, 11/27 Carver PB, RG.

**NEOTROPIC CORMORANT**

First state record (see Summer Season).

Reported through 8/4 Ramsey *fide* RJ (*The Loon* 64:176-178).

**American Bittern**

Late north 9/20 Clay LCF, 10/10 Cook SOL, 10/13 Lake DPV; late south 8/7 Yellow Medicine HK, 8/16 Lac Qui Parle CM, 8/23 Chisago KB.

**Least Bittern**

Reported 8/26 Rice TB, 9/1 Rice FKS.

**Great Blue Heron**

Late north 11/1 Otter Tail SDM, 11/6 Duluth FN, 11/27 Becker BBe; late south 11/17 Wabasha DWM, 11/27 Carver PB, RG, 11/28 Hennepin DM.

**Great Egret**

Late north 9/25 Clay TL, 9/27 Itasca TL, 10/4 Otter Tail MO; late south 11/14 Goodhue BL, 11/17 Houston CS, 11/26 Wabasha DWM.

**Snowy Egret**

Reported 8/28 Sherburne RG, 9/9 Lac Qui Parle FE.

**Little Blue Heron**

Reported 8/25 Washington County RG, RJ, BL.

**Cattle Egret**

Late north 10/25 Otter Tail DC, EL, DM and Wilkin KE, 10/27 St. Louis KE; late south 9/5 Kandiyohi CJ, 10/23 Big Stone KE.

**Green-backed Heron**

Late north 9/14 Aitkin WN, 9/26 Otter Tail MO, 10/10 Polk DJ; late south 9/26 Goodhue RJ, Washington TEB, WL, 10/2 Olmsted JB, 10/22 Hennepin SC.

**Black-crowned Night Heron**

Late north 8/2 Roseau MO, 8/12 Otter Tail SDM, 9/21 Duluth KR; late south 10/1 Dakota TW, 10/3 Hennepin RB, 10/23 Chippewa AB.

**Tundra Swan**

Early north 10/14 Wilkin SDM, 10/18 Lake

of the Woods and Roseau RJ; early south 10/18 Hennepin SC, 10/22 Wabasha JB; late north 11/22 Mille Lacs *fide* PB, 11/28 Beltrami DS; late south 11/30 Houston EMF and Winona CS.

#### **TRUMPETER SWAN**

Reported 10/11 Pine, 10/27 Sherburne 11/22 Mille Lacs, all *fide* PB.

#### **Mute Swan**

Reported by many observers in Hennepin, Dakota and Washington counties (probably all same bird) from 9/25 through 11/28. Also reported 11/14 Rice RJ.

#### **Greater White-fronted Goose**

Early north 10/24 Wilkin EL, 10/30-11/8 Duluth mob; early south 10/18 Anoka *fide* PB, 11/5 Dakota DM; late south 11/15 Wabasha KB, 11/24 Olmsted JB.

#### **Snow Goose**

Early north 9/23 Polk PS, 10/1 St. Louis SC; early south 8/30 Big Stone RB, 10/2 Ramsey KB; late north 10/26 Cook AH, 11/26 Otter Tail SDM; late south 11/22 Dakota KB, 11/25 Martin BBo.

#### **ROSS' GOOSE**

Reported 10/19 Olmsted JB.

#### **Canada Goose**

Reported from 28 counties south, 17 counties north.

#### **Wood Duck**

Late north 10/11 Beltrami DJ, 10/25 Aitkin WN, 10/29 Becker BBe; late south 11/12 Washington DS, 11/21 Wabasha RJ, 11/26 Ramsey KB.

#### **Green-winged Teal**

Late north 10/31 Norman MO and St. Louis TW, 11/5 Beltrami DJ, 11/29 Otter Tail SDM; late south 11/14 Wabasha RB, 11/30 Hennepin SC and Winona CS.

#### **American Black Duck**

Late north 10/29 Aitkin DN, 11/3 Cook SOL, 11/5 Beltrami DJ; late south 11/27 Goodhue DN, 11/30 Hennepin SC and

Ramsey DS.

#### **Mallard**

Reported from 23 counties south, 15 counties north.

#### **Northern Pintail**

Late north 10/17 Lake PB, 10/25 Otter Tail DC, 10/29 Aitkin DN; late south 10/27 Anoka WL, 11/23 Wabasha DWM, 11/27 Dakota RH.

#### **Blue-winged Teal**

Late north 10/8 Becker BBe, 10/18 Clay LCF, 10/25 Aitkin WN; late south 10/10 Olmsted JB and Redwood DN, 10/27 Anoka WL.

#### **Northern Shoveler**

Late north 10/13 Wilkin MO, DN, 10/31 Douglas RJ, 11/21 Otter Tail SDM; late south 11/14 Dakota TT, 11/20 Wabasha DWM, 11/30 Hennepin KB, SC.

#### **Gadwall**

Late north 10/29 Becker BBe, 11/29 Otter Tail SDM; late south 11/28 Hennepin SC, 11/29 Ramsey KB, 11/30 Winona CS.

#### **American Wigeon**

Late north 10/29 Aitkin DN, 10/31 St. Louis TW, 11/26 Otter Tail SDM; late south 11/23 Winona CS, 11/25 Hennepin KB, 11/26 Nicollet MF.

#### **Canvasback**

Late north 10/19 Duluth DPV, 10/23 Douglas DC, 11/7 Becker BBe; late south 11/23 Wabasha DWM, 11/25 Ramsey KB, 11/26 Carver DM.

#### **Redhead**

Late north 11/1 Clay LCF, 11/7 Becker BBe, 11/29 Otter Tail SDM; late south 11/22 Le Sueur PS, 11/25 Ramsey KB, 11/30 Winona CS.

#### **Ring-necked Duck**

Late north 10/30 Aitkin WN, 11/1 Clay LCF, 11/28 Cook KE; late south 11/21 Olmsted JB, 11/25 Ramsey KB, 11/29 Hennepin SC, DM.

### **Greater Scaup**

Late north 11/6 Becker DJ, 11/8 Kanabec CM, 11/24 St. Louis KE; late south 11/25 Ramsey KB, 11/27 Carver PB, 11/29 Hennepin DM.

### **Lesser Scaup**

Late north 11/7 Aitkin WN and Becker BBe, 11/24 St. Louis KE, 11/26 Otter Tail SDM; late south 11/30 Hennepin KB, SC, Wabasha DWM, Washington DS and Winona CS.

### **Harlequin Duck**

Reported 9/19–11/30 Duluth alt., mob, also 11/26 Otter Tail SDM.

### **Oldsquaw**

Reported 10/10–11/7 Cook mob, 10/17 Lake of the Woods, *fide* PB, 11/14 Lake MH, 11/16–17 Goodhue RG, CS, 11/20–26 Carver RG, RJ, DM, 11/21 Winona RJ, CS, 11/25 Ramsey RG, KB, 11/27 Goodhue DN.



**Oldsquaw, 18 November 1992, McNally Landing, Winona Co. Photo by Howard Munson.**

### **Black Scoter**

Reported 10/9–23 Lake DPV, PB, 10/10 Cook PB, 10/12–14 Wilkin SDM, PS, 11/19 Mille Lacs KB, 11/26 Ramsey KB.

### **Surf Scoter**

Reported 10/10 Itasca TL, 10/19 Cook DM, 11/24 Anoka KL, 10/28 Meeker RG, 10/29 St. Louis TW.

### **White-winged Scoter**

Reported 10/7–11/7 Cook mob, 10/17

Cottonwood ED, 10/18 Lake KE, 11/4 Becker *fide* BBe, 11/6 Ramsey KB, 11/15–19 Hennepin DB, SC, RG, 11/25 Martin BBo.

### **Common Goldeneye**

Early south 10/24 Goodhue AB, 10/27 Anoka WL, 10/31 Ramsey KB.

### **Bufflehead**

Early north 8/4 Roseau PS, 9/26 Becker County DJ; early south 8/30 Lac Qui Parle RB, 10/4 Swift AB; late north 11/26 Otter Tail MO, 11/29 Cook KMH; late south 11/30 Hennepin SC, Ramsey DS and Winona CS.

### **Hooded Merganser**

Late north 11/7 Aitkin WN and Becker BBe, 11/22 Beltrami DJ, 11/29 Otter Tail SDM; late south 11/22 Ramsey AB, 11/23 Olmsted JB, 11/30 Hennepin KB, SC.

### **Common Merganser**

Early south 10/24 Goodhue AB, 11/2 Ramsey KB, 11/7 Dakota TT and Hennepin DN.

### **Red-breasted Merganser**

Late north 10/19 St. Louis TEB, 11/15 Aitkin WN, 11/19 Becker BK; late south 11/14 Mower RJ, 11/23 Hennepin DB, 11/25 Ramsey KB.

### **Ruddy Duck**

Late north 10/24 Douglas DC, 11/6 Cass RH, 11/29 Otter Tail SDM; late south 11/21 Ramsey KB and Winona RJ, 11/27 Carver PB.

### **Turkey Vulture**

Hawk Ridge count: 777. Late north 10/4 Aitkin WN and Itasca AB, 10/12 Beltrami DJ, 11/4 Becker BBe; late south 10/5 Houston EMF and Kandiyohi CJ, 10/9 Wabasha RG, 10/11 Olmsted JB.

### **Osprey**

Hawk Ridge count: 433, a new high. Late north 10/3 Becker DN, 10/16 Mille Lacs AB, 10/21 St. Louis SS; late south 10/25 Dakota DZ, 11/15 Rice OR.

### **MISSISSIPPI KITE**

Reported 9/11 Wabasha AM (*The Loon* 64:234).

### **Bald Eagle**

Hawk Ridge count: 982, a new high. Late north 11/29 Itasca AB, 11/30 Becker BBe and Roseau KB.

### **Northern Harrier**

Hawk Ridge count: 387, down 40%. Late north 10/17 Koochiching RJ, 11/12 Cook SOL, 11/18 Norman BK; late south 11/3 Wabasha DWM, 11/4 Martin BBo, 11/14 Winona CS.

### **Sharp-shinned Hawk**

Hawk Ridge count: 16,288. Late north 10/20 Becker BBe, 10/31 Norman MO, 11/14 Clay LCF; late south 11/4 Blue Earth BBo, 11/11 Brown JS, 11/28 Houston EMF.

### **Cooper's Hawk**

Hawk Ridge count: 257, a new high. Late north 10/4 Clay LCF, 10/12 Lake DPV, 10/31 Norman MO; late south 11/3 Washington DN, 11/28 Hennepin RJ and Ramsey PS.

### **Northern Goshawk**

Hawk Ridge count: 2,247. Early north 9/4 Clearwater AB, 9/20 St. Louis PB, OJ, 10/17 Koochiching RJ; early south 10/4 Goodhue KB and Houston FL, 10/24 Anoka KL.

### **Red-shouldered Hawk**

Hawk Ridge count: eight. Late north 8/15 Mahnomen AB, 10/3 Becker DN, 10/24 Duluth SDM; also reported 9/27 Houston LL, 11/8 Washington WL.

### **Broad-winged Hawk**

Hawk Ridge count: 37,487, down 35%. Late north 9/22 Lake DPV, 9/28 Becker BK, 10/4 Aitkin WN; late south 9/25 Anoka JH, EL, 9/26 Olmsted AP, 9/27 Hennepin SC.

### **Swainson's Hawk**

Hawk Ridge count: two. Late north 9/27 Otter Tail SDM and Wilkin MO, 10/10 Cook AH; late south 8/29 Lac Qui Parle

RB, 8/30 Dakota EL, 10/30 Ramsey RH.

### **Red-tailed Hawk**

Hawk Ridge count: 5,875. Reported from 29 counties south, 22 north.

### **Rough-legged Hawk**

Hawk Ridge count: 299. Early north 8/15 Lake DPV, 9/14 Aitkin WN, 9/27 Pennington SS; early south 10/9 Watonwan BBo, 10/17 Washington DS, 10/21 Swift AB.

### **Golden Eagle**

Hawk Ridge count: 69, a new high (previous high was 37 in 1984). Early south 10/25 Lac Qui Parle CH and Anoka KL, 10/27 Sherburne BC.

### **American Kestrel**

Hawk Ridge count: 2,016, a new high. Late north 11/22 Aitkin WN, 11/27 Kanabec CM, 11/29 Norman MO.

### **Merlin**

Hawk Ridge count: 236. Late north 10/28 Wilkin SDM, 11/14 St. Louis TW, 11/29 Pennington SS; late south 10/27 Martin BBo, 11/13 Hennepin OJ, 11/23 Carver PS.

### **Prairie Falcon**

Reported 8/28–10/6 Clay LCF, 9/6 Grant SDM, 10/8–12 Polk PS, 10/14 Wilkin SDM, 10/28 Meeker RG, 11/3 Hennepin AH, 11/22 Clay LCF.

### **Peregrine Falcon**

Hawk Ridge count: 71, a new high. Late north 9/25 Lake DPV, 9/27 Becker BBe, 9/30 Duluth PS; late south 9/27 Houston FL, 9/29 Le Sueur RJ, 11/6 Hennepin JF.

### **Gyr Falcon**

Hawk Ridge count: three (10/26, 11/15, 11/21). Also reported 10/3 Roseau PS.

### **Gray Partridge**

Reported from 10 counties south, six north; numbers down.

### **Ring-necked Pheasant**

Reported from 8 north and 22 south

counties.

### **Spruce Grouse**

All reports: 10/10 Roseau KB and 10/30 Cook SOL.

### **Ruffed Grouse**

Reports were down; reported from 10 north and 6 south counties.

### **Greater Prairie-Chicken**

All reports: 9/23 Otter Tail SDM (first record in over 10 years!) and 10/24–11/28 Wilkin mob.

### **Sharp-tailed Grouse**

Reported from Aitkin, Beltrami, Lake of the Woods, Pennington, Polk and Roseau counties.

### **Wild Turkey**

Reported from Houston, Olmsted and Rice counties.

### **Virginia Rail**

Late north 8/14 Kanabec CM; late south 8/1 Chippewa RJ, 9/1 Hennepin (2) KB, 10/29 Carver KR.

### **Sora**

Late north 8/29 Becker MO, 9/14 St. Louis DN, 10/2 Lake PB.

### **Common Moorhen**

All reports: 8/1 Chippewa RG, RJ, 8/15–22 Cottonwood, Lyon County PE *et al.*

### **American Coot**

Late north 10/18 Lake PB, 10/25 Aitkin WN, 11/19 Beltrami DJ.

### **Sandhill Crane**

Reported from 15 counties; late north 10/10 Aitkin WN, 10/17 Kanabec CM, 10/24 Pennington mob and Wilkin (300) DC, EL; late south 9/11 Anoka KB, 9/26 Wabasha RJ, 9/27 Sherburne AB.

### **Black-bellied Plover**

Early north 8/16 Wilkin MO, 9/17 St. Louis DZ; early south 8/1 Chippewa RJ, 9/7 Kandiyohi CJ; late north 10/19 Kittson RJ

and Norman RJ, 10/25 Otter Tail DC and Wilkin HT, 11/9 St. Louis TW; late south 10/29 Carver KR, 10/31 Waseca CS, 11/7 Goodhue BL.

### **Lesser Golden-Plover**

Early north 8/15 Wilkin, 9/5 Aitkin WN and St. Louis SS; early south 8/13 Hennepin KB, OJ, 9/27 Rice PS, 9/28 Le Sueur OR, FKS; late north 10/21 Polk (3) PS, 10/24 Wilkin DC, HT, 10/30 St. Louis KE; late south 10/23 Chippewa AB, 10/24 Redwood TL.

### **Semipalmated Plover**

Early north 8/2 Beltrami DJ, 8/15 Cook SOL and Wilkin MO; early south 8/1 Chippewa RJ, Dakota TT and Hennepin SC, 8/2 Rice TB, 8/7 Lyon HK; late north 9/27 St. Louis KB, 10/2 Lake DPV; late south 10/3 Chippewa RG, RJ, 10/29 Carver (2) KR.

### **Killdeer**

Late north 10/19 Kittson RJ, 10/24 Pennington PS, 11/4 St. Louis PS; late south 10/28 Martin BBo, 10/29 Carver KR, 11/7 Goodhue BL.

### **American Avocet**

One report: 8/21–23 Renville KR, KE.

### **Greater Yellowlegs**

Late north 10/19 Kittson RJ, 10/29 Aitkin DN, 11/1 Otter Tail SDM; late south 10/29 Carver (2) KR, 10/31 Houston FL and Waseca CS, 11/2 Martin BBo, 11/12 CS.

### **Lesser Yellowlegs**

Late north 10/18 Clay LCF, Kittson RJ and Lake PB, 10/21 Polk PS; late south 10/24 Houston FL, 10/25 Brown JS, 10/29 Carver KR.

### **Solitary Sandpiper**

Late north 8/14 Roseau PS, 9/4 Clearwater AB, 10/19 Clay RG, RJ; late south 9/18 Rice TB, 9/19 Hennepin SC, 9/27 Wright AB.

### **Spotted Sandpiper**

Late north 9/20 Clay LCF, 10/1 St. Louis

SC, 10/10 Lake PB and Roseau KB; late south 10/5 Hennepin KB, 10/13 Winona CS, 10/19 Washington DS.

#### **Upland Sandpiper**

All reports: 8/1 Kandiyohi RJ and 9/2 Clay LCF.

#### **Whimbrel**

All reports: 8/29 St. Louis KR, 9/2 St. Louis PS, 9/19–21 St. Louis mob.

PB, 11/7 Cook KE *et al.*

#### **Red Knot**

All reports: 8/21–9/1 St. Louis (3) mob, 8/25 Carver DM, 9/10 Cook TB.

#### **Sanderling**

Late north 10/1 St. Louis SC, 10/4 Cook PB and Roseau (3) PS, 10/10 Roseau KB; late south 10/9 Lac Qui Parle AB, 10/11 Swift RG, 11/8 Martin BBo.



**Whimbrel, 13 September 1992, Park Point, Duluth. Photo by Warren Nelson.**

#### **Hudsonian Godwit**

All reports: 8/9 Wegdahl, Chippewa County (27) SC, 8/17 St. Louis LE, 10/18 Roseau RG, RJ, 10/31 Weaver Bottoms, Wabasha County BF.

#### **Marbled Godwit**

One report: 8/1 Chippewa (2) RJ.

#### **Ruddy Turnstone**

All reports: 8/12 Martin DM, 8/23–29 Carver mob, 8/30 Dakota PB, PS, 9/9 Lake DPV, 9/19–20 St. Louis mob, 10/4 Cook

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#### **Semipalmated Sandpiper**

Late north 9/6 Beltrami AB, 9/21 Cook KMH; late south 9/27 Le Sueur PS, 9/28 Rice OR, 10/10 Lac Qui Parle AB.

#### **Least Sandpiper**

Late north 9/13 Wilkin MO, 9/22 Lake DPV, 10/21 Polk PS; late south 10/6 Le Sueur RG, 10/25 Brown JS, 10/29 Carver KR.

#### **White-rumped Sandpiper**

All reports: 8/1 St. Louis TD, 8/26

Mahnomen PS, 10/10 Roseau KB, 11/8 St. Louis HT.

#### **Baird's Sandpiper**

Late north 9/22 Lake DPV, 10/19 Pennington RJ, 10/21 Polk (3) PS; late south 9/29 Le Sueur and Scott RJ, 10/24 Goodhue AB, 10/29 Carver KR.

#### **Pectoral Sandpiper**

Late north 10/21 Polk PS, 10/31 Lake AH, and 11/1 Clay County LCF; late south 10/31 Brown JS, 11/3 Waseca CS, and 11/6 Winona CS.

#### **Dunlin**

Early north 9/28 Cook KMH; early south 8/21 Renville; late north 10/4 Roseau PS, 10/17 Kittson RJ, 11/3 St. Louis KE; late south 10/9 Lac Qui Parle AB, 10/29 Carver KR, 11/7 Goodhue BL.

#### **Stilt Sandpiper**

Early south 8/1 Chippewa RJ, 8/15 McLeod TT; late north 9/5 Beltrami AB, 9/6 Aitkin DN, 9/19 St. Louis LE; late south 9/5 Hennepin SC, 9/12 Martin RJ, 9/28 Le Sueur OR.

#### **Buff-breasted Sandpiper**

All reports: 8/1–2 Hennepin (22) SC, 8/1 Dakota TT and Kandiyohi (2) RG, RJ, 8/8–9/20 St. Louis mob, 8/15–9/3 Wilkin (11) RJ, MO, 8/18 Traverse CM, 8/22 McLeod RG, RJ, 8/25 Carver DM, 9/20 Washington DS, 10/21 Polk PS.

#### **Short-billed Dowitcher**

Two north reports: 8/30 St. Louis RJ, 9/2 St. Louis PS; late south 8/23 Hennepin SC, 8/23–28 Carver mob.

#### **Long-billed Dowitcher**

Early north 8/14 Roseau PS, 9/3 Wilkin RJ; early south 9/27 Le Sueur FKS and Rice PS; late north 10/18 Kittson, Koochiching and Roseau RG, RJ; late south 10/2 Carver DM, 10/24 Houston (2) RG, FL.

#### **Common Snipe**

Late north 10/18 Kittson RJ, 10/19 Mille Lacs AB, 11/1 Clay LCF; late south 10/31

Meeker AB, 11/10 Winona CS, 11/22 Hennepin KB.

#### **American Woodcock**

Late north 10/12 Pine DN, 10/15 Kanabec CM, 10/15 Cook KMH; late south 10/3 Brown JS, 11/6 Hennepin RG, 11/7 Anoka WL.

#### **Wilson's Phalarope**

Late north 8/31 St. Louis TD, 9/3 Grant RJ, 9/13 Clay LCF; late south 8/23 Brown JB, 8/29 Carver RB.

#### **Red-necked Phalarope**

All reports: 8/14 Roseau PS, 8/18 Otter Tail CM, 8/27 Koochiching PS, 9/3 Grant RJ and Martin DM, 9/13 Wilkin MO, 10/4 Roseau PS.

#### **Parasitic Jaeger**

One report: 9/7 St. Louis MH.

#### **Franklin's Gull**

Late north 9/26 Crow Wing WN, 10/1 Aitkin PS, 10/24 Otter Tail DC; late south 10/4 Anoka SC, 10/23 Brown JS and Chippewa AB, 10/24 Isanti DS and Jackson TL.

#### **Little Gull**

One report: 10/8–10 Lake Cameron, Polk County (1 adult) PS *et al* (*The Loon* 64:232–233).

#### **Bonaparte's Gull**

Late north 11/5 Beltrami DJ, 11/6 Crow Wing DB, 11/19 Aitkin and Mille Lacs KB; late south 11/8 Kandiyohi (25) CJ, 11/27 Ramsey BL, 11/30 Hennepin (2) SC.

#### **Ring-billed Gull**

Reported from 14 north and 20 south counties; a peak of 12,000 roosting birds at Lakes Calhoun/Harriet, Hennepin County KB; late north 11/15 Aitkin WN, 11/19 Becker BK and Hubbard HJF, 11/22 Beltrami DJ.

#### **Herring Gull**

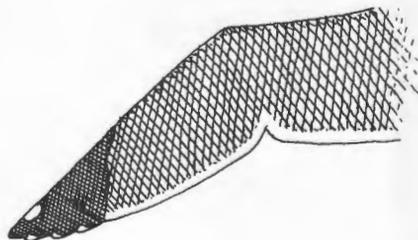
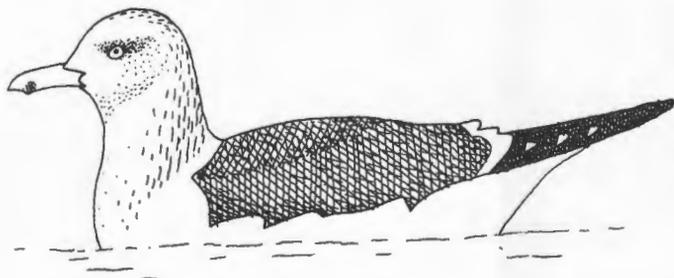
Reported from 9 counties north and 13 counties south.

### Thayer's Gull

Reported from Grand Marais, Cook County 10/16–11/7 (1 adult, 1 first-winter), 11/3 St. Louis (2) KE; reports were up in the south: 10/25 Hastings, Dakota County (first-winter) BF, 11/8 Washington (1 adult) KB, 11/14 Ramsey (1 adult) KB, 11/7–27 (8 reports total) Hennepin KB mob.

### LESSER BLACK-BACKED GULL

One report: 11/21–27 Lake Minnetonka, Hennepin County PB, AH *et al.* (*The Loon* 64:232).



Lesser Black-backed Gull. Drawing by Parker Backstrom.

### Glaucous Gull

North reports 10/31–11/28 Grand Marais, Cook County (peak of four) mob, 11/24 St. Louis KE; south reports 11/25 Medicine Lake, Hennepin County KB, 11/27–28 Lake Waconia, Carver County mob, 11/29 Lake Minnetonka, Hennepin County DM, 11/30 Lake Calhoun, Hennepin County KB.

### GREAT BLACK-BACKED GULL

At least two individuals were present along the North Shore of Lake Superior: 11/7–18 Grand Marais, Cook County (first-winter) BS mob, 11/9 Duluth, St. Louis County (first-winter) KE (*The Loon* 65:50–51).

### SABINE'S GULL

One report: 9/19 Park Point, St. Louis County BM, *et al.* (*The Loon* 65:46–47).

### Caspian Tern

Late north 8/9 Mille Lacs DN, 8/12

Beltrami AB, 9/5 Aitkin WN; early south 8/1 Chippewa RJ and Ramsey DC, 8/2 Cottonwood ED and Dakota TT, 8/13 Carver RB; late south 9/16 Winona CS, 9/19 Ramsey KB 9/26 Goodhue RJ.

### Common Tern

Late north 9/5 Aitkin WN and Clearwater

AB, 9/20 St. Louis mob; late south 8/10 Ramsey KB, 9/21-22 Washington WL, 9/27 Le Sueur PS.

#### **Forster's Tern**

Late north 8/29 Kanabec CM, 9/5 Aitkin WN; late south 8/30 Big Stone RB, 9/26 Goodhue RJ, 10/10 Redwood (3) DN.

#### **LEAST TERN**

One report: 8/22 Spring Lake, Dakota County KB (1 adult, 1 juvenile) (*The Loon* 64:222-223)

#### **Black Tern**

Late north 8/25 Clay LCF, 9/5 Beltrami AB, 9/13 Wilkin (8) MO; late south 8/30 Big Stone RB and Dakota (10) PB, PS, 9/2 Rice TB, 9/12 Cottonwood RJ.

#### **Rock Dove**

Reported from 15 north and 25 south counties.

#### **Mourning Dove**

Reported from 15 counties in the north and 24 in the south; late north 11/22 Clay LCF, 11/27 Mahnomen MO, 11/20 Koochiching GM.

#### **Black-billed Cuckoo**

Late north 8/8 Aitkin WN and Norman MO, 8/30 Clay LCF; late south 9/16 Cottonwood ED, 10/1 Rice TB, 10/2 Olmsted JB.

#### **Yellow-billed Cuckoo**

No north reports; late south 9/7 Brown JS, 9/15 Winona CS, 9/17 Houston EMF.

#### **Eastern Screech-Owl**

Reported from Cottonwood, Hennepin, Lac Qui Parle, Lyon, Olmsted, Ramsey, Sibley, Watonwan and Wilkin counties.

#### **Great Horned Owl**

Reported from 12 north and 23 south counties.

#### **Snowy Owl**

Reported from Aitkin, Becker, Cook, Koochiching, Lake, Lake of the Woods, Mille Lacs, Otter Tail, Polk, Roseau, St.

Louis and Wilkin counties in the north; early north 10/18 Koochiching RG, RJ and Lake PB, 10/24 Roseau PS, 10/29 Becker BBE; one south report: 11/14 Wabasha BF, RB.

#### **Northern Hawk Owl**

All reports: 10/3 Lake of the Woods PS, 10/5 Aitkin DS, 10/10 Cook SOL, 11/22-30 Lake FN *et al.* 11/24-28 St. Louis mob, 11/27-28 Hawk Ridge St. Louis County FN, 11/27-30 Lake (2) mob.

#### **Barred Owl**

Reported from 9 north and 12 south counties.

#### **Great Gray Owl**

All reports: 8/14 Roseau (2) PS, early September Lake *vide* KE, 11/15-27 Aitkin WN, 11/30 Itasca *vide* ME.

#### **Long-eared Owl**

Reported from St. Louis mob and 10/23 Kandiyohi AB.

#### **Short-eared Owl**

All reports: 8/30 Lyon HK, 10/10 Hennepin *vide* PB, 10/24 Otter Tail DM and Wilkin (5) mob, 11/11 Wilkin SDM.

#### **Northern Saw-whet Owl**

Reported from Carver, Itasca and St. Louis counties.

#### **Common Nighthawk**

Late north 9/18 St. Louis DZ, 9/20 Pennington SSt, 10/1 Mille Lacs EL; late south 9/21 Brown JS, 10/1 Hennepin (2) TT and Rice TB, 10/3 Washington DS; major movements reported 8/14 Becker (300) BBe, 8/20 Becker (200) BBe, 9/16 Ramsey (400) DS.

#### **Whip-poor-will**

Late north 8/14 Roseau PS, 9/6 St. Louis KB, 9/11 Cook SOL; late south 8/6 Anoka SC, 9/12 Houston EMF.

#### **Chimney Swift**

Late north 8/18 Beltrami DJ, 8/21 Pennington SSt, 9/17 Clay (3) MO; late

south 9/21 Brown JS, 9/27 Ramsey DJe.

### **Ruby-throated Hummingbird**

Late north 9/16 Becker BK, BBe, 9/18 Pennington SSt, 9/20 Cook KMH and Koochiching GM; late south 9/20 Washington DS, 9/27 Kandiyohi CJ and Mower RRR, lingered at a feeder in Dassel, Meeker County until 11/7 Bill and Michelle Marschall *et al* (*The Loon* 64:183-188).

### **RUFIOUS HUMMINGBIRD**

Two reports! 8/21-23 West Twin Lake, Crow Wing County JS (*The Loon* 65:47-48), 8/23-24 Lake Mazaska, Rice County FKS *et al* (*The Loon* 64:235).

### **Belted Kingfisher**

Late north 10/16 Mille Lacs, 10/25 Aitkin WN, 11/30 Otter Tail SDM.

### **Red-headed Woodpecker**

Reported from Aitkin, Becker, Beltrami, Clay, Clearwater, Kanabec, Mahnomen, Otter Tail, Roseau, St. Louis and Traverse counties in the north; late north 10/4 Aitkin WN and Clay LCF, 11/7 Becker BBe; also reported from 22 south counties.

### **Red-bellied Woodpecker**

Reported from Aitkin, Becker, Clay, Kanabec, Otter Tail, Traverse and Wilkin counties in the north; late north 11/7 Becker BBe, 11/8 Wilkin MO, 11/26 Otter Tail CS/KC; also reported from 26 counties south.

### **Yellow-bellied Sapsucker**

Late north 9/28 Pennington SSt, 10/3 Lake DPV, 10/5 Cook KMH; late south 10/11 Nicollet LF, 10/17 Brown JS, 11/19 Houston EMF.

### **Downy Woodpecker**

Reported from 14 north and 25 south counties.

### **Hairy Woodpecker**

Reported from 15 north and 23 south counties.

### **Three-toed Woodpecker**

All reports: 9/27 Cook *fide* KE, mid-

November Cascade River State Park, Cook County TD, 11/17 Cook KMH.

### **Black-backed Woodpecker**

All reports: 9/22-11/16 St. Louis mob, 9/29 Lake DPV, 9/30-10/31 Cook mob, 10/3 Itasca AB, 10/3-11/1 Beltrami DJ, 10/30 Pine DM, 11/9 Hubbard TS.

### **Northern Flicker**

Reported from 14 north and 24 south counties; late north 10/16 St. Louis TW, 10/22 Cook SOL, 11/15 Aitkin MG.

### **Pileated Woodpecker**

Reported from 22 north and 21 south counties.

### **Olive-sided Woodpecker**

Early south 8/2 Hennepin SC, 8/11 Anoka KB; late north 8/29 Becker MO, 9/1 Beltrami DJ, 9/5 Clearwater AB; late south 9/13 Wabasha AB, 9/17 Hennepin SC, Rice TB and Winona CS.

### **Eastern Wood-Pewee**

Late north 9/6 Aitkin DN and Becker DJ, 9/12 Clay LCF, 9/13 Cook KMH and Otter Tail MO; late south 9/25 Anoka JH, 9/26 Hennepin PS, and 9/28 Wabasha County DWM.

### **Yellow-bellied Flycatcher**

Early south 8/3 Hennepin SC, TT, 8/8 Mower RJ; late north 9/3 Grant RJ, 9/14 Lake DPV; late south 9/1 Carver MB, 9/16 Hennepin SC.

### **Acadian Flycatcher**

All reports: 8/2 Hennepin (one) SC, 8/22 Goodhue (one) KB, until 8/27 Ramsey (three young fledged) KB.

### **Alder Flycatcher**

Late north 8/19 Lake DPV, 9/3 Grant RJ, 9/8 Cook KMH; one south report 8/23 Brown JS.

### **Willow Flycatcher**

All reports: 8/5 Hennepin SC, 8/8 Norman MO, 9/3 Grant RJ, 9/10 Washington WL, 8/5-10/3 Houston EMF.

### **Least Flycatcher**

Late north 9/17 Cook KMH, 9/29 Lake DPV, 10/25 Otter Tail DM, mob; late south 9/17 Houston EMF and Winona CS, 10/10 Hennepin TT; Empidonax sp.? 10/18 Clay LCF.



**Least Flycatcher, 25 October 1992, Otter Tail County. Latest date on record for the state. Photo by Dennis Martin.**

### **Eastern Phoebe**

Late north 10/3 Clay LCF, Lake DPV and Pennington SST, 10/4 Aitkin WN, 10/11 Beltrami DJ; late south 10/16 Nicollet MF, 10/22 Hennepin SC, 10/28 Olmsted AP.

### **Great Crested Flycatcher**

Late north 9/13 Otter Tail MO, 9/14 Lake DPV, 10/16 Duluth *fide* KE; late south 9/16 Hennepin SC, 9/17 Rice TB, 9/21 Ramsey KB and Winona CS.

### **Western Kingbird**

Late north 8/30 Duluth KR, 9/9 Traverse

SDM, 9/13 Clay LCF and Wilkin SDM; late south 8/30 Big Stone RB, 9/12 Lac Qui Parle BL.

### **Eastern Kingbird**

Late north 9/4 St. Louis SS, 9/5 Beltrami AB, 9/6 Becker DJ; late south 9/8 Wabasha DWM, 9/11 Olmsted JB, 9/13 Fillmore TEB.

### **Horned Lark**

Reported from nine north and 18 south counties; late north 10/31 Norman MO, 11/7 Polk SSt, 11/28 Wilkin PS.

### **Purple Martin**

Late north 8/10 Polk AB, 8/16 Morrison RB, 9/17 Clay MO; late south 9/8 Kandiyohi CJ, 9/12 Washington WL, 9/15 Hennepin KR.

### **Tree Swallow**

Late north 9/13 Otter Tail MO, 9/20 Clay LCF, 10/31 Lake AH; late south 10/22 Rice TB, 10/23 Olmsted JB, 11/7 Wabasha KR.

### **Northern Rough-winged Swallow**

Late north 9/6 Becker DJ, 9/13 Otter Tail MO, 9/20 Clay LCF; late south 9/12 Nicollet MF, 9/25 Anoka DS, 9/27 Hennepin TT and Le Sueur PS.

### **Bank Swallow**

Late north 8/24 Pennington SSt, 9/6 Becker DJ and Clay LCF, 9/13 Otter Tail MO; late south 9/12 Watonwan RJ, 9/13 Wabasha AB, 9/14 Olmsted JB.

### **Cliff Swallow**

Late north 8/26 Clay LCF, 9/1 Pennington SSt, 9/6 Aitkin WN and Becker AB, DJ; late south 9/11 Olmsted JB, 9/12 Blue Earth MF, 9/19 Hennepin SC.

### **Barn Swallow**

Late north 9/25 Roseau NJ, 10/4 Wilkin MO, 11/4 Duluth FN; late south 10/5 Nicollet JS, 10/10 Redwood DN, 10/11 Chippewa AB.

### **Gray Jay**

Reported from eight north counties.

**Blue Jay**

Reported from 20 north and 34 south counties.

**Black-billed Magpie**

Reported from Aitkin, Beltrami, Clearwater, Kittson, Koochiching, Lake of the Woods, Marshall, Norman, Pennington, Polk, Red Lake, Roseau, and Wilkin.

**American Crow**

Reported from 20 north and 30 south counties.

**Common Raven**

Reported from 15 north counties; only south reports 9/5–11/29 Anoka JH, KB, 10/21–24 Washington *fide* PB.

**Black-capped Chickadee**

Reported from 19 north and 32 south counties.

**Boreal Chickadee**

Reported from Cook, Roseau and St. Louis counties.

**Tufted Titmouse**

One report: 8/1–11/30 Houston (two to four daily) EMF.

**Red-breasted Nuthatch**

Reported from 13 north and 12 south counties; early south 8/28 Hennepin SC, 9/9 Washington TEB.

**White-breasted Nuthatch**

Reported from 16 north and 30 south counties.

**Brown Creeper**

Reported from 14 north and 19 south counties; late north 11/15 Becker BBe, 11/28 Aitkin WN.

**CAROLINA WREN**

All reports: 9/6 Hennepin TT, SC, 9/19 and 10/31 Houston (two locations) FL, 9/26 Dakota RJ.

**House Wren**

Late north 9/6 Aitkin DN, 9/13 Otter Tail

MO, 9/20 Clay LCF and Pennington SS; late south 10/18 Hennepin TT, 10/23 Olmsted JB, 10/24 Rice TB.

**Winter Wren**

Early south 9/2 Pope RG, 9/14 Ramsey KB; late north 10/10 Aitkin WN, 10/13 Lake DPV, 10/22 Cook KMH; late south 10/16 Brown JS, 10/18 Hennepin SC.

**Sedge Wren**

Late north 9/6 Aitkin WN, 10/3 Duluth KE, 10/10 St. Louis PB; late south 10/16 Ramsey *fide* PB, 10/22 Winona CS, 11/23 Rock ND (*The Loon* 65:93–94).

**Marsh Wren**

Late north 9/19 Clay LCF, 10/3 Lake of the Woods PS, 10/4 Aitkin WN; late south 10/3 Renville RJ, 10/10 Redwood DN, 10/17 Hennepin JF.

**Golden-crowned Kinglet**

Early south 9/23 Hennepin TT, 9/25 Washington WL; late north 11/8 Wilkin MO, 11/28 Roseau KB; late south 11/29 Hennepin SC, 11/30 Brown JS.

**Ruby-crowned Kinglet**

Early south 8/26 Ramsey KB, 9/6 Hennepin RB; late north 10/18 Aitkin WN, 10/25 Otter Tail EL; late south 11/7 Meeker RJ, 11/14 Hennepin SC.

**Blue-gray Gnatcatcher**

Two north reports 8/15 Kanabec CM, 8/21–24 Clay LCF; late south 9/12 Ramsey KB and Houston EMF, 9/19 Brown JS and Winona CS, 9/21 Hennepin TT.

**Eastern Bluebird**

Late north 10/20 Clay LCF, 11/27 Cook KMH, 11/28 Otter Tail MO; late south 11/14 Hennepin TT, 11/18 Houston EMF, 11/29 Brown JS.

**Mountain Bluebird**

All reports: 9/30 Lac Qui Parle (one) SDM, 10/3 Swift (one) RG, RJ, 11/8 Cook BS.

**Townsend's Solitaire**

All reports: 10/2–11/26 St. Louis (total of

five individuals) KE, FN, TW, mob, 10/15 Hennepin *fide* PB, 10/25 Beltrami *fide* DJ, 11/5 Crow Wing *fide* PB, 11/15 Cook KMH.

### Veery

Late north 8/16 St. Louis SS, 8/21 Cook KMH, 9/6 Hubbard DJ; late south 8/11 Scott DZ, 9/1 Brown JS, 10/6 Hennepin AB.

### Gray-cheeked Thrush

All reports: 9/6 Aitkin DN, 9/17 and 10/3 Hennepin SC, JF, 10/3 Duluth EL.

### Swainson's Thrush

Early south 8/26 Hennepin SC, 8/29 Olmsted JB; late north 9/26 Clay DJ, 10/10 Aitkin WN, 10/11 Lake DPV; late south 10/6 Mower RRK, 10/11 Hennepin TT.

### Hermit Thrush

Early south 9/8 Hennepin SC, 9/29 Ramsey KB; late north 10/11 Lake DPV, 10/18 Itasca AB and St. Louis PS, 10/23 Becker BBe; late south 10/23 Brown JS, 11/9 Cottonwood ED.

### Wood Thrush

All reports: 8/9 Cook KMH, 8/11 Dakota KB, 9/2 Stevens RG, RJ, 9/9 Brown JS.

### American Robin

Reported from 15 north and 23 south counties; late north 11/29 Norman MO and Otter Tail SDM, 11/30 Koochiching GM; peak 10/22 Winona (36,000+ in 90 minutes) DWM (*The Loon* 64:233-234).

### Varied Thrush

All reports: 10/18 Duluth LE, 11/4-15 Aitkin MG, WN, 11/8-30 Wilkin MO, SDM, 11/11-13 Beltrami DJ, PS, 11/24 Cook KMH.

### Gray Catbird

Late north 9/29 Lake DPV, 10/3 St. Louis SS, 10/9 Pennington SSt, 11/29 Otter Tail SDM; late south 10/9 Brown JS and Houston EMF, 10/26 Hennepin SC, 10/31 Ramsey RH.

### Northern Mockingbird

All reports: 10/9-11/8 Cook DM *et al*, 11/

4-10 Becker BBe.

### Brown Thrasher

Late north 9/17 Lake DPV, 9/26 Otter Tail MO, 10/6 Becker BBe; late south 10/1 Rice TB, 10/10 Hennepin TT, 10/23 Winona CS.

### American Pipit

Early north 9/19 St. Louis PS, 9/22 Lake DPV; early south 9/18 Dakota KB, 9/27 Le Sueur and Sibley PS; late north 10/18 Aitkin WN, 10/19 Norman RJ; late south 10/21 Murray ND, 11/4 Martin and Watonwan BBo.

### SPRAGUE'S PIPIT

One report: 8/22 Clay (two) PS (*The Loon* 64:231).

### Bohemian Waxwing

Reported from six north counties; early north 10/16 Cook PB, PS, 10/29 St. Louis SS, 11/5 Aitkin WN; one south report 10/25 Hennepin (one or two) *fide* PB.

### Cedar Waxwing

Reported from 13 north and 23 south counties; late north 10/27 Mille Lacs AB, "Nov." Becker BBe, 11/5 Cook KMH.

### Northern Shrike

Early north 10/10 Aitkin WN, 10/11 Beltrami DJ and Polk PS, 10/13 Douglas RG; early south 10/24 Anoka *fide* PB, 10/25 Hennepin SC, 10/29 Olmsted JB.

### Loggerhead Shrike

All reports: 8/1 Dakota (seven) EL, TT, 8/7 Scott DM, 8/13 Fillmore (one) RG, 9/7 McLeod (two) BF, 9/9 Traverse SDM, 10/8 Clay LCF.

### European Starling

Reports from 16 north and 27 south counties.

### Bell's Vireo

One report: 8/10 Winona CS.

### Solitary Vireo

Early south 8/8 Rice TB, 8/29 Anoka JH, 8/30 Hennepin TT; late north 9/25 Lake DPV,

9/27 St. Louis KB, 9/28 Cook KMH; late south 9/27 Stearns AB, 10/6 Winona CS, 10/10 Hennepin SC.

#### **Yellow-throated Vireo**

Late north 9/6 Aitkin WN, 9/7 Itasca TL, 9/12 Clay LCF; late south 9/15 Winona CS, 9/17 Washington PC, 10/2 Houston EMF.

#### **Warbling Vireo**

Late north 9/6 Aitkin WN, 9/7 Itasca TL, 9/12 Clay LCF; late south 9/15 Winona CS, 9/17 Washington PC, 10/2 Houston EMF.

#### **Philadelphia Vireo**

Early south 8/24 Dakota RH, 8/26 Hennepin SC; late north 9/17 Cook KMH, 9/19 Itasca AB, 9/20 Clay LCF and St. Louis KR; late south 9/13 Washington EL, 9/14 Brown JS, 10/9 Hennepin SC.

#### **Red-eyed Vireo**

Late north 9/12 Clay LCF and Koochiching GM, 9/13 Beltrami DJ, 9/19 Duluth RJ and Lake DPV; late south 9/14 Brown JS, 10/2 Houston EMF, 10/9 Hennepin SC.

#### **Blue-winged Warbler**

One north report: 9/3 Wilkin (one) RG, RJ; late south 9/1 Olmsted JB, 9/7 Houston EMF, 9/13 Winona CS. "Brewster's" 8/26 Minneapolis SC.

#### **Golden-winged Warbler**

Late north 8/29 Becker MO, 9/3 Otter Tail SDM and Wilkin RG, 9/5 Clearwater AB; late south 9/7 Olmsted JB, 9/12 Cottonwood RJ, 9/17 Hennepin SC and Rice TB.

#### **Tennessee Warbler**

Early south 8/3 Hennepin SC, TT, 8/14 Winona CS; late north 10/2 Lake DPV, 10/4 Roseau PS, 10/16 Cook PB, PS; late south 10/10 Winona CS, 10/20 Hennepin SC.

#### **Orange-crowned Warbler**

Early north 8/14 Roseau PS, 8/26 Clay LCF; early south 8/22 Anoka RH, 8/27 Houston EMF; late north 10/6 Clay LCF, 10/7 Pennington SSt; late south 10/11 Winona CS, 10/18 Hennepin SC, TT.

#### **Nashville Warbler**

Early south 8/2 Hennepin TT, 8/16 Carver DM; late north 9/30 Roseau NJ, 10/19 Duluth DPV, 11/3 Cook (record late north date) KMH; late south 10/20 Martin BBo, 10/21 Hennepin SC.

#### **Northern Parula**

Early south 8/22 Hennepin SC, 9/2 Stearns and Stevens RJ; late north 9/3 Grant RJ, 9/6 St. Louis SS, 9/16 Cook KMH; late south 9/12 Cottonwood RJ, 9/29 Hennepin DB.

#### **Yellow Warbler**

Late north 9/10 Beltrami DJ, 9/13 Otter Tail MO, 9/19 Lake DPV; late south 9/17 Rice TB, 9/21 Brown JS, 9/29 Hennepin SC.

#### **Chestnut-sided Warbler**

Early south 8/12 Rice TB, 8/16 Hennepin TT; late north 9/14 Lake DPV, 9/19 St. Louis RJ, KR, 9/29 Cook KMH; late south 9/17 Houston EMF and Rice TB, 9/29 Hennepin SC.

#### **Magnolia Warbler**

Early south 8/18 Hennepin SC, 8/19 Ramsey KB; late north 9/27 Cook KMH, 10/3 Roseau PS, 10/4 Aitkin WN; late south 9/26 Goodhue RJ, 10/23 Winona CS.

#### **Cape May Warbler**

Early south 8/25 Rice DB, DC, 8/26 Hennepin SC, TT and Ramsey KB; late north 9/23 Cook KMH, 10/4 Aitkin WN, 10/18 Lake MH; late south 9/13 Hennepin SC, TT, 9/23 Washington TEB.

#### **Black-throated Blue Warbler**

All reports: 8/26-9/6 Hennepin (three to four) DC, SC, TT, 9/12-10/6 Becker (two) BBe, 9/24 Cook KMH, 10/9 Brown JS.

#### **Yellow-rumped Warbler**

Early south 8/27 Winona CS, 9/11 Nicollet MF; late north 11/7 Becker BBe, 11/23 St. Louis *fide* KE, 11/27 Cook KMH; late south 11/7 Wabasha KR, 11/27 Blue Earth AH.

#### **Black-throated Green Warbler**

Early south 8/21 Hennepin SC, 8/26

Ramsey KB; late north 9/17 Lake DPV, 9/19 St. Louis PS, 9/29 Cook KMH; late south 9/13 Houston EMF, 9/29 Hennepin SC and Winona CS.

#### **Blackburnian Warbler**

Early south 8/7 Hennepin TT, 8/13 Rice TB; late north 8/30 St. Louis KR, 9/3 Wilkin RJ, 9/17 Cook KMH; late south 9/21 Hennepin SC, TT, 9/23 Winona CS.

#### **Pine Warbler**

Late north 8/24 Pennington SSt, 8/29 Becker MO, 9/13 Beltrami DJ; late south 8/28 Washington PC, 9/14 Hennepin DB, SC, 9/17 Houston EMF.

#### **Palm Warbler**

Early south 8/26 Hennepin SC, OJ, 9/3 Ramsey KB; late north 10/11 Lake DPV, 10/17 Cook KMH, 11/7 Becker BBe; late south 10/9 Brown JS and Winona CS, 10/10 Dakota TT.

#### **Bay-breasted Warbler**

Early south 8/19 Hennepin DB, SC and Ramsey KB, 8/22 Sibley RJ; late north 9/17 Cook KMH, 9/19 Itasca AB, 9/20 St. Louis PS; late south 9/18 Washington DS, 9/28 Hennepin SC.

#### **Blackpoll Warbler**

Early north 9/10 Beltrami DJ, 9/18 St. Louis DZ; early south 8/18 Brown JS, 8/26 Dakota KB and Hennepin SC; late north 9/26 Lake DPV, 10/3 Lake of the Woods PS; late south 10/6 Winona CS, 10/9 Hennepin SC.

#### **Cerulean Warbler**

All reports: 8/7 Nicollet DM, 8/10 Ramsey KB, 8/24 Brown JS.

#### **Black-and-white Warbler**

Late north 9/23 Cook KMH, 9/27 Koochiching GM; late south 9/29 Washington DS, 10/9 Hennepin SC.

#### **American Redstart**

Late north 10/6 Cook KMH, 10/8 Pine DPV; late south 10/18 Hennepin SC, 10/24 Wright CS.

#### **PAINTED REDSTART**

First state record 9/30 Aitkin MG (*The Loon* 65:49).

#### **Prothonotary Warbler**

Late south 8/27 Winona CS.

#### **Worm-eating Warbler**

One report: 10/10 Washington DS.

#### **Ovenbird**

Late north 9/15 Cook KMH, 9/19 Itasca AB; late south 10/2 Hennepin TT, 10/9 Hennepin *vide* PB.

#### **Northern Waterthrush**

Early south 8/2 Rice TB, 8/3 Hennepin SC, TT; late north 9/6 Koochiching GM, 9/13 Beltrami DJ; late south 9/21 Brown JS, 9/29 Hennepin SC.

#### **Louisiana Waterthrush**

Late south 8/14 Washington County WL.

#### **Connecticut Warbler**

Early south 8/19 Hennepin SC, 8/21 Ramsey RH; late north 9/6 Aitkin DN, 9/29 Lake DPV; late south 9/1 Carver MB, 10/3 Hennepin JF.

#### **Mourning Warbler**

Early south 8/14 Winona CS, 8/20 Hennepin SC; late north 9/14 Cook KMH, 9/15 Lake DPV; late south 9/26 Lac Qui Parle FE, 10/9 Hennepin SC.

#### **Common Yellowthroat**

Late north 10/1 St. Louis SC, 10/2 Lake DPV; late south 11/14 Hennepin SC, 11/27 Hennepin TT.

#### **Wilson's Warbler**

Early north 8/7 Pennington SSt, 8/12 Clay LCF; early south 8/20 Hennepin SC, 8/21 Ramsey RH; late north 9/25 Lake DPV, 10/3 Becker BK; late south 9/13 Hennepin TT, 9/19 Hennepin SC.

#### **Canada Warbler**

Early south 8/6 Hennepin SC, 8/13 Rice County TB; late north 9/12 Cook County KMH, 9/19 Cook PS; late south 9/13

Winona CS, 9/17 Rice TB.

### **Scarlet Tanager**

Late north 9/18 Lake DPV, 10/4 Otter Tail MO; late south 9/26 Chisago KB, Winona CS, 10/3 Hennepin RB.

### **Northern Cardinal**

Reported from Becker, Cook, Kanabec, and St. Louis counties north and 23 counties south.

### **Rose-breasted Grosbeak**

Late north 9/14 Cook KMH, 10/16 Cook PB, PS; late south 10/24 Olmsted JB, 10/26 Hennepin SC.

### **Blue Grosbeak**

All reports: 8/7 Nobles ND, 8/8 Murray ND and Pipestone ND, 8/16 Renville HT, 8/21 Renville KE, 9/9 Rock ND.

### **Indigo Bunting**

Late north 8/14 Mahnommen AB, 9/6 Grant SDM; late south 10/5 Winona CS, 10/7 Houston EMF.

### **Dickcissel**

Late north 8/4 Clay LCF; late south 8/6 Rice OR, 8/20 Carver KB.

### **Rufous-sided Towhee**

Late south 10/11 Winona CS, 10/30 Hennepin SC.

### **American Tree Sparrow**

Early north 9/17 Cook KMH, SOL, 9/18 Aitkin WN; early south 9/29 Kandiyohi CJ, 10/11 Hennepin OJ, TT.

### **Chipping Sparrow**

Late north 10/21 Roseau NJ, 11/4 Koochiching GM; late south 10/25 Olmsted JB, 11/3 Winona CS.

### **Clay-colored Sparrow**

Late north 9/15 Lake DPV, 9/16 Clay LCF; late south 10/8 Rice TB, 10/10 Hennepin OJ.

### **Field Sparrow**

Late north 10/5 Pennington SSt; late south

11/27 Olmsted JB, 11/28 Washington RJ.

### **Vesper Sparrow**

Late north 10/18 Lake of the Woods RJ, 11/25 Wilkin SDM; late south 10/4 Anoka JH, 10/6 Hennepin SC.

### **Lark Sparrow**

Late north 8/1 Becker BBe; late south 8/6 Goodhue BL, 8/16 Renville HT.

### **BLACK-THROATED SPARROW**

Third state record, discovered 11/25 Wilkin (*The Loon* 65:49-50).

### **Savannah Sparrow**

Late north 10/17 Lake PB, 10/18 Lake of the Woods RJ; late south 10/24 Hennepin JF, 11/3 Hennepin SC.

### **Grasshopper Sparrow**

Late north 8/8 Norman MO; late south 8/1 Chippewa RJ, 8/2 Brown JS.

### **LeConte's Sparrow**

Late north 10/17 Cook KMH; late south 10/3 Chippewa RJ, 10/10 LeSueur RG, RJ and Rice RG, RJ.

### **Sharp-tailed Sparrow**

One report: 10/4 Duluth AH.

### **Fox Sparrow**

Early north 9/20 Pennington SSt, 9/22 Clay LCF and Koochiching GM; early south 9/22 Hennepin SC, 9/25 Hennepin OJ; late north 11/14 Aitkin WN, 11/30 Cook SOL; late south 11/11 Hennepin DZ, 11/28 Hennepin SC.

### **Song Sparrow**

Late north 11/8 Becker BBe, 11/14 St. Louis TW.

### **Lincoln's Sparrow**

Early south 8/27 Hennepin SC, 9/1 Hennepin DC; late north 10/10 Cook KMH, 10/17 Cook PS; late south 10/22 Winona CS, 10/28 Olmsted JB.

### **Swamp Sparrow**

Late north 10/19 Duluth DPV, 10/23 Cook

KMH; late south 11/7 Hennepin SC, TT, 11/28 Olmsted JB.

#### **White-throated Sparrow**

Early south 9/4 Hennepin TT, 9/9 Hennepin SC; late north 11/24 Becker BBe, 11/29 Otter Tail SDM; late south 11/29 Hennepin SC, 11/30 Houston EMF.

#### **White-crowned Sparrow**

Early north 9/11 Cook KMH, 9/14 Aitkin WN; early south 9/17 Hennepin KB, 9/22 Hennepin OJ, TT; late north 10/18 Aitkin WN, 10/25 Wilkin DC.

#### **Harris' Sparrow**

Early north 9/19 Aitkin WN, 9/22 Clay LCF; early south 8/20 Carver MB, 9/6 Hennepin HT, 9/20 Hennepin OJ; late north 10/25 Clay LCF and Wilkin DC, 10/30 Pennington SSt; late south 11/7 Lac Qui Parle FE, 11/8 Nicollet LF.

#### **Dark-eyed Junco**

Early south 9/17 Rice TB, 9/22 Hennepin SC, OJ.

#### **Lapland Longspur**

Early north 9/19 Aitkin DS and St. Louis PS; early south 9/27 Le Sueur PS, 10/2 Hennepin OJ; late north 11/7 Polk SSt, 11/8 Aitkin WN.

#### **Smith's Longspur**

Early north 9/29 St. Louis TD, 10/12 Wilkin PS; late north 10/23 Clay *fide* PB, 10/24 Wilkin KE; one report south 10/21 Swift AB.

#### **Chestnut-collared Longspur**

One report: 8/14 Clay LCF.

#### **Snow Bunting**

Early north 10/6 Polk SSt, 10/10 Roseau KB; early south 10/24 Goodhue AB, 11/2 Lac Qui Parle FE.

#### **Bobolink**

Late north 9/19 Clay LCF, 9/20 Wilkin MO; late south 10/1 Carver RG.

#### **Red-winged Blackbird**

Late north 11/27 Cook KMH, 11/30 Cook

SOL.

#### **Eastern Meadowlark**

Late north 10/4 Aitkin WN, 10/11 Beltrami DJ.

#### **Western Meadowlark**

Late north 11/29 Norman MO, 11/30 Otter Tail SDM.

#### **Yellow-headed Blackbird**

Late north 9/13 Otter Tail MO, 10/19 Pennington SSt; late south 9/5 Hennepin SC, 9/12 Cottonwood RJ.

#### **Rusty Blackbird**

Early north 10/17 Aitkin RJ, 10/19 Pennington SSt; early south 10/11 Olmsted JB, 10/24 Goodhue AB; late north 11/9 Cook KMH, 11/29 Otter Tail SDM; late south 11/18 Ramsey KB, 11/22 Hennepin TT.

#### **Brewer's Blackbird**

Late north 11/3 Pennington SSt, 11/8 Otter Tail CS/KC; late south 10/25 McLeod RH, 11/8 Kandiyohi CJ.

#### **Common Grackle**

Late north 11/27 Cook KMH, 11/30 Cook SOL.

#### **Brown-headed Cowbird**

Late north 8/22 Clay MO, 9/2 Lake DPV; late south 11/8 Martin BBo, 11/18 Rice FKS.

#### **Orchard Oriole**

Late north 8/8 Clay LCF; late south 8/7 Brown JS, 8/29 Hennepin OJ.

#### **Northern Oriole**

Late north 9/11 Otter Tail MO, 11/30 Duluth (at feeder) *fide* KE; late south 10/7 Hennepin *fide* PB, 11/9 Winona MC.

#### **Pine Grosbeak**

Early north 10/24 Cook KMH and Koochiching GM.

#### **Purple Finch**

Reported from 13 counties north and 18 counties south.

**House Finch**

Reported from seven counties north and 14 counties south.

**Red Crossbill**

Early north 10/24 Roseau PS, 10/27 Duluth KE.

**White-winged Crossbill**

Early north 10/3 Lake of the Woods PS, 10/10 Roseau KB.

**Common Redpoll**

Early north 10/16 St. Louis PS, 10/23 St. Louis SS.

**Pine Siskin**

Reported from 16 counties north and 11 counties south.

**American Goldfinch**

Reported from 22 counties north and 24 counties south.

**Evening Grosbeak**

Early south 10/21 Washington WL, 11/28 Anoka JH.

**House Sparrow**

Reported from 13 counties north and 21 counties south.

**Contributors**

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RBo	Ray Boehmer	EG	Esther Gesick	SDM	Steve & Diane Millard
TB	Tom Boevers	RG	Ray Glassel	MM	Mark Moore
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TD	Tim Dawson	DJ	Douglas Johnson	DS	Dave Sovereign
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LF	Lawrence Filter	SOL	Sandy & Orvis Lunke	DZ	Dave Zumeta
HJF	Herbert & Jeanette Fisher	DWM	Don & Wynn Mahle	mob	many observers

# Birds of the Sandstone Unit of Rice Lake National Wildlife Refuge, Pine County

JoAnn M. Hanowski and Gerald J. Niemi

## Introduction

The Sandstone Unit of Rice Lake National Wildlife Refuge, located south of Sandstone, Minnesota (Pine County), is approximately 2045 acres of upland and riparian forests (about 70%) and open grassland and brushland (about 30%). The Unit was transferred to the U.S. Fish and Wildlife Service (USFWS) from the Bureau of Prisons, Department of Justice in 1970 and has been relatively unaltered in terms of management since then. The USFWS completed an environmental assessment in developing a management plan for the Unit, but determined that more information was needed on wildlife communities before any plans were implemented.

Quantitative information on birds from this area of Minnesota is limited and no information was available for the Unit itself. The purpose of our project was to identify bird species and their habitat associations within the Unit, with special emphasis on determining the presence and relative abundance of forest and grassland passerines, raptors, and species of concern in the Midwest (Thompson *et al.* 1993) or in Minnesota (Coffin and Pfannmuller 1988). Species within these groups deserve special consideration because many are long distant or neotropical migrants that are declining on a national level (Robbins *et al.* 1989). Species that have shown the greatest declines are those dependent on contiguous forest or large tracts of grassland. Although causes of such declines are complex (Blake *et al.* 1992), forest fragmentation in breeding areas and deforestation in wintering areas are two major factors (Terborgh 1989). Breeding bird population trends in Minnesota over the past 25 years do not reflect national level trends on a species specific basis based on Breeding Bird Surveys

(Janssen 1990). However, these data are based on limited coverage of roadside counts (53 total) completed in the state.

## Study Areas and Methods

The study area is located approximately 5 miles southeast of Sandstone, and a total of 35 points, or sampling stations were established for bird monitoring. Habitat types sampled were open (grass and brush), forested upland (pine and aspen), and forested riparian area along the Kettle River (Figure 1). The number of points placed within each type was proportional to the area of each type; therefore, a total of 11 points were placed in open grassland/brushland, 17 points in aspen, and 7 points in northern hardwoods/pine mix and riparian forests.

Points for bird counts were placed at least 100m from an edge of each habitat type. Points were located 250m apart, and a 100m radius point count was used because this distance is required to ensure that birds from adjacent points are not counted twice (Hanowski and Niemi 1993). Because some open field birds can be seen or heard for a greater distance, additional caution was used in open habitats to prevent counting birds on adjacent points. With this method, an area the size of the Sandstone Unit can be adequately sampled and quantitative information (birds/unit area) can be collected.

Observers counted all birds seen or heard at each point three times for a period of ten minutes/count (Hanowski and Niemi in press), once during spring migration (May), once in early breeding season (June), and one time in late breeding season (July) (Reynolds *et al.* 1980). Counts were completed from one half-hour before and three and one half hours after sunrise (Central Daylight Time). This counting method is effective with singing passerines, but

probably underestimates numbers of wide ranging species or those that have large territories (e.g., raptors).

We calculated the maximum and mean number of individuals detected/point for each species for points where the species was observed (zero values were not included in the mean). A species-by-habitat matrix was generated for three habitat types: open (grassland, lowland brush), aspen, and other forests (northern riparian hardwoods and pine). A rarefaction procedure was used to standardize the number of species observed to a standard unit of area (James and Rathbun 1983). This was done to make relevant comparisons within the Unit of number of species and individuals detected between habitat types that had different numbers of acres censused (see Niemi 1987).

We identified migration strategies (guilds) for each species, including permanent resident, short-distant migrant, and long-distant migrant (Finch 1991), to compare numbers of individuals in each migration guild that occurred in each habitat type. Because the major objective of the study was to provide a species list and habitat associations for birds occurring in the Sandstone Unit, no statistical comparisons were done. The terms higher, lower, more, or less in the results and discussion refer only to empirical observations and to standardized values by area.

### Results

**Bird community parameters.** A total of 76 species and 1226 individuals was recorded at the 35 points during the three census periods. Fifty-seven species and 430 individuals were detected in May, 52 species and 399 individuals in June, and 52 species and 397 individuals in July. Eleven species were recorded exclusively during the migration census (May), four in June (breeding), and ten in July (late-breeding) (Appendix 1). Of 11 species observed only during migration, the Tennessee Warbler was probably the only migrant that did not nest in the area. In contrast, the Ruffed Grouse and Chipping Sparrow are species that nest in May which possibly accounted

for their absence from counts in June and July, when they become less conspicuous.

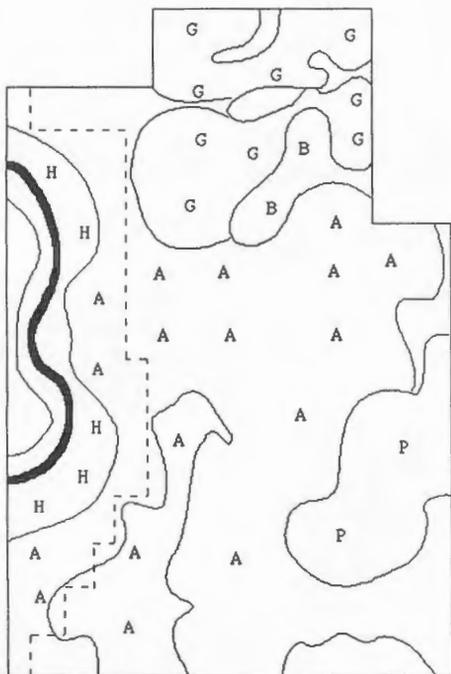
The total number of species observed was highest in aspen (48 species) and lowest in the open habitat type (38 species). We observed 41 species in the northern hardwoods/pine habitat type. The mean number of species observed per point was highest in northern hardwoods/pine (18.1) and lowest in the open habitat (10.6). The total number of species that we would expect to record if the same area of habitat were sampled (based on rarefaction) reflected the pattern that we observed with mean number of species/point. That is, number of species that we would expect to count if 56 acres of all habitat types were sampled was 41 in hardwood/pine, 32 in aspen, and 29 in the open habitat type.

The pattern of total numbers of individuals observed/point reflected the pattern observed for number of species/point. On average, about 25 individuals were observed/point in hardwood/pine forest, about 24 individuals/point in aspen forest, and about 22 individuals/point in open habitat type.

**Migration guilds.** Permanent resident species were most abundant in forested areas of the Unit, but the percent of total individuals within all habitat types was lowest for this group. Short distance migrants accounted for more than half of the individuals observed in open habitats, while long-distant migrants were the most common type in forested habitat types.

**Species and habitat.** Bobolink, Red-winged Blackbird, and Savannah Sparrow were the most abundant species observed in open habitat type (Appendix 1). Several species were observed only in this habitat type (Appendix 1).

Veery, Red-eyed Vireo, Ovenbird, Chestnut-sided Warbler, Common Yellowthroat and Song Sparrow were the most abundant species in hardwood/pine forests (Appendix 1). Seven species were only found in this habitat type (Appendix 1). The most abundant species in aspen forests were the Least Flycatcher, Black-capped Chickadee, Veery, Red-eyed Vireo, Ovenbird and Common Yellowthroat. Sixteen species were observed only in this habitat (Appendix 1).



A = Aspen, B = Brushland, G = Grassland,  
H = Hardwood, P = Pine

**Figure 1. Location of bird point counts within habitat patches in the Sandstone Unit.**

A Sharp-tailed Grouse survey completed by Kent Solberg from the Minnesota Department of Natural Resources recorded three dancing males in 1992 in the very northwest corner of the Unit (down from four in 1991).

### Discussion

**Bird Communities.** The number of species observed in the Sandstone Unit is comparable to numbers counted in similarly-sized areas in northern Wisconsin and northern Michigan.

Patterns of species richness and total numbers of individuals (from rarefaction) within the Sandstone Unit are most likely related to overall heterogeneity and vertical complexity of the habitat. Most species and individuals were observed in hardwood/pine forests, which are the most complex structurally. In contrast, the open habitat type is the least complex had the fewest

number of species per point.

**Migration guilds.** Presence and relative proportion of individuals within migration guilds is related to age, structure, and complexity of the habitat. Permanent residents such as woodpeckers and nuthatches require mature trees for nesting and feeding and it is not unusual that they were essentially absent from the open habitats. In contrast, many sparrows and blackbirds are short distant migrants and also comprise the majority of individuals in the open areas. Long distance or neotropical migrants such as many warblers, vireos, and flycatchers are found primarily in forested habitats. Presence of all migration types (e.g., long distance, short distance, and permanent residents) in the forested areas is due to the more complex habitat structure of forests.

**Species abundance patterns.** Bird habitat associations and relative abundance of birds within the Sandstone Unit were generally consistent with what we have found in other forested areas of northern Minnesota and Wisconsin. We counted birds with point counts in five other forested areas in 1992 including the Chippewa, Superior, and Chequamegon National Forests, Rice Lake National Wildlife Refuge, and an area that included the St. Croix River Valley. The Ovenbird was the most abundant bird in all other forest areas, and was the second most common species in the Sandstone Unit. The Red-eyed Vireo was the most abundant species in the Sandstone Unit and ranked as the second or third most common in the other areas. Other abundant species in Sandstone that were in the top five in other areas included the Veery and Common Yellowthroat (Hanowski and Niemi 1992a; 1992b; 1993).

Relative abundance of birds within open habitats are comparable to data we collected in similar habitats in Wright County in south central Minnesota (Hanowski and Niemi 1992a). Relative abundance of common species, Yellow Warbler, Gray Catbird, and Common Yellowthroat, were quite similar between Sandstone and Wright County. Relative abundance of Red-winged Blackbirds in Sandstone was much lower than what we found in Wright County. Be-

Species	N	Habitat						
		May	June	July	Open n=11	Hard- wood/ pine forest n=7	Aspen n=17	Total n=35
Canada Goose	1	2.0	0.0	0.0	0.2	0.0	0.0	0.1
Wood Duck	1	0.0	0.0	1.0	0.1	0.0	0.0	0.1
Blue-winged Teal	3	0.7	0.7	0.0	0.4	0.0	0.0	0.1
Northern Harrier	1	1.0	0.0	0.0	0.1	0.0	0.0	0.1
Broad-winged Hawk	2	0.0	0.5	0.1	0.0	0.0	0.1	0.1
Red-tailed Hawk	1	0.0	0.0	1.0	0.0	0.1	0.0	0.1
Ruffed Grouse	1	1.0	0.0	0.0	0.0	0.0	0.1	0.1
Virginia Rail	1	1.0	0.0	0.0	0.1	0.0	0.0	0.1
Sora	4	1.3	0.2	0.0	0.5	0.0	0.0	0.1
Black-billed Cuckoo	6	0.3	0.2	0.5	0.2	0.3	0.1	0.2
Yellow-billed Cuckoo	1	1.0	0.0	0.0	0.0	0.1	0.0	0.1
Belted Kingfisher	1	1.0	0.0	0.0	0.1	0.0	0.0	0.1
Yellow-bellied Sapsucker	4	0.2	0.8	0.0	0.0	0.0	0.2	0.1
Downy Woodpecker	9	0.2	0.1	0.8	0.0	0.7	0.3	0.3
Hairy Woodpecker	6	0.2	0.8	0.2	0.0	0.0	0.4	0.2
Northern Flicker	4	0.0	0.0	1.3	0.0	0.0	0.3	0.1
Olive-sided Flycatcher	1	0.0	1.0	0.0	0.0	0.0	0.1	0.1
Eastern Wood-Pewee	20	0.5	0.5	0.5	0.0	0.7	0.9	0.6
Alder Flycatcher	4	0.0	0.8	0.5	0.4	0.0	0.0	0.1
Least Flycatcher	9	2.2	1.7	1.3	0.0	0.0	1.4	0.7
Eastern Phoebe	2	0.5	0.5	0.0	0.1	0.1	0.0	0.1
Great Crested Flycatcher	20	0.6	0.5	0.3	0.0	0.9	0.9	0.6
Eastern Kingbird	1	1.0	1.0	2.0	0.0	0.3	0.0	0.1
Barn Swallow	1	0.0	1.0	0.0	0.0	0.1	0.0	0.1
Blue Jay	11	0.1	0.6	0.4	0.0	0.3	0.5	0.3
Black-capped Chickadee	17	0.2	0.2	1.4	0.1	1.0	1.1	0.8
White-breasted Nuthatch	10	0.1	0.3	0.8	0.0	0.4	0.4	0.3
Brown Creeper	4	0.0	0.0	1.5	0.0	0.0	0.4	0.2
House Wren	1	0.0	1.0	0.0	0.0	0.0	0.1	0.1
Winter Wren	5	0.4	0.6	0.8	0.0	0.3	0.2	0.2
Sedge Wren	7	0.1	0.4	1.4	1.2	0.0	0.0	0.4
Marsh Wren	1	1.0	0.0	1.0	0.1	0.0	0.0	0.1
Eastern Bluebird	1	0.0	0.0	1.0	0.1	0.0	0.0	0.1
Veery	25	1.0	1.4	1.2	0.1	2.0	2.1	1.5
Hermit Thrush	1	0.0	0.0	1.0	0.0	0.0	0.1	0.1
Wood Thrush	1	1.0	0.0	0.0	0.0	0.0	0.1	0.1
American Robin	6	0.5	0.5	0.2	0.1	0.0	0.3	0.2
Gray Catbird	5	0.8	0.2	0.8	0.5	0.3	0.0	0.2
Cedar Waxwing	4	0.0	0.2	1.3	0.0	0.6	0.1	0.2
Solitary Vireo	1	0.0	0.0	1.0	0.0	0.0	0.1	0.1
Yellow-throated Vireo	3	0.0	0.7	1.0	0.0	0.0	0.2	0.1
Red-eyed Vireo	25	1.2	1.8	2.1	0.1	2.3	2.6	1.8
Golden-winged Warbler	11	0.5	0.6	0.0	0.3	0.4	0.4	0.3
Tennessee Warbler	2	1.0	0.0	0.0	0.0	0.0	0.1	0.1
Nashville Warbler	12	1.3	0.4	0.0	0.1	0.6	0.7	0.5
Yellow Warbler	8	1.3	0.1	0.8	0.8	0.9	0.0	0.4

(Continued on page 89)

**Appendix 1. Number of points (N) where individual species were detected, number of individuals detected/point in May, June, and July and mean of individuals detected/point within three habitat groups.**

cause, wetlands censused there were prime breeding habitat for this species.

Brown-headed Cowbird was found in both forested habitat types. Relative abundance of this species in the Sandstone Unit was higher than what we found in the region's National Forests in similar habitat types. For example, an average of 0.2 birds/point were found in Sandstone in comparison with 0.03, 0.07 and 0.13 birds/point in the national forests in 1992 (Hanowski and Niemi 1992b; 1992c; 1993). Higher relative abundance of this species in the Sandstone Unit is probably attributable to the overall agricultural setting of the Unit in Minnesota and the presence of more "edge" habitat.

Northern Harrier was the only State-listed species of special concern (Coffin and Pfanmuller 1988) that was observed in the Unit. This species was only observed in May, and this individual may have been a migrant or using this area as a foraging location.

Of 110 neotropical migrant bird species ranked for management concern, 20 species observed in the Sandstone Unit were considered high priority in the Midwest (Thompson *et al.* 1993). These species (in declining order) were: Golden-winged Warbler, Wood Thrush, Chestnut-sided Warbler, Bobolink, Nashville Warbler, Canada Warbler, Clay-colored Sparrow, Eastern Wood Pewee, Yellow-billed Cuckoo, Veery, Mourning Warbler, Great Crested Flycatcher, Olive-sided Flycatcher, Ovenbird, Blackburnian Warbler, Black-billed Cuckoo, Rose-breasted Grosbeak, Scarlet Tanager, Yellow-throated Vireo and Magnolia Warbler. Of these species, two were observed exclusively in the open habitat type and ten in only the forested areas of the Unit (Appendix 1).

The location of the Unit in Minnesota places it at the southern edge of more contiguous forests to the north and east and more open, urban and agricultural setting to the west and south. The Unit is located on the southern edge of the breeding ranges of several species, including the Hermit Thrush, Nashville Warbler, Chestnut-sided Warbler, Magnolia Warbler, Black-and-white Warbler, Northern Waterthrush,

Mourning Warbler, and Canada Warbler (Janssen 1987). These species require forest habitat for breeding, almost all are long-distant migrants, several are listed by Thompson *et al.* (1993) as being of concern in the Midwest, and many were projected to decline if forest harvesting increases in the State (Jaako Pöyry 1993).

The open grassland-brushland type provides habitat for other neotropical migrant species that have management concerns in the Midwest, and for one resident species, the Sharp-tailed Grouse, that is of special concern there. Many of these species, however, have been projected to increase in numbers if forest harvest levels are increased in the State (Jaako Pöyry 1993).

### Acknowledgments

Funding for this work was provided by the Rice Lake National Wildlife Refuge and the Nongame Division of the Minnesota Department of Natural Resources. We would especially like to thank Cal Harth, Rita Hawrot and Kent Montgomery for completing the bird surveys, and Ann Lima for her assistance with data summaries. Steve Lewis provided helpful comments on an earlier draft. This is contribution number 98 of the Center for Water and the Environment.

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Appendix 1, continued.

Species	N	May	June	July	Mean	Mean	Mean	Mean
Chestnut-sided Warbler	22	0.8	0.5	0.4	0.4	1.4	0.9	0.8
Magnolia Warbler	3	0.0	0.7	0.3	0.1	0.1	0.1	0.1
Yellow-rumped Warbler	2	1.0	0.0	0.0	0.0	0.0	0.1	0.1
Blackburnian Warbler	1	1.0	0.0	0.0	0.0	0.0	0.1	0.1
Black-and-white Warbler	12	0.6	0.3	0.7	0.0	0.7	0.5	0.4
American Redstart	6	0.7	0.5	0.0	0.0	0.3	0.3	0.2
Ovenbird	24	1.8	1.8	1.1	0.2	1.4	2.6	1.6
Northern Waterthrush	1	1.0	1.0	2.0	0.0	0.3	0.0	0.1
Mourning Warbler	9	0.1	0.9	0.3	0.0	0.4	0.5	0.3
Common Yellowthroat	29	0.9	1.1	1.2	1.3	2.0	1.3	1.4
Canada Warbler	6	0.2	0.8	0.3	0.0	0.3	0.3	0.2
Scarlet Tanager	9	0.7	0.2	0.2	0.0	0.6	0.4	0.3
Rose-breasted Grosbeak	10	0.6	0.7	0.0	0.1	0.9	0.2	0.3
Indigo Bunting	1	0.0	0.0	1.0	0.0	0.1	0.0	0.1
Rufous-sided Towhee	2	0.5	0.0	0.5	0.1	0.0	0.1	0.1
Chipping Sparrow	5	1.0	0.0	0.0	0.0	0.3	0.2	0.1
Clay-colored Sparrow	5	0.8	1.0	0.6	0.5	0.0	0.0	0.2
Vesper Sparrow	1	0.0	0.0	1.0	0.1	0.0	0.0	0.1
Savannah Sparrow	10	2.6	0.7	0.6	2.5	0.0	0.0	0.8
Song Sparrow	17	0.6	0.6	1.4	1.0	1.3	0.4	0.8
Swamp Sparrow	8	0.4	0.6	1.0	0.4	0.6	0.1	0.3
White-throated Sparrow	2	0.0	0.0	1.0	0.0	0.1	0.1	0.1
Bobolink	11	4.4	1.9	1.6	4.8	0.0	0.0	1.5
Red-winged Blackbird	13	2.0	2.7	1.6	4.2	0.3	0.1	1.4
Eastern Meadowlark	2	1.5	0.0	1.0	0.4	0.0	0.0	0.1
Common Grackle	2	0.5	0.5	0.0	0.1	0.1	0.0	0.1
Brown-headed Cowbird	16	0.6	0.7	0.1	0.2	0.6	0.8	0.6
Northern Oriole	4	0.5	0.2	0.2	0.0	0.1	0.2	0.1
Purple Finch	1	0.0	1.0	0.0	0.0	0.1	0.0	0.1
American Goldfinch	4	0.5	0.2	0.8	0.5	0.0	0.0	0.2
Unidentified passerine	6	0.3	0.2	1.0	0.0	0.6	0.2	0.2
Unidentified woodpecker	3	0.0	1.0	0.0	0.0	0.1	0.1	0.1
Unidentified warbler	2	1.0	0.0	0.0	0.0	0.0	0.1	0.1

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**CANOE COUNTRY WILDLIFE: A FIELD GUIDE TO THE BOUNDARY WATERS AND QUETICO** by Mark Stensaas, Illustrations by Rick Kollath. Pfeifer-Hamilton Publishers, 240 pages, numerous line drawings, softcover \$14.95.

Although many M.O.U. members may

remember Mark "Sparky" Stensaas as a former hawk counter at Hawk Ridge, he has also put in time as a resident naturalist at Gooseberry Falls and Jay Cooke State Parks, and has worked at the Wilderness Canoe Base and Grand Portage National Monument, all in the Arrowhead Region of

Minnesota. His overall interest in the natural history of the region is evident in this publication. This is not a "traditional" field guide in that there are no detailed identification tips or range maps for the 75 species of mammals, birds, fish, reptiles, amphibians, insects and other invertebrates represented. As stated in his introduction, "Cram it into your trusty Duluth Pack or stash it in your backpack, but wherever you carry it, keep it handy and use it! I hope it will make your North Country trips more enjoyable." It will certainly do that. Introducing you to some of the more common residents of the North Country while shedding new light on their lives, natural history, breeding biology, feeding behavior, historical significance to the region and a score of other interesting facts, **Canoe Country** does an admirable job of making a unique place for itself in the field guide fraternity.

Each species account typically gives an overall view of the identification, status in the Boundary Waters and the ecological role the species plays within its environment. This information is presented in an easy to read manner. Sparky's writing style is an informative narrative that teaches a great deal by captivating your attention and holding it until you say, "I didn't know that!" The species account for Great Blue Heron, a common bird that many experienced birders never take a second look at (their loss), gives much information on the bird without seeming to do so. "Standing next to you, the Great Blue Heron would probably measure somewhere between your belly button and your armpit, but its wingspan is most assuredly larger than yours, at 7 feet. Despite all that surface area, the bird barely tips the scales at 7 pounds. Its light weight and large wings allow the heron to leap into flight and leisurely flap away. But a heron never seems to retract its landing gear as its long legs dangle behind. The scrunched-up neck and trailing legs are easy field marks to identify a flying Great Blue, even at a distance."

The most unique thing about **Canoe Country** is the section in each account entitled "Sparky says." He uses this paragraph to suggest an interesting (and some-

times fantastic) "hands on" activity. Most are directly related to the species account it's contained in, but a few are designed to give some awareness of the life of the subject. Take the Red-backed Vole account: "Sparky says: Get on all fours and crawl ever so slowly through the deep moss of the boreal forest, your face only inches from the ground. Poke your nose into holes. Smell the earth. Take a magnifying glass along and notice the tiny details: moss fronds and spore caps, scattered seeds, lichens and insects. You'll experience the world of a Red-backed Vole." You will certainly learn, remember and have a unique insight and understanding of Red-backed Voles and their habitats. Some of my personal favorites are to be found within the Moose, Sawyer Beetle, smallmouth bass and Osprey accounts and demonstrate the humor of the author. Accompanying each account is one or more drawings by Rick Kollath. Generally well done, they complement the text nicely. The birds seem to give him the most trouble, however, and the illustration of the Common Nighthawk would have been better left out. Each section finishes with a complete checklist of those animals to be found in the Boundary Waters/Quetico. Finishing with a "North Woods Primer" (detailing the geology and natural history of the region) and an introduction to Phenology (to awaken your observation skills and to get you to see what is happening in the natural world all around you) **Canoe Country** is a book meant to awaken your interest and increase your knowledge (and your understanding) of the natural world to be found in canoe country.

As stated earlier, 75 species are covered and birds make up the largest single group (29 species accounts). The "hardcore lister" will probably not enjoy this book as much as an individual interested in the life and habits of birds. This book has much to offer anyone interested in wildlife and the roles they play in the natural world. I heartily recommend this book for anyone who travels in Northeastern Minnesota and has an interest in the natural world. You will find much information that is presented in a new and captivating manner. If you have chil-

dren (many of the activities suggested would be great fun for you to try with them) give the activities a try on your next trip to canoe country. **Kim W. Risen, 5756 Brunswick Ave. N, Crystal, MN 55428.**

**DANGEROUS BIRDS: A NATURALIST'S AVIARY**, by Janet Lembke. Lyons & Buford, 31 West 21 Street, New York, NY 10010, 1992; x plus 179 pages including one appendix, ISBN 1-55821-190-X, hardcover, \$21.95.

This is a dangerous book! It is dangerous to birders at all levels of ability and experience, none of whom may be able to look at birds in quite the same way after reading this marvelous collection of essays. Each of the 15 "chapters" stands alone, so that the book can be slowly savored as the seasons progress, although threads of continuity, provided by person and place, result in much more than an anthology of short stories. If instead you feel compelled to read one essay after another, you are forewarned — this is a dangerous book!

The author acknowledges a series of "consultants" in the introduction, ranging from Aeschylus and Aristotle to a plethora of poets and naturalists. Consultations with ancient poets, modern writers, taxonomists, and "natural historians" from all ages are woven into observations on life that incorporate ethical, philosophical, and at times, mystical threads of reasoning. According to the very brief biographical sketch on the dust jacket, Ms. Lembke is trained as a classical scholar and translator, making her well equipped to maximize the services of these consultants. The book is tightly written and not for casual perusal. Readers will want to keep a variety of reference books and a dictionary handy, in order to fully grasp the author's meaning and to enrich the entire experience by assembling one's own array of "consultants."

Most of the action takes place on Great Neck Point, North Carolina, where the author lives with her partner on the banks of the Lower Neuse River for eight months of the year. Observations at "home" supplemented by frequent trips to the area during the winter months, have produced a repre-

sentative list of over 200 species of birds for the Point, which is contained in the appendix. However, this book is about much more than birds and none of the area's natural history escapes notice. The behavior of local persons, some of whom are truly characters, also is observed, along with the author's own inquiries into Self, such as the ethical dilemma posed by an invitation to join in a feast of robins.

Some of the birds featured in individual essays are less familiar to observers from the Midwest, such as the Red-cockaded Woodpecker. The essays on the most familiar still offer unexpected insight; try "Thirteen Ways of Looking at a Grackle" for example. One essay describes the Marsh Wren giving its "untuned, rinky-tink, toy-piano song" and further elaboration of the function and mechanisms of bird song takes place in "The Musical Shuttle" where a mockingbird is cited as once giving a perfect imitation of a chain saw!

Other essays on cormorants, vultures, flycatchers, and pelicans are no less provocative and emotive. My own favorite is "A Bird in the Hand" which weaves mythology into the nesting ecology of the Belted Kingfisher (*Ceryle alcyon*) with such poetic beauty that the truth (an excavation into a river bank) becomes the new mythology. I'd prefer to think of Alcyone, daughter of the King of the Winds, chattering her sorrow while carrying her mate's body out to sea, there to build a floating nest as the halcyon days of the winter solstice calm the waters. This book is required reading for birders who are missing poetry in their observations, because it is a very dangerous book. **Peder Svingen, 151 Bedford St. SE, Minneapolis, MN 55414.**

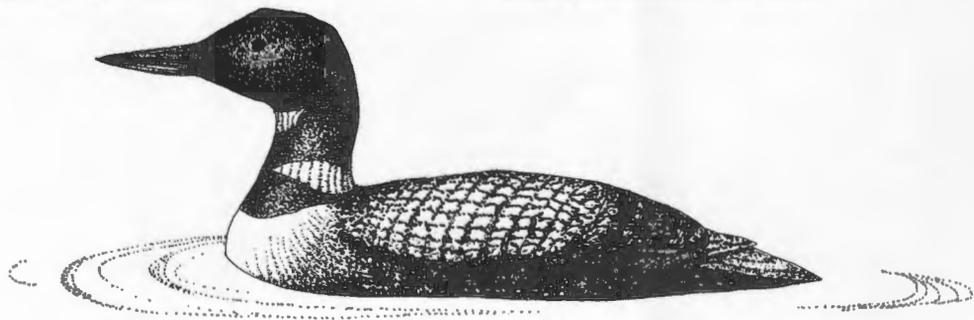
**A TEACHER'S ACTIVITY BOOKLET ABOUT IOWA BIRDS**, by Linda Zalatel, Rick Hollis and Beth Brown, eds. 1992. I.O.U. & Iowa Conservation Education Council, c/o Zalatel, 715 West St., Colo Iowa 50056.

I found this booklet to be a very well organized guide for teachers to use when preparing lessons about birds. The objectives and materials needed for each activity

are clearly stated. The procedures are easy to follow and many of the activities include excellent follow-up activities. Although the activities are designed for upper elementary students, they could be easily adapted for use with my second grade class. I especially liked the "hands-on" approach used throughout the booklet to make the lessons more meaningful and exciting, (i.e., building bird nests, monitoring bird houses.) The background information contained throughout the booklet would be especially valuable to teachers who are not knowledgeable about birds. I feel that the numerous action projects are an outstanding feature which provides the student with an opportunity to "make a difference," (i.e., constructing and utilizing a variety of bird feeders.)

A possible addition to this booklet might include a lesson on the American Goldfinch, which is Iowa's state bird. A follow-up activity could be putting up and maintaining finch feeders to attract goldfinches. Another activity could relate to endangered or threatened birds.

The bibliography contains some valuable resources for teachers. The lists of nature centers and Iowa Audubon Societies is excellent. An extensive list of wildlife rehabilitators is also a unique feature because this could provide teachers with access to excellent speakers, programs, and field trips for their students. Information relating to securing collector's licenses and permits is another outstanding feature. As a teacher, I have found that many educators are unaware of the laws that pertain to collecting nests, eggs, etc. for educational purposes. I would suggest expanding the bibliography to include a more detailed list of the superb videos which are available, (i.e., "Bluebirds Up Close" by Michael Godfrey, Nature Science Network, "Eagles" by Piragis Northwoods Company.) Expanding the list of children's books would enhance the bibliography. I am aware of a number of recent publications geared to the elementary level which are not listed in the bibliography. Jane Werecke, N 5370 Craig Lane, Onalaska, WI 54650.



## NOTES OF INTEREST

**A RECORD LATE SEDGE WREN** — On 23 November 1992, my husband Arnie and I were birding the "dirt" road just east of the gravel pits, north of Luverne, Rock County. We stopped near the bridge where there is a marsh area with water and grasses. The ditches are full of brush, trees, and weeds. There were about two dozen American Tree Sparrows nearby. I made a squeaking sound on the back of my hand and immediately we heard a "chip" and a wren came to investigate, and it wasn't a House Wren! We viewed it for about ten minutes. It stayed mostly in view about nine feet from us, and about two or three feet above ground, going in and out of the bare twigs. The throat was white, the back streaked, the crown with fine streaks, a faint eye line, very



buffy underparts, especially the area under the tail. We thought this to be a late date for the Sedge Wren, checked when we got home, and found this to be true. **Arnie and Nelvina DeKam, Rt. 2, Box 90, Edgerton, MN 56128.**

#### **IMMATURE GREAT BLACK-BACKED GULL AT GRAND MARAIS** — While on a



Minnesota birding weekend 7 November 1992, I stopped in advance of the group at the fish shacks in Grand Marais, Cook County, to scout the gull flocks. My attention was drawn almost immediately to a large gull behaving aggressively toward other gulls close to the western-most fish shack. It was actively chasing other gulls on foot while flapping its wings and I noticed vocalizations which were lower in pitch and raspier than the Herring Gulls. This aggressive behavior took place even though there

was no feeding frenzy on fish entrails at the time. When I viewed the bird through my 7X binoculars, I immediately noted a strong checkered pattern on the feathers of the back (mantle) and scapulars, with much more obvious contrast (black and white) than Herring Gulls nearby. I also noted the significantly larger size (larger to the naked eye than any of the Herring Gulls), the whitish head contrasting against back and flank, and the massive, completely black bill. At this point, I recognized it as a first-year (winter) Great Black-backed Gull, identical in markings to one I had studied extensively with Ken and Molly Hoffman last year at the same location. I also noted a blackish smudge around the eye, which heightened the contrast of the face and sides of the neck. At this point, Kim Eckert arrived. I told him I had found a first-year Great Black-backed Gull. He confirmed my sighting with his binoculars. I had also studied the bird through 40X Kowa TSN-4 scope at a distance of 35-40 feet. I remained to keep track of the bird, while Kim went to alert the group. During this time, I had several opportunities to observe the bird in flight. I noted the larger size, a strongly blackish tail band, which appeared to contrast more with the base of the upper tail than the first-year Herring Gulls, but with irregular whitish feather edgings within the band of the upper surface of the tail. **Bill Stjern, 6490 Glen Road, Woodbury, MN 55125.**

#### **WORM-EATING WARBLER IN WASHINGTON COUNTY** — On the afternoon of 1



October 1992, I decided to relax and bask in the sun on that warm fall day. After 15 minutes, a huge warbler wave inundated the area along Olson Lake in Washington County. After observing over 100 Palm Warblers and 150 Yellow-rumped Warblers, I noticed a brownish-green warbler which needed further investigation. The bird acted very nervous as it foraged around the limbs and trunk of an oak tree. I observed the bird for ten minutes in perfect light at distances as close as 15-25 feet. I saw the

four stripes on its crown. The nape, wings, and back were olive-brown and the entire underparts were buffy. There were no streaks on the breast and the thin bill was all black. My first-ever Worm-eating Warbler. **Dave Sovereign, 6479 Upper 55th, Oakdale, MN 55128.**

#### **ACADIAN FLYCATCHER NEST IN RAMSEY COUNTY** — In July and August of



1992, an Acadian Flycatcher was found near my parents' home in North Oaks, Ramsey County, and subsequently was seen with a dependent trio of fledglings. Although the Acadian Flycatcher was not heard in North Oaks until 21 July, it may have been present in this area earlier, since I was gone for the summer and did not walk in these woods until the date the flycatcher was found. After the initial sighting, this bird continued singing actively on the same territory on 23 and 28 July, and was observed by the local band of county listers. By 10 August, the bird was still very vocal, but

was singing only half of its distinctive “pizza” song, resulting in a single loud, sharp “peet.” This half-song was also heard on 14 August. On 26 August, after assuming the flycatcher was gone, I found an adult feeding three recently fledged, stub-tailed young. This was a surprise to me, since I had never seen more than one bird and had assumed I was observing a lone male. I had previously made several casual searches for a nest, but did not think the possibility was very likely, since I had never observed any nesting behavior from the single singing individual. The adult observed feeding the fledglings continued to occasionally sing its loud “peet” half-song, clearly distinguishing it from the Eastern Wood-Pewees which were also fledging young at this time. The three chicks were lined up on the branch of a fallen oak, and I was able to observe them quite closely. Although able to fly to more distant branches when I approached them, their tails were approximately half-grown, their gapes were still fleshy and prominent, and a lot of down still clung to their plumage, especially on the crown. I searched the surrounding area for the nest, but was unable to locate it, even though the singing male had maintained a very small and consistent territory only 100 meters in diameter in the month that it was observed. The flycatcher family was last seen on 27 August, which ties the second latest date on record for this species. (The latest date is 2 September, *The Loon* 60:81.) I did not revisit this area until 3 September, when no Acadian Flycatchers were seen. The habitat occupied by this Acadian Flycatcher family apparently resembles that previously described for the species by Bruce Fall in Scott County (*The Loon* 59:117–21). The oak canopy is tall and closed, with an open understory and only a moderate and patchy amount of prickly ash and buckthorn. The timing of fledging was a day short of two weeks later than the second nest of a double-brooded female described by Fall in Scott County; using a 14-day fledging period and a 13-day incubation period, I estimate that incubation began on 30 July, the young hatched on 12 August, and the fledging date was seen to be 26 August. The breeding range of the Acadian Flycatcher has expanded north and west since they were first discovered nesting in Houston County in 1967 (*The Loon* 40:4–6). Examination of seasonal reports in *The Loon* revealed that Acadian Flycatchers have now been reported from 21 counties in Minnesota, from as far north as Washington, Chisago, and Hennepin counties, as far west as Wright, McLeod, and Brown counties, and recent observations have been reported from Kandiyohi and even Clay County (*The Loon* 64:164). This is a remarkable expansion, considering that prior to 1974, the species was known from only Houston County (Green and Janssen, 1975), and as recently as 1984, there were records from only seven counties (*The Loon* 56:44). Despite the increase in reports and apparent range expansion, Acadian Flycatchers have not been found nesting north of Scott County since Bruce Fall documented a range expansion into that county in 1986–87 (*The Loon* 59:117–21). The current record in Ramsey County is the farthest north this species has been found nesting in Minnesota. Acadian Flycatchers probably nest in other areas this far north, such as Elm Creek Park Reserve in Hennepin County, where the species has been seen in the summer for the past four years. **Karl Bardon, 1430 – 100th Ave. NW, #212, Coon Rapids, MN 55433.**

**MINNESOTA'S FIRST WINTERING SAVANNAH SPARROW** — We just saw the bird on 18 January 1993 at the feeder located at Keith and Cheryl Radel's residence at 1420 East Division Street, Faribault, MN 55021. What drew our attention to the bird was its lack of a tail, which brought us to look more carefully at this individual. It was feeding with a group of American Tree Sparrows and Pine Siskins. We at first thought the bird was a Song Sparrow because of general size and shape and there was a very conspicuous spot that could be seen on the breast. The yellow line over the eye and the pale stripe down the center of the crown ruled out the Song Sparrow. When the bird fed off the ground on the platform feeder, the pinkish-colored legs and feet



were easily seen. The flanks and breast were heavily streaked. We do not know if the bird had been in the area previous to 18 January. We can only speculate on how the bird lost its tail, but this may have been the reason for its staying in the area. The bird remained at the Radels' feeder until 14 February 1993, the date they left for an extended vacation. **Orwin Rustad, 1134 East Division St., Faribault, MN 55021.**

Editor's Note: I had the opportunity, along with Ray Glassel, to see and confirm the identification of the Savannah Sparrow at the Radels' feeder on 23 January 1993.

**YELLOW-BELLIED SAPSUCKER IN JANUARY** — New Year's Day morning 1993 in Minnetonka was cold (-10° F), calm, bright, and sunny. Looking outside beyond our deck and feeders, I saw one, then another, Pileated Woodpecker. Within minutes, there were Downy, Hairy, and Red-bellied Woodpeckers at our suet feeder, and other common birds were at our feeders. We then saw a starling-size woodpecker inching up a large elm tree. The bird was mottled, brown, black, and white; white wing stripe; white rump; yellow tinge on belly; faint white lines above and below the eye; and faint red spot on the forehead. Alternating between binoculars and field guides, we identified it as an immature Yellow-bellied Sapsucker. The bird was watched by three



**Yellow-bellied Sapsucker, 2 January 1993, Minneapolis. Photo by Richard Brasket.**

observers at distances from three to 60 feet between 9:30 A.M. and 4:00 P.M. It drank at a heated birdbath, and fed at a suet feeder, a peanut feeder, a birdseed feeder, under the feeder on the ground (once), and was seen clinging to trees. Several times, it clung to a

tree motionless for up to 20 minutes; it appeared to be sleeping, but occasionally it preened its breast feathers. It was far less active than the Downy or Hairy Woodpeckers. It was lethargic to the extent that I thought it might die, fall to the ground, and go to the Bell Museum. The bird was still present on 4 January when this was written, and was somewhat more active. Five woodpecker species on one day — in one yard in January — seems noteworthy; it was an encouraging sign for good at-home birding in 1993. **Richard G. Brasket, 5708 Glen Avenue, Minnetonka, MN 55345.**

#### ICELAND GULL AT LAKE CITY —



On 4 December 1992, thousands of Herring and Ring-billed Gulls and Common Mergansers were present on Lake Pepin in Wabasha and Goodhue counties. Large groups of mostly Herring Gulls could be seen parasitizing the large rafts of Common Mergansers present by hovering over the feeding mergansers and either stealing or forcing them to drop their catch. One feeding flock of about 10,000 Common Mergansers seen from the point at Lake City had about 500 attendant Herring Gulls, an immature Glaucous Gull, and an adult

“Kumlien’s” Iceland Gull. This latter bird was observed for approximately half an hour as it joined the Herring Gulls in parasitizing the mergansers. Although the gulls were several hundred meters out from shore and eye color was not visible even with 40X, the color of their wingtips was clearly discernible under skies that were clearing after a morning of snow flurries. I spotted the Iceland Gull in flight by the much reduced, light gray pattern on the primaries, making it appear much more “white-winged” than the other gulls present. Although the exact amount of gray on the dorsal surface of each primary could not be determined, when the gull was in flight, the pattern appeared to encompass a large portion of the two outer primaries (numbers 10 and 9), and progressively smaller amounts on the next two inward (numbers 8 and 7). These subterminal markings did not appear to extend to primaries 6 and 5, although small gray spots may have been present on these inner primaries, but not visible, considering the distance involved. The resulting pattern (shown in the accompanying sketch) was confined more to the leading edge of the wing than on a typical Thayer’s or Herring Gull, which have a series of black markings extending across the entire wingtip. The terminal portion of the first several primaries on the Iceland Gull appeared to be entirely white. Although most illustrations of Iceland Gull wing patterns in flight show the gray markings on the outer webs of each primary separated from the next by the white inner webs, the pattern on this gull appeared more as a solid gray wedge, perhaps because the wing was never spread enough to display the white inner webs on the outer primaries. When perched on the water, the color of the Iceland Gull’s wingtips was a shade darker than its mantle, but considerably lighter than the black wingtips of the adjacent Herring Gulls, with a large amount of white visible in the folded wing, especially nearest the tip of the longest one or two primaries. The mantle was a light gray, similar to or slightly paler than the adjacent Herring Gulls; overall, the Iceland Gull looked much lighter due to the absence of black in the wingtips. The wingtips appeared very long in proportion to the body, with the tips of the primaries extending upward at an angle from the back, more similar to a Ring-billed Gull (which has much longer primaries in proportion to the tail than a Herring Gull). When alighting on the water, the Iceland Gull often briefly held its wings over its back, allowing the underside of the wing to be seen clearly. No black was visible at the tip of the primaries on the undersurface, as on an adult Thayer’s Gull, and the gray pattern described on the dorsal surface of this Iceland Gull showed through to the ventral surface only as a very light gray color on the subterminal portions of the outermost three to four primaries. The head and bill proportions were similar to that of a Thayer’s Gull; i.e., with a smaller bill and rounder head than an average Herring Gull. The more delicate head and neck of the Iceland Gull were especially pronounced when it sat on the water with its head held high

over its back. After viewing the Iceland Gull, I also saw a possible adult Thayer's Gull, which had grayish-black primaries appearing slightly paler than the black primaries of the adjacent Herring and Ring-billed Gulls. At least three other Thayer's Gulls were also present on Lake Pepin on 4 December, including two immatures seen by Ray Glassel on the ice at the marina in Lake City, and another adult seen at this same location earlier in the morning. Since the Goodhue/Wabasha County line occurs at Lake City, where these



**Iceland Gull. Drawing by Karl Bardon.**

gulls were observed, I judged that the Iceland Gull was seen in both Wabasha and Goodhue counties; the Glaucous Gull in Goodhue County alone; the Thayer's Gulls in Wabasha County; and the possible pale adult Thayer's in Goodhue County. Estimates of 53,000 Common Mergansers and 5,000 gulls were obtained at dusk when the flocks of birds convened into rafts closer to shore to roost. This estimate of gulls includes both Herring and Ring-billed Gulls, but the proportion of either species in this total is unknown. Considering this large "freeze-up" gathering of gulls and mergansers, it is not entirely surprising that all three species of white-winged gulls which presently occur in Minnesota (Glaucous, Thayer's, and Iceland) were found among them. On a return visit three days later, Lake Pepin was entirely frozen. **Karl Bardon, 1430 - 100th Ave. NW, #212, Coon Rapids, MN 55433.**

**A DECEMBER WINTER WREN IN OTTER TAIL COUNTY** — On 19 December 1992, a Winter Wren was found by Tom Smith and Loren Woolson of Fergus Falls while they were participating in the local Christmas Bird Count. I heard of the sighting about mid-afternoon and immediately drove out to look for the bird, but was unsuccessful. The next morning, Diane and I tried to locate the wren, but again came up empty-handed. We did see a male Varied Thrush at a nearby yard, however. This "count week" bird was also found by Tom Smith. Shortly after 1:00 P.M., I returned and finally located the wren. It was frequenting an area of the Otter Tail River immediately below a dam, where the flow rate is low but steady enough to keep open water for several hundred feet. Augmenting this flowage are numerous small springs on the east side of the river bank. The area has many trees, bushes, and cattails for an active



species like the Winter Wren to forage under and roost in. With its eye-stripe, barred belly, and extremely short tail, this bird was easily identified. Though certainly over-used, the words “tiny” and “mouse-like” are apt and descriptive. This is a very small bird. It was quite secretive and spent most of its time hidden beneath tangles of vegetation and also under jumbled rocks and concrete at the base of the dam. When it flew out, it only stayed exposed for a few seconds, then would flit beneath another rock or bush. Each disappearance lasted several minutes. When exposed, it would sometimes vocalize with a single or double-note call, “pip-pip,” similar to that of a Song Sparrow. At mid-day on 23 December, I had the good fortune to observe the Winter Wren feeding in the stream bed where one of the springs flowed in. It hopped around on the rocks and periodically picked something from the water. In this feeding mode, its behavior reminded me of a dipper. I collected some specimens of the food it was eating, which turned out to be caddis fly larvae. Despite below-zero temperatures, they were alive and swimming actively. Later that same afternoon, my wife Diane and Gerry Winkelman returned with me to see the wren. After a brief look, it disappeared for 40 minutes beneath some cattails. We had another quick look, then it went under some rocks at the base of the dam. I could not locate the bird on subsequent visits to the area. This species is very rare in northern Minnesota in winter. Steve Millard, 630 W. Laurel, Fergus Falls, MN 56537.

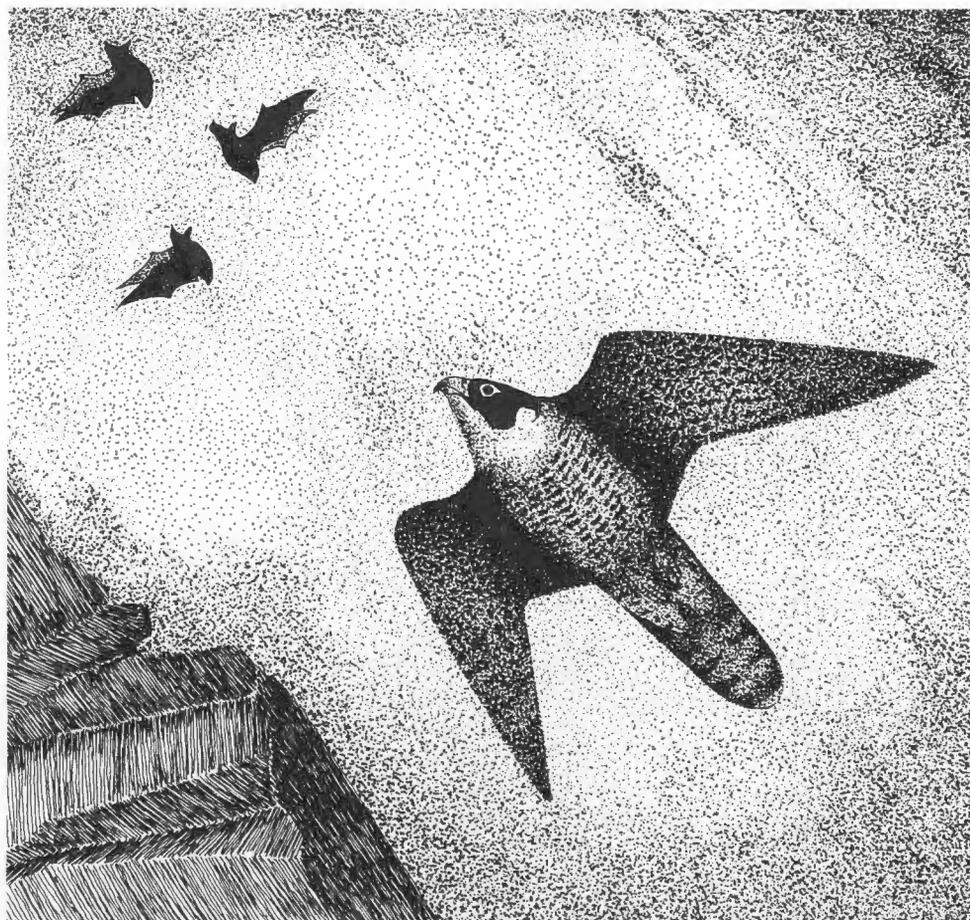
**RED-SHAFTED FLICKER OBSERVATION** — An unusual sighting occurred in St. Anna, Stearns County, which is approximately 15 miles northwest of St. Cloud. A male Red-shafted Flicker was a visitor in my yard between 18 December 1992 and 3 January 1993. This is unique because Red-shafted Flickers are rarely seen in the winter time, especially out of their range, which is west of Minnesota. In addition, this did not appear to be a hybrid, but a true Red-shafted Flicker, with salmon-red wings, tail linings, and a red mustache (although it could have been, and probably was, a hybrid.) My five acre yard is a mixture of hardwood/softwood/conifer trees and aban-



**Northern (Red-shafted) Flicker, 3 January 1993, St. Anna, Stearns County. Photo by Craig L. Simon.**

doned cornfields, surrounded by drainage ditches. The flicker was observed in the mixed tree area on the south side of the house, between 20 and 75 feet away, eating suet or a birdseed mixture. I observed the flicker during various times of the day and under a variety of weather conditions. **Craig Simon, 17975 St. Anna Drive, Avon, MN 56310.**

**PEREGRINE FALCON BEHAVIOR** — I first sighted the male Peregrine Falcon (of the Greysolon Building pair) atop the old Central High School clock tower in Duluth's downtown area, consuming prey. This was on 14 April 1992 at approximately 5:18 P.M. The bird was on the south side of the building's uppermost ledge. The prey appeared grayish, suggesting maybe a House Sparrow. The falcon pulled at it, ripping off feathers and small hunks of meat. On two occasions, he actually picked the prey up off the ledge and I was able to see it. He soon flew out, away from the building, with the prey in his talons. He stalled in the air in front of the clock tower on the Second Street



**Peregrine Falcon, North Shore of Lake Superior. Drawing by Dudley Edmondson.**

side. He then flew into the wind to the back side of the northwest corner of the Greysolon Plaza Hotel building. This building is also located in downtown Duluth, a few blocks northeast of Central High School. He landed there and appeared to continue to eat his prey. I drove over and parked in a lot off of Third Avenue east. When I arrived, I discovered a male American Kestrel in the company of the Peregrine. The kestrel called once and the falcon opened its wings and kited from the ledge, where it had been sitting next to the kestrel. He hovered for a second or two and allowed the strong northeast wind to pull him up and back, to land on the roof ledge above the kestrel. The Peregrine sat there for awhile and watched as the kestrel ate from the Peregrine's kill. He then kited again off the building and made a few circles around and over the roof of the building, eventually flying to a perch on the very top of the building's southwest corner. While he sat, the kestrel again began to eat. The Peregrine paid no further attention to the kestrel and just watched passing gulls and starlings, while occasionally preening. Some time later (roughly 40 minutes or so), five gulls began to dive-bomb the kestrel, still on the building's northwest corner. They either wanted to rob him of his food or simply to harass him. The Peregrine took to the air and immediately flew through the mobbing gulls like a bowling ball through bowling pins. The gulls left the area immediately and the Peregrine circled the building, picking up the northeast wind, kiting and swooping in silence. He finally went back to his perch on the building's southwest corner, opposite the kestrel. My purpose for having witnessed this was to try and read the Peregrine's black band, located on his right leg. I was unsuccessful during this observation, but who cares! I have never seen or heard of such behavior! **Dudley Edmondson, P.O. Box 3161, Duluth, MN 55803.**

**NORTHERN MOCKINGBIRD IN SCOTT COUNTY** — On 28 February 1993, while looking for shrikes along Scott County Road 57 near the entrance to the fairgrounds, Jerry Gresser and I found a Northern Mockingbird. The slim body, long tail, straight bill, lack of a black mask and general behavior distinguished the bird from a shrike. It was feeding on the ground along the edge of the road and cocked its tail at times. It also sat on the fence wires and went into the cedar trees to feed on the berries. This bird was seen by many observers over the next two months. I saw it last (at this writing) on 1 May 1993. Also seen at the site were a Townsend's Solitaire, Red Crossbills, flocks of Cedar Waxwings, and in May, Lark Sparrow and Loggerhead Shrike. It will be interesting to see if this mockingbird stays all summer. **Karol Gresser, 13508 Grand Ave. S., Burnsville, MN 55337.**



**EARLY DATE FOR VIRGINIA RAIL** — On 3 April, 1993, about 6:30 P.M. we saw a Virginia Rail at the edge of Black Dog Lake, Dakota County. We were just leaving the observation platform on the north side of the lake when the rail was seen to our right in the flooded edges. Field marks observed: gray cheek, long bright ruby-red bill with dark tip, stripes on flanks, rusty neck and breast. It was active and feeding and flew over to a small peninsula where the coots were and walked into the vegetation, then flew back to the original clump. After walking around there a while, it again flew to the coot area and was there when we left. Light conditions were good with the sun at our backs. We used 10x42 Leitz binoculars and a Kowa TSN-2 scope with a 30X eye piece. The only birds in the area for comparison were Red-winged Blackbirds and American Coot. This bird was larger than the blackbirds and smaller than the coots. We checked very carefully to see the color of the cheek, keeping in mind last year's King Rail near this area. **Karol Gresser, 13508 Grand Ave. S., Burnsville, MN 55337.**

Editor's Note: This date represents the earliest spring migration date for the Virginia Rail in Minnesota.

**COMMON MOORHEN IN LAKE OF THE WOODS COUNTY** — On 26 June 1992,



I was performing point count bird surveys at Zippel Bay State Park in Lake of the Woods County as a field ornithologist for the DNR's 1992 State Parks Bird Survey. At 10:05 A.M., I approached a secluded marshy area surrounding a pond. Aspen cover along the way prevented me from seeing into the marsh until I was right next to it. Unfortunately, two birds in the reeds saw me before I saw them, and flushed, without vocalizing, from four to five meters away. I observed them as they flew. I noted that both birds were drab gray-colored, with dull brownish backs. My eyes were immediately drawn to a red bill, which continued on each bird as a broad plate-like band up to the forehead, between the eyes. Based on this, I instantly identified the birds as Common Moorhens. I did not have very long to observe the birds before they were out of view, but I clearly saw the red frontal shield on each, and believe it a pretty unmistakable ID. After the birds were gone, I searched the reeds where they had been for a possible nest or chicks, but found none. I remember thinking at the time that I was north of the usual range for Common Moorhens, but I did not realize just how unusual this sighting was until I spoke with bird-watching colleagues of mine several days later. The only similar species I can think of is the American Coot, but coots have a white bill, and no red frontal plate. Wood Ducks have red on their bills, but it does not extend to the forehead in a broad plate. Furthermore, the birds I saw did not have the light belly, crest, white facial markings, or coloration of Wood Ducks. I have seen Common Moorhens on numerous occasions in Wisconsin, my home state, and on a trip to the Florida Everglades. Two weeks previously, I had also visited this site, and saw no moorhens at that time. **Pam Page.**

**NORTHERN HAWK OWL BREEDING BEHAVIOR OBSERVED** — On 13 March



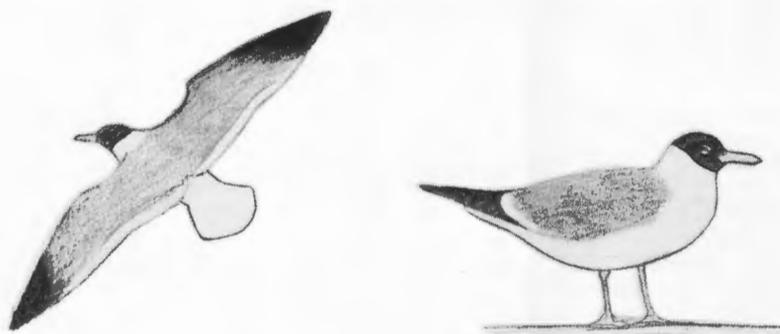
1993, we were birding in Lake County along Highway 1, heading towards Ely. The day was clear and sunny with very little wind. Although the temperature wasn't high, it felt warm in the sunshine. Driving along, it was about mid-morning when we spotted a Northern Hawk Owl perched at the top of a spruce tree not far off the left side of the road. We quickly pulled over and stopped and got out for a better look. We were right by mile marker 299. The owl was apparently sleeping, its head turned to one side and motionless. We stood there observing for just a few moments, when we heard this incredible raucous screeching coming from a short distance away, on the same side of the road as the owl. Practically indescribable, but obviously birdlike, these calls were completely unknown to us. Whatever the source, this hawk owl showed no interest. The calls continued and were very loud, even from the distance we were hearing them. Then it seemed they were getting even louder, as if the source was approaching rapidly. Looking in that direction (approximately 50 feet to the right) another Northern Hawk Owl suddenly flew up from behind the tallest spruce, perching at the top, facing us. Still screeching and cackling, it was fluttering its wings and seemed very excited. Just as suddenly, a third hawk owl (also screeching) flew out from behind the tall spruce, around in front of it and up, and landed on the second owl's back. We then witnessed a brief and very noisy copulation. As quickly as it began, it was over. The visibly smaller male turned and flew back and down the rise towards a frozen bog beyond. The distinctly larger female hesitated momentarily, then flew back after her mate still screeching and calling. The entire sequence of events lasted only a couple of minutes. We were about forty feet away from the activity. As we were recovering from the unexpected surprise, we looked at the first hawk owl. It was as stoic as when we first saw it — still at its perch, head tucked and motionless. The nearby mating activity didn't seem to have aroused any interest from this bird. Perhaps more curious is that the mating pair ignored it, even though they were more than likely within a breeding territory. A couple of days after returning home, we reported

our experience to Parker Backstrom. Although we were excited about the experience, we hadn't realized how lucky we were to have witnessed calling and mating. Backstrom notified Steve Wilson of the DNR, who conducts nesting owl research in that area, to report the possibility of nesting Northern Hawk Owls. The pair was relocated, but to our knowledge the nest site hasn't been discovered. We met Wilson about a month later, and discussed the events further. Some of his comments were also interesting. The size difference noted above was particularly distinctive with this pair. Apparently this isn't always immediately discernible with a sight observation. We did not attempt to determine the sex of the first hawk owl. Lastly, Wilson also pointed out that not only were we extremely lucky to see mating behavior, but to see three Northern Hawk Owls in such close proximity is highly unusual. **Drew and Becky Smith, 3606 Widgeon Way, Eagan, MN 55123.**

**LAUGHING GULL IN HOUSTON COUNTY** — On the morning of 22 April 1993, I



located an adult Laughing Gull feeding with Bonaparte's and Ring-billed Gulls in a flooded agricultural field along the Root River between the towns of Hokah and Houston in Houston County. While scanning the gulls with a 40X scope from Highway 16, I noticed one hooded gull that had a much darker mantle than either the Bonaparte's or the Ring-billed Gulls, similar to a Franklin's Gull (which would be unusual in Houston County at this time of year.) This gull, however, was seen in flight numerous times as it was chased by Ring-billed Gulls, and it clearly lacked any white markings in the outer wing. It had extensive black primaries that blended into the dark gray mantle without any white markings separating the outer primary tips from the inner primaries and coverts as on an adult Franklin's Gull. There was also extensive black on the underside of the wing on the primaries that graded into white on the secondaries and coverts. A broad white trailing edge on the upper wing extended out into the inner primaries, but not into the outer primaries. When the bird was perched, there were no white primary tips visible on the folded wing. The hood was complete and covered about the top third of the head. This gull had white eye crescents, but they were thin and did not join behind the eye. The deep maroon-red bill was almost as long as the head, nearly as large as that of a Ring-billed Gull, and clearly much larger than the Bonaparte's Gull's. The legs



**Laughing Gull, 22 April 1993, Houston County. Drawing by Karl Bardon.**

were darkish, but with a hint of deep red similar to the bill. The gape was red. The body and tail were entirely white with no rosy bloom on the breast. I watched the bird for about half an hour, during which time it stayed in the same field with the other gulls. The Laughing Gull could not be relocated by myself or other birders later on the same day or on subsequent days. **Karl Bardon, 1430 10th Ave NW #212, Coon Rapids, MN 55433.**

PURPOSE OF THE MOU

The Minnesota Ornithologists' Union is an organization of both professionals and amateurs interested in birds. We foster the study of birds; we aim to create and increase public interest in birds; and to promote the preservation of birdlife and its natural habitat. We carry out these aims: through the publishing of a magazine, *The Loon*; sponsoring and encouraging the preservation of natural areas; conducting field



trips; and holding seminars where research reports, unusual observations and conservation discussions are presented. We are supported by dues from individual members and affiliated clubs and by special gifts. The MOU officers wish to point out to those interested in bird conservation that any or all phases of the MOU program could be expanded significantly with gifts, memorials or bequests willed to the organization.

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SUGGESTIONS TO AUTHORS

The editors of *The Loon* invite you to submit articles, shorter "Notes of Interest" and color or black & white photos. Photos should be preferably 5x7 in size. Manuscripts should be typewritten, double-spaced and on one side of sheet with generous margins. Notes of Interest should be generally less than two typewritten pages double-spaced. Whenever possible, please include a copy of your manuscript on a 3 1/2 inch MS/DOS or Macintosh disk saved in text (ASCII) file format. If reprints are desired, the author should so specify indicating the number required. A price quotation on reprints will be sent upon receipt of information.

Club information and other announcements of general interest should be sent to the Newsletter editors. See inside front cover. Bird-sighting reports for "The Season" should be sent promptly at the end of February, May, July and November to Peder Svingen. See inside front cover.

# *The Loon*

FALL 1993

VOLUME 65 – NUMBER 3



**The Loon**, Minnesota's magazine of birds, is published four times each year by the **Minnesota Ornithologists' Union**, the statewide bird club. Permanent address: J. F. Bell Museum of Natural History, 10 Church Street SE, University of Minnesota, Minneapolis, Minnesota 55455-0104. Anyone interested in birds may join. Any organization with similar aims may affiliate. All members receive our two publications: **The Loon** and the **MOU**piece.

**MEMBERSHIPS AND SUBSCRIPTIONS:** Jerry Bonkoski, 9022 Southridge St. SW, Byron, MN 55920. To join the MOU and receive both our publications, donate \$20.00 for a regular yearly membership. Other classes of membership that you may choose are: Youth (through age 17) \$15.00 yearly; Family \$30.00 yearly; Supporting \$50.00 yearly; Life \$400.00. Canadian and Foreign Subscriptions, \$25.00 yearly. All memberships are on a calendar year basis. Also available: back issues of **The Loon** (\$3.00 each ppd.) and MOU checklists of Minnesota birds (minimum lots of 20 for \$5.00 postage paid). Gifts, bequests and contributions to the MOU Endowment Fund should be sent to the Treasurer.

**EDITOR OF The Loon:** Robert B. Janssen, 10521 S Cedar Lake Road, #212, Minnetonka, MN 55305 (612-546-4220). The Editor invites articles, short notes and illustrations about Minnesota birds. See back cover for details.

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"The Season" section of **The Loon** publishes reports of bird sightings throughout Minnesota. We particularly invite reports from parts of the state that have been neglected or covered lightly in past reports. To become a contributor to "The Season," request the report form from the Editor of "The Season," Peder Svingen, 2602 East 4th St, Duluth, MN 55812-1533.

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# Peregrine Paternity Case

H. B. Tordoff, S. M. Moen, P. T. Redig,  
J. L. Longmire and D. Foster

Meg is the reigning peregrine of downtown St. Paul, but she doesn't have much luck with the opposite sex. Cohan, who was released with Meg in Minneapolis and was the father of her first young in 1988, departed in the fall of 1988 and never came back. Radar, an older male hacked at Weaver Dunes in 1983, moved into Meg's penthouse in spring 1989; he helped her raise their four young until he was killed by an airplane on nearby Holman Field in early July. Within eight hours of Radar's death, Beaner (another male hacked with Meg) moved in and drove her fledged young out of town. After he established his presence, Beaner left town to winter in warmer climes, only to return in spring 1990 to find yet another male courting Meg.

The details of what went on in the early spring of 1990 are sketchy. There were fights in public. Neighbors and relatives were involved. There were babies of unknown paternity.

Though Meg sounds like a soap opera star, she is an important part of the effort to re-establish peregrines in the Midwest. She was hacked from the Multifoods Tower in Minneapolis in 1986 along with 15 other falcons, two of which (Cohan and Beaner) eventually became her mates. She moved to the North Central Life (NCL) Tower in downtown St. Paul in 1987 and has nested there since 1988, fledging 15 offspring through 1992.

We keep detailed records and observations of the individual peregrines in the new Midwestern population. These records help to evaluate management efforts, and monitor the population's fate over the years. All released birds and almost all of the wild young are banded with field-readable bands so that we can see who survives, where they settle down, and who is mated to whom each year. Since 1990, blood samples have been taken from released birds and, where possible, wild produced young and their parents. We use the blood samples to assess the genetic diversity

of the new population through DNA fingerprinting and RFLP (short for "restriction fragment length polymorphisms," although nobody asked) analysis. Fortunately, field observations and the availability of blood samples from all of the principal players in the drama have allowed us to identify the genetic father of the 1990 North Central Life chicks.

DNA fingerprinting and RFLP analysis have become standard techniques for studying questions of paternity and maternity. Species ranging from whales (Amos et al. 1991) to shrews (Tegelstrom et al. 1991) have been successfully studied using these genetic methods. Recently, through DNA fingerprinting, researchers identified the sires of Whooping Crane (*Grus americana*) chicks produced by artificial insemination with pooled semen (Longmire et al. 1992). Such information is valuable for the genetic management of small populations.

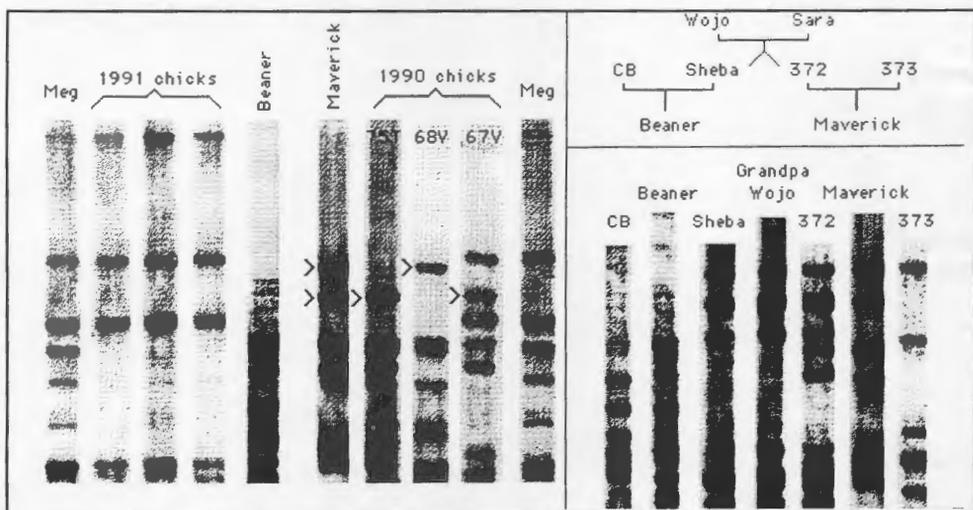
Fingerprinting and RFLP analyses target different areas of chromosomes and different types of polymorphisms (Longmire et al. 1988 and 1991), thereby giving two mostly independent estimates of genetic variability within a population. Methods and probes that were developed at the Los Alamos National Laboratory are being used in studies of adult turnover and genetic diversity in peregrines in Greenland (Lisa Clepper, pers. comm.), subspecies identification during migration (Longmire et al. 1991), and genetic diversity of the Midwestern peregrines (our work).

Our story began to unfold when field observations led Tordoff to speculate that the male helping Meg raise the 1990 NCL chicks was not their father. Meg spends her winters in St. Paul, dining on pigeons and an occasional duck; she was seen repeatedly in February 1990. Then on 4 March an adult male with a black band on his left leg and a silver one on his right appeared in the nest box. This new male was seen again on 7, 10, 12 and 19 March and 4 April.

On 9 April there were three eggs in the nest box and two peregrines were locked in spectacular battles throughout the day. These aerial battles were seen by office workers on the 24th floor of the Meritor Tower and by window washers who passed over the nest box that day as they worked the east face of the NCL tower. At the time, we thought the mated peregrines were redirecting to each other their aggressive response to the intruding window washers. In retrospect, the battles of 9 April may have been between the black-banded male and the newly returned Beaner,

days of incubation. Back at the NCL tower, the chicks had hatched on 14 May. The events of the spring led Tordoff to propose that the male at the Ward tower, Maverick, was the ousted father of the NCL brood, and that Beaner had spent his summer raising chicks sired by Maverick.

Although partly speculative, the story is based on some solid evidence. First, Beaner obviously replaced a black-banded male at the NCL tower between 4 April and 23 June. Second, Tordoff had made a detailed plumage sketch of the black-banded NCL male on 4



**Figure 1.** DNA fragments highlighted by the pMR1-4 probe. The patterns show that Maverick has more in common with the 1990 NCL chicks than Beaner does. Although Beaner and Maverick are first cousins, the DNA fragments inherited from their related parents are very different.

who wore only a single faded gold band on his right leg. The next day, there were two adults in the territory, the window washers were elsewhere, and all seemed normal. On 23 June, we trapped the NCL male for a blood sample and were surprised to catch Beaner, not the black-banded male present in early spring.

On 3 May, Tom Shearen reported a pair of peregrines on the Montgomery Ward tower, just three miles west of the NCL tower. The Ward female had laid three eggs on a bare ledge. We put the eggs in a gravel tray and one chick hatched on 9 June after at least 36

March. Third, we had blood samples from Beaner, Meg, Maverick, and the NCL and Ward chicks.

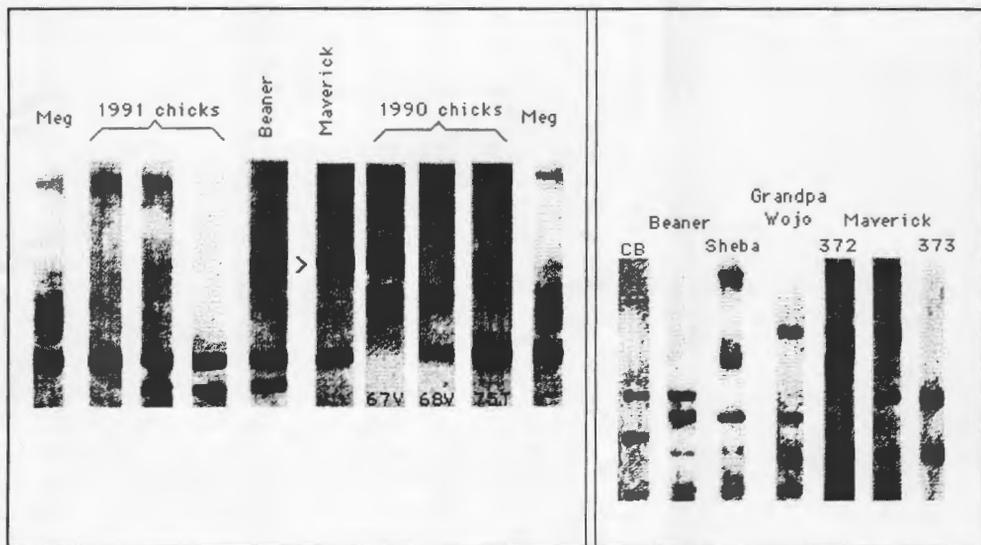
The plumage sketch made on 4 March 1990, at the NCL nest box fits Maverick in all details even today. On 12 March 1993, we identified him at the Ward tower from the 1990 NCL sketch, two weeks before we were able to read his band for confirmation. Peregrines vary individually in plumage about as much as people vary in appearance; rarely do two individuals resemble one another enough to cause confusion, if good photos or drawings are available.

DNA fingerprinting analysis also supports Tordoff's reconstruction of events. Assuming that the DNA fragments detected are inherited from parents and do not arise spontaneously, the three 1990 chicks are clearly not Beaner's offspring (Figs. 1 and 2). Even though Beaner and Maverick are first cousins, they have unique banding patterns detected by both the pVPf1-3 and pMR1-4 probes.

The DNA fragments detected with the pMR1-4 (RFLP) probe show that the relationship between Maverick, Beaner and their offspring most clearly (Fig. 1). Two high mo-

been available.

Judging by plumage sketches and the single gold band on his right leg, Beaner was probably the male sighted in Hastings in 1988 and again for a few days in 1989. Early in 1989, he was in Bayport and later, after the death of Radar in July, at the NCL tower. Supporting evidence comes from his spring arrival dates of 21 April 1988, and 16 April 1989, at the Hastings cliff, checked daily by Joanne Dempsey. If Beaner arrived in St. Paul on 9 April 1990, when the fights were seen, he could not have sired the 1990 NCL brood,



**Figure 2. DNA fragments highlighted by the pVPf1-3 probe. The patterns show that at least one of the NCL chicks (67V) could be Maverick's but not Beaner's offspring. The band in question comes from Maverick's and Beaner's common ancestor, Wojo.**

lecular weight bands (not to be confused with leg bands) found in the DNA of the 1990 NCL brood could not have been inherited from Meg or Beaner. These bands match bands found in Maverick's DNA profile, however, indicating that he is indeed the true father.

The DNA fingerprints made with the pVPf1-3 (DNA-fingerprinting) probe do not refute Maverick's paternity of the 1990 NCL chicks. At least one of the chicks inherited a band of DNA equal in size and intensity to Maverick's unique one (Fig. 2). The other chicks could have been attributed to either Beaner or Maverick, had no other information

since three eggs were already laid and the fourth would have been fertilized and in the oviduct. Nevertheless, he raised the brood, while their true father established a neighboring territory and raised two more chicks (one fostered).

The peregrine population in the Midwest is the product of captive peregrines from around the world. By nature, some are migratory, some are not. Differences in behavior, morphology, and physiology, as well as luck, will make some individuals more successful than others in leaving their genes in the new population. In Beaner's case, his misfortune in

1990 was poor migratory timing. Arriving after Meg had already been inseminated cost him a breeding season and the energy to raise four chicks that were not his. Natural selection acting on the generations to come should sort out the peregrines best adapted to life in the Midwest in the 21st century.

As an update, Meg continues to go through mates. After Beaner raised the 1990 brood, even though they were not his (we assume he was unaware of this), he left for the winter. Beaner returned in 1991 and, at age five, finally raised the first brood of his own, with Meg. He never returned for the 1992 season and he was replaced by Spanky, a new male, who had nested on the Control Data headquarters in Bloomington in 1990 and 1991, but raised three chicks with Meg in 1992.

We appreciate financial support from the U.S. Fish and Wildlife Service through M. Fuller; the U.S. Army through W. Seegar; the Minnesota Department of Natural Resources Nongame Wildlife Program; the Graduate School of the University of Minnesota; and the Dayton Natural History Fund and the Wilkie Fund for Natural History of the Bell Museum at the University.

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Bell Museum of Natural History (HBT and SMM), the Raptor Center (PTR), Dept. of Animal Science (DF), University of Minnesota; Genetics Group, M.S. 886, Los Alamos National Laboratory, Los Alamos NM 87545 (JLL).

## The Townsend's Solitaire in Minnesota

Peder Svingen

The status of Townsend's Solitaire (*Myadestes townsendi*) in Minnesota became Regular for the first time with the 1983 revision of the state checklist (MORC 1983). Even as recently as 1973, only 25 additional records had accumulated since the species was first documented by specimen on 20

December 1909 (Roberts 1932). Since 1973, no fewer than 96 records involving 107 individuals have been submitted! Through mid-1993, the total number of records for the state is 122. This article reviews this remarkable change in the status of Townsend's Solitaire in Minnesota and highlights its record invasion

into Minnesota during 1992–93.

### The 1992–93 Invasion

Between 2 October 1992 and 27 March 1993, there were 22 records involving 29 individuals in Minnesota, mostly along the North Shore of Lake Superior (Figure 1). This is almost three times the previous high of eight records in 1981–82 (Figure 2). Four of last winter's records were of multiple individuals, including the flock of four birds along Croftville Road in Cook County on 11 December, an unprecedented event in Minnesota.

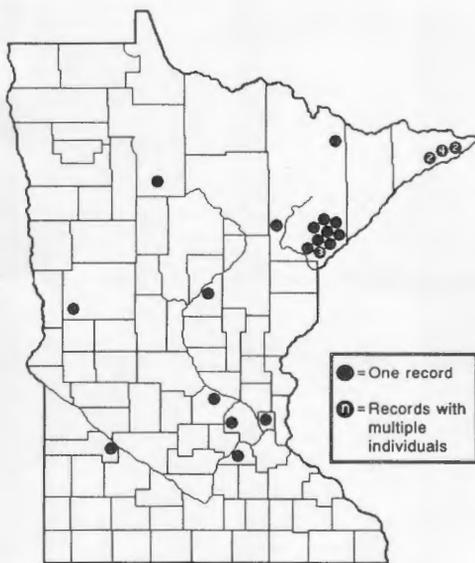


Figure 1. Map of Minnesota showing locations of Townsend's Solitaire records for 1992–1993.

Prior to the 1992–93 invasion, two birds had been recorded together only three times along the North Shore, plus once in Dakota County (Lewanski 1990). Although the balmy weather in northeastern Minnesota last winter (see "The Winter Season" in this issue) and the unusually abundant fruit and berry crop may partly explain the presence of up to eight solitaires in the vicinity of Grand Marais during the winter plus at least four birds that overwintered in the Duluth area, it is clear that additional factors were involved. The 1992–93 invasion was definitely not confined to

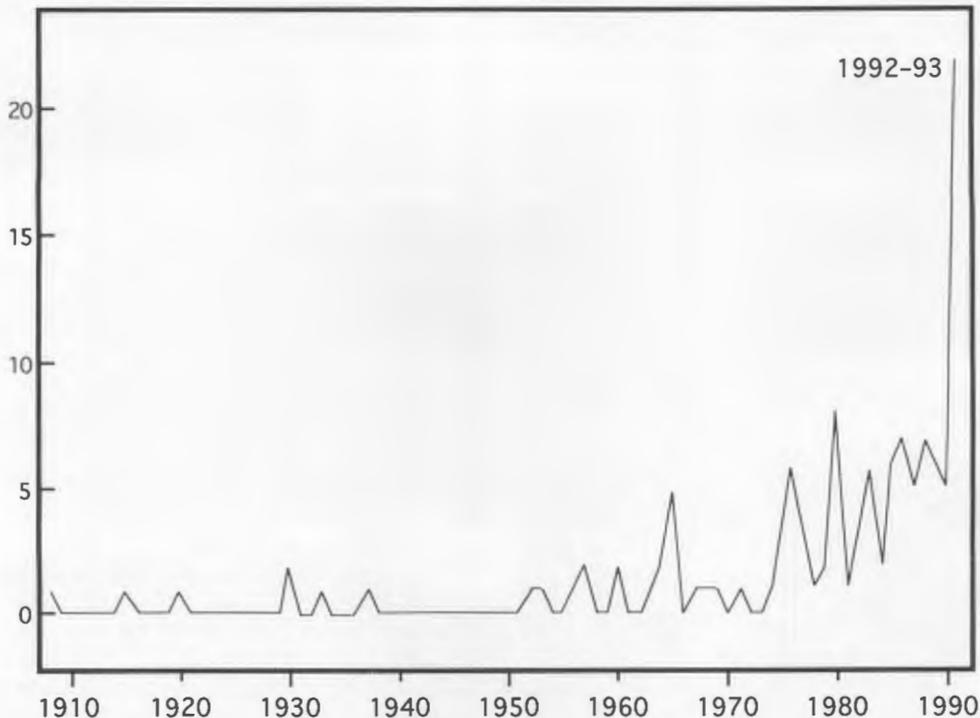
Minnesota.

Saskatchewan (7 records) and Manitoba (4 records) both detected an eastward movement during autumn 1992 (Koes and Taylor 1993a). North Dakota reported ten solitaires in autumn 1992, including a fifth earliest arrival date (25 September) and six birds in the Denbigh Experimental Forest, McHenry County, on 1 November (Berkey 1993). Reports from the prairie provinces were "well above average" during the 1992–93 winter season although only two birds reached Manitoba (Koes and Taylor 1993b). One or two individuals spent most of the winter in Thunder Bay, Ontario and another overwintered in Toronto (Ridout 1993). The unusual number of additional reports during the winter of 1992–93, including Indiana's first state record, indicated that a significant movement of solitaires had taken place (Kaufman 1993). Michigan had two records, both from the Upper Peninsula (Granlund 1993). Curiously, Wisconsin had only one report this past winter, a bird discovered by the author and Sue Barton at Devil's Lake State Park, Sauk County.

### Seasonal Distribution

The parade of solitaires invading Minnesota began on 2 October 1992 in Duluth and ended there on 27 March 1993. While these were neither the earliest nor the latest dates that the species has been recorded in Minnesota (Janssen 1987) the distribution by month for the 1992–93 records mirrors the historical pattern (Figure 3). For the purpose of this analysis, an undated "winter" record of two birds in Grand Marais during the invasion (*vide* Molly Hoffman) was counted for January 1993. The four records in October 1992, and the five records each in November and December, comprised 64% of the invasion records; in comparison, 65% of all previous records occurred during one of these three months.

The cumulative Minnesota total of 122 records was compiled by accepting all records reviewed by others through 1973 (Green and Janssen 1975); reviewing indices published in *The Loon* from 1971 to the present; perusing seasonal reports for fall, winter, and spring from 1971 to the present; reviewing photo-



**Figure 2. Townsend's Solitaire records graphed by season (July to June) from 1909 to the present. n=122**

graphs and other documentation in the M.O.U. species file; following the decision by the Minnesota Ornithological Records Committee on all records considered by MORC through 31 December 1982, when solitaires became officially Regular in Minnesota; and personal communication with the observers if the record was problematic.

An examination of all "overwintering" records (defined here as one or more individuals reported from the same location over a span of 30 or more days, some portion of which occurs during December through February) suggests that only birds first discovered in the months of November through February are likely to be overwintering. This is especially true for December discoveries (9 records) although this may primarily reflect the bias of Christmas Bird Counts, when more observers are in the field. Distribution of the 23 known overwintering records (Figure 4) must also be interpreted with caution; they are even more dependent upon the distribution of

winter birding and birders, since multiple observations are necessary to establish that birds are overwintering. Observer bias most likely accounts for the preponderance of nine overwintering records in the seven-county metro area (five of these in Hennepin Co. alone) and the six overwintering records (involving nine birds) in the Northeast region.

### Geographical Distribution

If October through December is the time to look for solitaires (Figure 3) in Minnesota, then the North Shore of Lake Superior is the place to search. St. Louis County has the most records (30) with the majority of these in Duluth. The addition of Cook (16) and Lake (8) counties means that 54 of Minnesota's 122 records have occurred in the Northeast region. Only Hennepin County (14 records) and the seven-county metro area (total of 28 records) challenge the supremacy of the North Shore. Solitaires have been recorded in at least 34 counties, with the total of 5 records for Martin

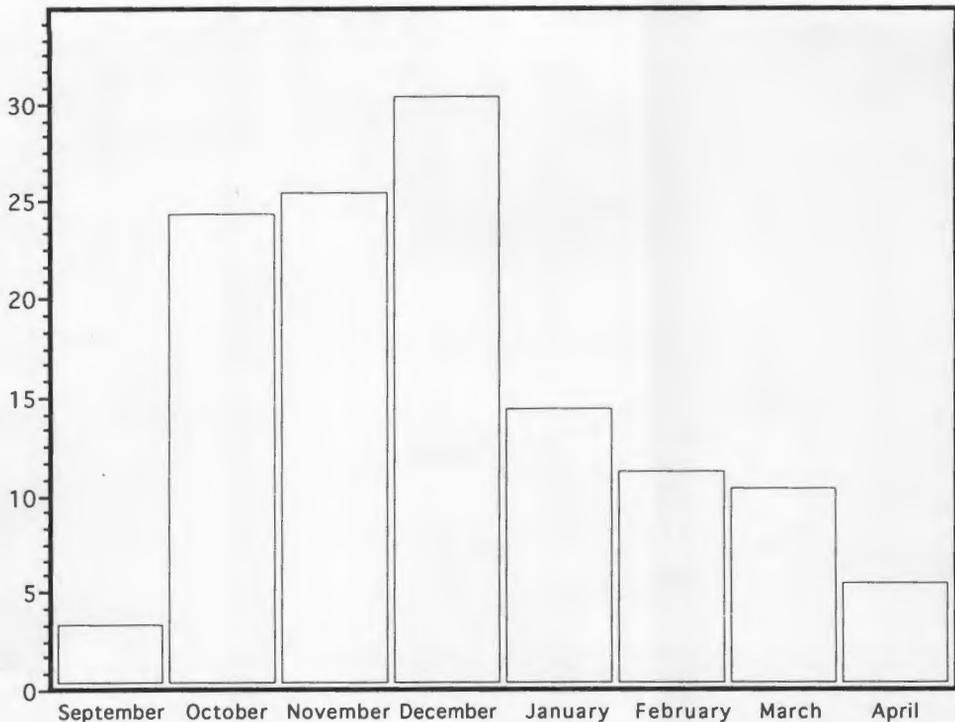


Figure 3. Distribution of Townsend's Solitaire records by month, 1909 to present.

County worthy of special mention. Most of the counties bordering the Minnesota River have at least one record but few other distributional statements can be made, until one considers the distribution of the Eastern Red Cedar (*Juniperus virginiana*) in Minnesota.

Even the most cursory glance at the distribution of this plant (Ownbey and Morley 1991) in Minnesota reveals its apparent association with solitaire records, except for the northeast region (Figure 5). The fruit of the Eastern Red Cedar, generally borne by female plants and maturing in one to three years, are often called "juniper berries" although they are actually cones with soft, fused scales; each berry contains one or two seeds and the berries are consumed by more than 50 species of birds as well as mammals (Brockman and Merrilees 1968, Petrides and Petrides 1992). In Minnesota, solitaires have been observed consuming these berries (e.g. *The Loon* 49:108) and searching stands of Eastern Red Cedar for solitaires (and other birds) in winter

can be productive.

Other food sources described for solitaires in Minnesota include mountain ash berries (primarily *Sorbus americana*), "holly berries", asparagus berries, Red Splendor crabapples, and one report of black alder (*Ilex verticillata*) berries (Lawrence 1964). Solitaires prefer juniper berries (including Rocky Mountain Juniper and Oneseed Juniper in the West) in winter (Lederer 1977, Salomonson and Balda 1977, Poddar and Lederer 1982). Both male and female solitaires vigorously defend food sources within winter territories in New Mexico (George 1987). These studies were performed in California, New Mexico and Arizona, so their findings may not apply to Minnesota; however, it is likely that red cedar berries are one of the primary food sources for overwintering solitaires in the state, except along the North Shore of Lake Superior. Observations of solitaires' foraging behavior in Wisconsin are probably more applicable; in addition to consuming fruits of red cedar,

November (n=5)

Cook (1992)  
Fillmore (1988)  
Hennepin (1984)  
Washington (1984)  
Clearwater (1981)

December (n=9)

St. Louis (1992)  
Otter Tail (1988)  
Nicollet (1979)  
Mower (1978)  
Cook (1977)  
St. Louis (1977)  
Otter Tail (1976)  
Carver (1968)  
Hennepin (1966)

January (n=5)

St. Louis (1993)  
Hennepin (1990)  
St. Louis (1985)  
Lac Qui Parle (1932)  
Hennepin (1922)

February (n=4)

Ramsey (1993)  
Carver (1992)  
Freeborn (1962)  
Hennepin (1954)

Figure 4. Overwintering records of Townsend's Solitaire in Minnesota arranged by month of initial discovery (n=23).

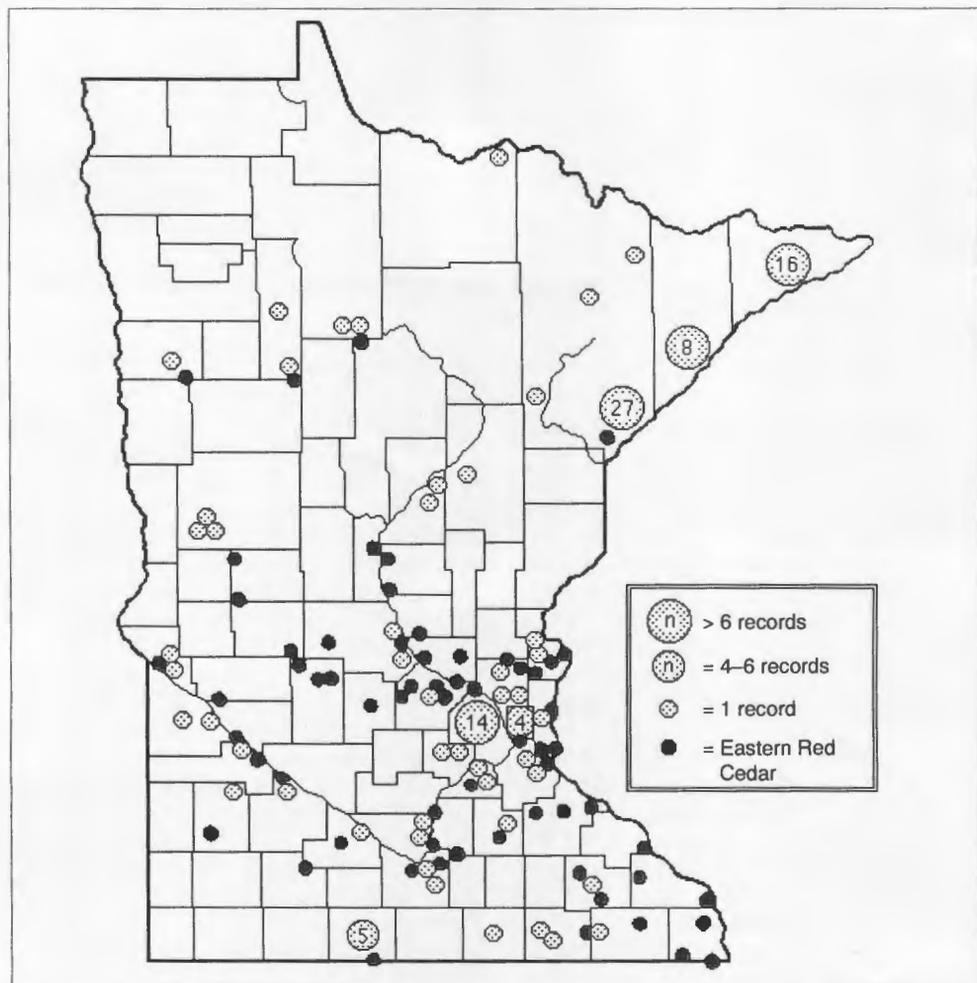


Figure 5. Map of Minnesota showing all Townsend's Solitaire records since 1909 with locations of Eastern Red Cedar groves. Map adapted from Owens and Marley.

mountain ash, and buckthorn (*Rhamnus cathartica*), this thrush has been seen fly-catching for gnats and other insects at Devil's Lake State Park (Lange 1988).

### Summary

The record invasion of Townsend's Solitaires into Minnesota between 2 October 1992 and 27 March 1993 (22 records in all) included unprecedented numbers of individuals in northeastern Minnesota and the largest flock (4 birds) ever seen in the state. The vast majority of records (96 of 122 total) have occurred in just the past 20 years. Solitaires discovered in November through February may be overwintering, especially those first seen in December. Examination of fruit-bearing trees along the North Shore in fall and early winter, along with searching stands of Eastern Red Cedar elsewhere in Minnesota, is most likely to produce additional records of this western thrush in Minnesota.

### Acknowledgments

Parker Backstrom, Doug Campbell, Kim Eckert, Molly Hoffman, Robert Janssen, and Jack Sprenger provided written summaries or helped clarify the status of certain records. Janet Green's review of early records and organization of the M.O.U. file on solitaires greatly facilitated my research. Anthony Hertzell designed the maps and graphs for this article. Finally, thanks to the many observers who discovered and documented Townsend's Solitaires in Minnesota.

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151 Bedford St. SE, Minneapolis, MN 55414-3668.



Boreal Chickadee, 10 January 1993, Saint Louis County. Photo by Anthony Hertzell.

## The Winter Season (1 November 1992 – 28 February 1993)

Karl Bardon

Despite the “lackluster” winter for many observers, a record number of species was reported this season. Apparently the mild December weather allowed many half-hardy species to linger in the state, with some even in record numbers, and the continent-wide phenomena of western strays showing up east of their normal range was well represented in Minnesota, including the state’s third Black-throated Sparrow. Temperatures in the latter half of February were below average and probably as a result, very few early migrants were noted returning before the end of the period.

The first three weeks of December were mild with weekly high temperatures in the 30s throughout the state, which is as much as 10° above normal. Cold weather arrived just in time for the beginning of the Christmas Bird Count season, with the many counts

done on 19 December reporting dropping temperatures and severe wind chills. Following this cold front, low temperatures ranged from -9° at Worthington to -36° at International Falls. This cold weather lasted until early January when the coldest temperature for the season (-38°) was recorded at International Falls. The second week in January was the snowiest week of the winter with 6" of snow falling in the Twin Cities on 11–12 January, and as much as 16" in Faribault. Otherwise, moderate snow depths were reported throughout the state, and few winter storms were noted during the season. Above average temperatures in mid-January (usually the coldest time of the year) lasted through the first two weeks in February, with a peak of high temperatures during the first week in February when 40s were reported all across the state, and the highest recorded tempera-

ture for the winter of 48° was reached at Grand Marais (!). An unusual cold spell set in during the latter half of February, with weekly low temperatures throughout the state ranging from -9° to -29°, which is 10–20° below normal. There was a slight warming trend in late February.

Many lingering water birds were found in December and early January, including three species of grebes, both Double-crested Cormorant and American White Pelican, 28 species of waterfowl, and numerous American Coots. The most noteworthy observation was thousands of geese seen migrating south in Lyon County on 14 December — mostly Canadas, but also Snow Geese, and even a few flocks of up to 100 Greater White-fronted Geese, providing the latest migration date on record for White-fronteds in the state. Also noteworthy was the estimate of 53,000 Common Mergansers at Lake Pepin along the lower Mississippi River Valley in early December. Because of Lake Pepin's large size (over 20 miles long), the difficulty of observing from widely spaced locations on shore, and continuous movement of birds up and down the lake, this and other recent counts are probably underestimating the numbers of mergansers actually on the lake. Concentrations in excess of 100,000 birds are potentially regular here (see *The Loon* 64:10–12).

Eight species of gulls were recorded this season, a tie for the record set in the winter of 1988–1989. Rarities included a Great Black-backed Gull observed in Duluth, an Iceland Gull seen with the Common Mergansers at Lake Pepin in Goodhue and Wabasha counties, and a Lesser Black-backed Gull seen with the large gathering of gulls in the Twin Cities area that roost on Lakes Calhoun and Harriet in Hennepin County, and feed near Black Dog Lake in Dakota County. Five record late Bonaparte's Gulls were seen at Black Dog Lake on 15 December (one wonders from where these birds came!). Several Ring-billed, Thayer's, and Herring Gulls lingered at Black Dog Lake through at least late January, which is a month later than normal, and at least two of the Ring-billed Gulls even overwintered, providing one of the few such records for the state. These observations, and the adult Great Black-backed Gull that over-

wintered at this location last winter (and apparently had no trouble finding food), bring to mind the obvious question: why don't more gulls overwinter in the Twin Cities area?

After last year's record northern owl influx, only average numbers of Great Gray and Northern Hawk Owls were reported, but it was still an excellent year for Snowy Owls, especially in the northwest, which received few reports during last year's invasion. Surprisingly, and despite the lower than expected flight at Hawk Ridge last fall, Northern Goshawks were more widespread than ever before. Perhaps as a reflection of this movement, all grouse species were down in numbers, especially Ruffed Grouse. Interestingly, Red-tailed Hawks were very widespread, but the number of Rough-legged Hawks were perhaps at their lowest ever with few reports in the north, and none in the west.

Although many areas of the state may have had a poor winter for birds, including the Twin Cities and Duluth areas, a few other locations reported one of their best years ever. The temperatures in Grand Marais were consistently higher than anywhere else in the state throughout most of the winter, and possibly as a result, the Grand Marais Christmas Bird Count (CBC) tallied a record number of species for its count. The highlight of this count was northern Minnesota's first winter record of a Turkey Vulture — seen flying with a flock of gulls, and possibly feeding on a deer carcass found nearby. At least six (and possibly eight) Townsend's Solitaires were seen during the winter in Grand Marais, including a flock of four individuals seen by Molly and Ken Hoffman — certainly the most ever seen at one time in Minnesota. Other species seen in Grand Marais included an overwintering Fox Sparrow at a local feeder, a Harlequin Duck seen well into January, plus Ruddy Duck, Surf Scoter, Eastern Bluebird, Yellow-rumped Warbler, and White-throated and Song Sparrows, all of which lingered much later and farther north than normal.

In the Fergus Falls area, Steve and Diane Millard reported their greatest variety of overwintering waterfowl ever along the open portions of the Otter Tail River, including a Harlequin Duck for the second consecutive win-

ter. Also overwintering at this location were Wood Duck, Green-winged Teal, American Wigeon, Redhead, and Lesser Scaup, most of which have seldom overwintered in the north. Other noteworthy species reported in Wilkin and Otter Tail counties included a Gray Catbird eating raisins in December, Varied Thrush and Winter Wren on the Fergus Falls CBC, a Merlin overwintering in Fergus Falls, two Golden Eagles, and numerous Snowy Owls moving through Wilkin County in late February.

There were also excellent numbers of birds in the juniper hillsides of the Minnesota River Valley in Renville, Redwood and Yellow Medicine counties, originally found by statewide travelers Bob Janssen and Ray Glassel. Species seen here included large numbers of Northern Flickers, American Robins, Cedar Waxwings, Blue Jays and Purple Finches, plus Townsend's Solitaire, Hermit Thrush, Yellow-rumped Warbler, and Golden Eagle.

Among the passerines, some half-hardy species were reported in record numbers this season, with no fewer than four mid-winter reports of Yellow-bellied Sapsuckers, at least four Winter Wrens, five Hermit Thrushes, as many as seven Yellow-rumped Warblers, and a high of 19 Eastern Bluebirds at Faribault. Besides the unexpected reports of Gray Catbird, Brown Thrasher, Field Sparrow, Northern Oriole, and Yellow-headed and Brewer's Blackbirds (all of which are accidental in winter), the state's first winter record of a Savannah Sparrow was seen at a feeder in Rice County.

One of the most exciting birds of the winter was the state's third Black-throated Sparrow that lingered at a feeder in Doran, Wilkin County, until it disappeared following severe weather in late December. This bird was apparently one of the many Black-throated Sparrows and other western strays which wandered eastward (*American Birds* 47:230-31) in North America during the winter of 1992-1993. Minnesota was also treated to the highest number of Varied Thrushes and Townsend's Solitaires ever reported for the winter in the state, with exceptional numbers of solitaires at Duluth and Grand Marais.

The number of other winter visitors from

the north seemed low this season, except for Snow Buntings, which were particularly widespread. Bohemian Waxwings and most winter finches were notably scarce. Exceptions included unprecedented numbers of American Goldfinches in the northeast where they are seldom reported in winter, and very large numbers of Pine Siskins were seen in at least the northern regions. Common Redpolls and crossbills were scarce statewide, although intriguing numbers of White-winged Crossbills were found in the extensive spruce bogs of Koochiching County in late February, including many singing adult males.

This report summarizes the observations of 78 seasonal contributors and 50 Christmas Bird Counts. Coverage was excellent, thanks in large part to former winter season compiler Ken LaFond who sent in observations from a total of 83 counties. The only counties lacking reports were Big Stone, Traverse, Stevens, and Red Lake (unless you count the House Sparrows reported there!). A record total of 149 species was reported (previous record was 146 in 1987-1988). Reports of additional (and possibly correct) species were received, including Chipping Sparrow and Ruby-crowned Kinglet, but without substantiating details these could not be included. All reports of species which are accidental in winter must be accompanied by details, and details for species which are casual in winter would have been desirable as indicated in the text.

As always, such a report is not possible without the contributions of many individuals, but I would like to give special thanks to Peder Svingen who continues to provide invaluable editorial assistance, to Parker Backstrom who provided a list of observations reported to the Minnesota Rare Bird Alert, and to all the observers who sent in reports this season, even those who did not send in a seasonal report, but took the time to send in even the briefest list of sightings. As the beginning of another winter will soon be upon us, observers are encouraged to remember that there is always something interesting to watch — even in winter in Minnesota, perhaps our state's most fascinating season.

**1430 - 100th Avenue NW #212, Coon Rapids, MN 55433**

### Common Loon

Only report a late migrant on 12/2 Fairmont BBo.

### Pied-billed Grebe

Recorded on the Hastings/Etter and Austin (count week) CBCs.

### Horned Grebe

Only report 2/4 Cook (overwintering?) *fide* PB.

### Red-necked Grebe

Only report a late migrant on 12/17 Olmsted JB.



American White Pelican, 14 February 1993, Black Dog Lake, Dakota County. Photo by Mary Zehner.

### American White Pelican

Two overwintered at Black Dog Lake, Dakota Co. mob. By 2/27, one was reportedly dead, DN. Also reported 12/4 & 11 at Albert Lea, Freeborn Co. RRR.

### Double-crested Cormorant

One overwintered at Black Dog Lake, Dakota Co. mob, for the second year in a row. Also reported 2/28 Como Lake, Ramsey Co. (4) DJe (early migrants?).

### Great Blue Heron

Again widespread; reported from 11 counties (12 l.y.). Overwintered at Cedar Creek Natural History Area, Anoka Co., JH; on the Mississippi River, Ramsey Co. mob; and at Grey Cloud Island, Washington Co. TEB. Lingered individuals reported in Dec. and early Jan. from Lyon, Blue Earth, Goodhue, Scott, Dakota, and Hennepin. Only north report 12/16 Otter Tail SDM. CBC total only 4 (25 l.y.).

### Tundra Swan

Still 200–400 on 12/4 Houston EMF and 500 on 12/4 Wabasha KB. Last seen 12/19 Wabasha WDM, 12/19 Goodhue (160) CS, and 12/21 Winona CS. One imm. reported 1/18 & 19 Winona CS (no details).

### [TRUMPETER SWAN]

Overwintered at Monticello, Sherburne/Wright counties where up to 44 seen 2/6 KB, and at Fergus Falls, Otter Tail Co. where 8

## KEY TO SEASONAL REPORTS

1. Species listed in upper case (**PACIFIC LOON**) indicate a Casual or Accidental occurrence in the state.
2. Dates listed in boldface (**10/9**) indicate an occurrence either earlier, later or within the earliest or latest dates on file.
3. Counties listed in boldface (**Aitkin**) indicate either a first county record or an unusual occurrence for that county. City of **Duluth** also boldface when applicable.
4. Counties listed in italics (*Aitkin*) indicate a first county breeding record.
5. Brackets [ ] indicate a species for which there is reasonable doubt as to its origin or wildness.

seen on 1/2 PKL. Also reported 12/12-13 Crow Wing (1) PKL, 12/25 Washington (5) *fide* PB, and on the St. Paul NE (6), Tamarac NWR (2), and Wild River (2) CBCs. These were presumably all from MN and WI DNR releases.

#### **Mute Swan**

One overwintered at Cannon Lake, Rice County (2) OR, FKS. Also reported until 12/11 at Grey Cloud Island, Washington County (1 from fall season) TEB, and on the Owatonna (2) CBC. The possibility that these reports are escapes or releases cannot be ruled out.

#### **Greater White-fronted Goose**

Several flocks of up to 100 individuals migrating overhead with Canada Geese and Snow Geese on 12/14 in Marshall, Lyon County HK. Record late date for migration in state.

#### **Snow Goose**

One blue morph overwintered at Black Dog Lake, Dakota County for the second consecutive year. The reports on 12/17 from Hennepin County (another blue morph) KB and on the Minneapolis North CBC were possibly the same as the Black Dog Lake bird. Also reported on 12/17 from Olmsted JB and on the Rochester CBC (possibly the same bird?).

#### **Canada Goose**

Reported from 39 counties (23 l.y.) statewide, with 10 northern counties (only 2 l.y.) including records as far north as: until 1/1 Beltrami DJo, 1/3 St. Louis (Virginia Power Plant) KB, and 12/15 & 2/9 Pennington (overwintering?) KSS. CBC total continues to decline, with only 71,951 (86,818 l.y. and 110,376 two years ago). Thousands were noted flying south 12/14-16 Lac Qui Parle FE and 12/14 Lyon HK. Only 30,000 were on the Lac Qui Parle CBC, and very few wintered at Lac Qui Parle Lake/WMA with only 3,000 there on 1/18 KB. The 6,017 on the Fergus Falls CBC and the 15,200 on the Rochester CBCs are more normal, while large numbers of 2-4,000 were recorded on the Bloomington, Excelsior, Fairmont, and

Minneapolis CBCs.

#### **Wood Duck**

Fourteen reports. Overwintered in Hennepin SC (two females), Otter Tail SDM, and possibly Dakota and Rice (1/2-10) mob. Other reports included the Bloomington, Excelsior, Faribault, Minneapolis and St. Paul CBCs, 12/4 Wabasha KB, 12/12 & 12/19 Scott DN & DS, 12/19 Nicollet MF, 1/6 Ramsey (5) RG, and 2/7 Hennepin (male) DZ. CBC total 14.

#### **Green-winged Teal**

Overwintered in Fergus Falls, Otter Tail Co. SDM, plus late migrants 12/3 Anoka PKL and 12/10 Hennepin SC, RG. Also reported on the Winona CBC.

#### **American Black Duck**

Reported from 21 counties (12 l.y.) mostly along the Mississippi River as far north as Stearns and Benton counties; reports from outside this core area include overwintering birds with other duck concentrations in Cook, Otter Tail and Olmsted counties, plus 12/5 Beltrami DJo, until 12/17 St. Louis (Duluth) KE, Crow Wing PKL (no date), and on the Albert Lea and Mankato CBCs. CBC total 110 (131 l.y.).

#### **Mallard**

Reported from 44 counties (30 l.y.) statewide as far north as Cook (Grand Marais), St. Louis (Virginia Power Plant), Itasca, Beltrami, and East Grand Forks CBC, Polk Co. CBC total 18,208 (15,846 l.y.). Only large concentration noted was 10,000 on 12/2 at Black Dog Lake, Dakota Co. KB.

#### **Northern Pintail**

One overwintered at Black Dog Lake, Dakota County. The reports from 1/20 & 1/24 Hennepin DBo & *fide* PB, and 1/31 Scott *fide* PB were possibly the Black Dog Lake individual since this duck population disperses daily to feed. Also reported 12/12 Sherburne RG, RJ.

#### **Northern Shoveler**

Late migrant reported until 12/17 Hennepin SC *et al.*

### **Gadwall**

Overwintered in Scott as usual, but number reduced (30-40 on 12/12 DN, only 5 on Excelsior CBC, and 17 on 2/13 DN — all presumably from the Mill Pond in Shakopee). Also overwintered in Hennepin (2) SC, and reported in Dec. and Feb. from Dakota and Winona.

### **American Wigeon**

Reported overwintering in Fergus Falls, **Otter Tail Co.** SDM. Also reported on the East Grand Forks CBC and 2/21 Benton KB.

### **Canvasback**

Overwintered at Black Dog Lake, Dakota Co. mob, and late migrants reported 12/3 Ramsey KB, and 12/7 Goodhue/Wabasha KB.

### **Redhead**

Overwintered in Fergus Falls, **Otter Tail Co.** SDM, and late migrant reported 12/19 Hennepin SC.

### **Ring-necked Duck**

Overwintered in Olmsted JB, and late migrants reported 12/12 Rice TBo, 12/12 Wabasha AB, until 12/19 Hennepin SC et al., 12/27 Otter Tail SDM, and on the La Crosse and Willmar CBCs.

### **Greater Scaup**

Reported 12/19 Hennepin SC and found dead 12/27. Also reported 12/12 Benton RG, RJ.

### **Lesser Scaup**

Overwintered in Otter Tail. Lingering individuals noted through early Jan., including 12/3 Ramsey KB, 12/3 Wabasha WDM, 12/4 Le Sueur PS, until 12/19 Hennepin SC *et al.*, the Bloomington, La Crosse, Mankato and St. Paul CBCs, and 1/8 Rice TBo. Although this species regularly returns in late Feb., the only possible returning migrants noted were 2/9 Sherburne/Wright (6) KB.

### **Harlequin Duck**

Adult male overwintered in Fergus Falls, **Otter Tail Co.** SDM, mob (a different bird than the apparent female which wintered at this location last year). One first-winter male present until 1/18 in Grand Marais, Cook Co.

TD, KMH, PS.

### **Oldsquaw**

Reported on Duluth CBC (2) and again on 1/9 mob. Overwintered in Cook with peak of **282** on Grand Marais CBC (a record for this count).

### **Surf Scoter**

Recorded on Grand Marais CBC, 12/19 Cook KMH.

### **Common Goldeneye**

Overwintered along the North Shore in the four northeast region counties (also inland records on the Isabella and Aurora CBCs, and at Birch Lake Dam, Lake County), plus 14 other counties along the Mississippi River as far north as Stearns, along the St. Croix River as far north as Chisago, and on the Minnesota River in Dakota and Scott counties. Numbers were low in these areas with only about 400-600 birds overwintering on the upper Mississippi River from Minneapolis to St. Cloud, and virtually none in St. Paul or at Black Dog Lake. Number on lower Mississippi R. south of Hasting unknown. Reports outside these regions included overwintering birds in Otter Tail (230) SDM and Olmsted. Also reported on the Bemidji and Fairmont CBCs (late migrants?). CBC total 667 (1,665 l.y.). No increase of reports in late February.

### **Bufflehead**

Overwintered along the North Shore in Grand Marais, Cook Co. (6) mob and probably in Lake (no date) DPV. Also, one female reported through 1/23 Ramsey BF, mob. Late lingering migrants include 12/2 Martin BBo, 12/17 Hennepin SC, KB; 12/17 Ramsey (2) RG and the Duluth (3), Bemidji (1) and St. Paul (3) CBCs. A possible early migrant noted 2/22 Anoka (male) KB.

### **Hooded Merganser**

Overwintered at Fergus Falls, Otter Tail Co. SDM; possible overwintering birds reported until 1/13 Ramsey mob, until 1/21 Anoka PKL, and until 1/30 Dakota mob. Late lingering migrants included 12/1 Ramsey (60) KB, 12/3 Beltrami (2) DJo, and the Aurora

and Winona CBCs.

### **Common Merganser**

Overwintered on Mississippi River and adjacent areas from Winona as far north as Stearns/Benton. Also overwintered in the three North Shore counties, and in Otter Tail. Peak of **53,000** at Lake Pepin, Goodhue and Wabasha counties on 12/4 KB, then reduced to 25,000 at Read's Landing on 12/6 PKL and 10,000 there on 12/7 KB with Lake Pepin entirely frozen. Large numbers lingered elsewhere until mid-Dec. with 2500+ on 12/12 Goodhue KB, 1500 on White Bear Lake, Ramsey Co. 12/1-3 PKL, KB and 1000 at Lake Minnetonka, Hennepin Co. 12/15 KB. These numbers gone by CBCs with total count of only 736. Single reports included 12/1 Hubbard HJF, 12/4 Le Sueur PS, 12/17 Rice TBo, and on the Lac Qui Parle and Rochester CBCs (not overwintering?). The report 2/14 Beltrami DJo probably refers to overwintering birds; there was no increase of reports in February.

### **Red-breasted Merganser**

Probably overwintered along the North Shore in Cook PS, Duluth KE, and Lake DPV. Late migrants seen 12/11 Hennepin KB, 1/2 Otter Tail RG & RJ, and the Albert Lea CBC.

### **Ruddy Duck**

Late lingering migrants reported 12/5 Hennepin TT, 12/12 Rice TBo, until 12/13 Otter Tail AB *et al.*, 12/18 Olmsted JB, and the Grand Marais CBC (12/19 KMH).

### **Turkey Vulture**

One individual reported on the Grand Marais CBC, 12/19 Cook *fide* KMH, providing one of the state's few winter records, and the first in the north.

### **Bald Eagle**

The most widely reported raptor this season. Bald Eagles were reported from 42 counties (42 l.y.) in all regions except the northwest. Again, was noted overwintering in northern regions as far northeast as Lake and Cook counties, and as far west as Becker and Otter Tail counties. Most of the other overwintering records were along the Mississippi River from

Houston County to Stearns, along the Minnesota River from Lac Qui Parle to Redwood County, and north along the St. Croix River to Chisago. CBC total **217** (136 l.y.), a record number, with 21 birds moving south as late as 12/19 on the Duluth CBC. Approximately 175 birds reported overwintering in the state with 104 counted along the Mississippi River on 2/1 Goodhue and Wabasha OJ. Few Feb. reports of returning migrants, although some were noted as far north as Koochiching and Beltrami in late February where apparently none had overwintered.

### **Northern Harrier**

Reported on the Austin (1) and Rochester (count week) CBCs.

### **Sharp-shinned Hawk**

Approximately 25 individuals reported from 17 counties, with only three north reports: 12/4 Becker BBe; 12/2, 12/19 (Bemidji CBC) & 2/11 Beltrami DJo (all the same bird?); and 1/29 St. Louis (Duluth) *fide* KE. Most reports were from December and January CBC total 12.

### **Cooper's Hawk**

Reported from nine southern counties including five counties in the Twin Cities area, plus Olmsted JB, Rice mob, 12/21 Houston PS, and the Willmar CBC. All reports except Houston apparently from populated areas. No Feb. reports. CBC total nine.

### **Northern Goshawk**

Despite lower than expected flight over Hawk Ridge last fall, there was a record number of winter reports. At least **71** reports (including CBCs) from **37** counties in all regions of the state from as far south as Mower and Freeborn on Iowa border. The majority of reports (excluding CBCs) were from Jan., with a CBC total of only 17 (31 l.y.), suggesting a relatively late influx into the state.

### **Red-shouldered Hawk**

Only reports 1/10 Hennepin (St. Louis Park) *fide* PB, and the Excelsior CBC.



**Red-shouldered Hawk, 26 December 1992 to 25 February 1993, at suet feeder daily in Andover, Anoka County. Photo by Dick Wernersbach.**

#### **Red-tailed Hawk**

Very widespread. Reported from 38 counties mostly in the south and east. Only north reports from Kanabec, Pine, St. Louis (overwintering in Duluth), 1/18 Lake DPV, and the Long Prairie CBC. Absent from the north central and northwest regions, with the only reports in the west from Yellow Medicine, Lyon, and the Lac Qui Parle CBC. CBC total 249.

#### **Rough-legged Hawk**

The lowest numbers in over 10 years. Reported from only 16 counties (34 l.y.) as far west as Kandiyohi and Beltrami, including only 5 northern counties: the Bemidji, Crosby, Sax/Zim, and Carlton CBCs, and Aitkin mob. There were no reports in the western regions. Highest daily count anywhere only 2 (39 l.y.).

Fall 1993

CBC total only 22 (93 l.y.).

#### **Golden Eagle**

Nine reports (eleven l.y.) including the usual range of Houston, Winona and Wabasha counties in the southeast. Unusual reports outside "normal" winter range included late migrant on Duluth CBC; mid-winter records 1/10 Otter Tail (adult) SDM, 1/17 Norman (adult) MO, 1/16 & 1/18 Renville (imm.) RJ, RG & KB; and an early migrant 2/28 Wilkin (imm.) SDM.

#### **American Kestrel**

Numbers continue to decline (sixth straight year). Reported from 38 counties (38 l.y.). Seen as far north as Aitkin, Otter Tail (overwintered) SDM, Wilkin, Becker and Polk (East Grand Forks CBC). CBC total only

123

67 (94 l.y.).

### **Merlin**

Fourteen reports from twelve counties (twelve l.y.). Overwintered in Otter Tail SDM, Pennington KSS, St. Louis mob, and possibly Roseau SDM, NJ, and Hennepin TT, PB. Additional reports 12/8 & 25 Anoka KL, 12/15 Rice TBo, 12/23 Ramsey *fide* PB, 12/26 Marshall KSS, and the East Grand Forks, Rochester, St. Cloud and Warren CBCs.

### **Prairie Falcon**

Only report 1/1 & 2/7 Clay LCF.

### **Peregrine Falcon**

Overwintered in the Twin Cities in Hennepin mob, plus observations in Ramsey mob and 1/4 Dakota KB. Also reported on the Rochester (2) CBC, and in Duluth harbor in Jan. and Feb. *fide* KE.

### **Gyrfalcon**

Only one report (nine l.y.): 12/26 & 1/3 Aitkin WN *et al.* There were several additional

reports without details. Since this species may be only casual in the state, complete details are necessary for all reports.

### **Gray Partridge**

Scarce again. Reported from 23 counties (16 l.y.) in the south and west as far north as Kittson and Roseau. CBC total 95 (136 l.y.).

### **Ring-necked Pheasant**

Reported from 46 counties (33 l.y.) as far north as Aitkin, Mahnomen and Clay. CBC total 640.

### **Spruce Grouse**

Reported 1/10 through Feb. along Lake Co. Rd. 2 (max. of 7) KE, *et al.* Also seen 2/28 Cook KSS and 2/27-28 Koochiching KB (4 different locations, max. only 4).

### **Ruffed Grouse**

Numbers down substantially. Reported from 24 counties (29 l.y.) east of a line from Roseau and Becker to Stearns and Houston.



**Common Snipe, 24 January 1993, Deerwood, Crow Wing Co. Photo by Warren Nelson.**

CBC total 49 (149 l.y.).

### **Greater Prairie-Chicken**

Only reports 12/4 Wilkin (150) RJ, Clay LCF, and on the Crookston (4) CBC.

### **Sharp-tailed Grouse**

Numbers down. Reported from only five counties (nine l.y.): Kittson, Roseau, Lake of the Woods, Beltrami and Aitkin. No CBC reports (43 individuals l.y.).

### **Wild Turkey**

Reported from Rice, Goodhue, Olmsted, Winona and Houston. Others on CBCs outside these counties were probably escapes or recent releases: Washington, Anoka, Becker and Carver counties.

### **American Coot**

Overwintered in Hennepin, Scott and Otter Tail (8) SDM; additional reports from Ramsey, Dakota, Goodhue, Rice, Le Sueur, Freeborn and Winona.

### **Common Snipe**

Eight reports (four l.y.). Unusual north report 1/16 Cook DN, SSt. Also reported in the north from Crosby CBC and again on 1/24 Crow Wing WN (same bird?). South reports included Hennepin (overwintering) JD, 12/26 Washington PC, 1/17 Le Sueur AB (overwintering?), and the St. Paul, St. Paul NE and Excelsior CBCs.

### **Bonaparte's Gull**

Record late migrants 12/6 Winona (1) PKL and 12/15 Dakota (4) RG & (5) JD.

### **Ring-billed Gull**

Hundreds of Ring-billed Gulls lingered on 12/4 Lake Pepin, Goodhue/Wabasha KB, and last seen in southeast 12/12 Goodhue AB and the La Crosse (1) CBC. In the Twin Cities area, 120+ were still present on 12/11 Lakes Calhoun/Harriet, Hennepin Co. KB, and last seen there 12/22 SC. Four first-winter individuals still at Black Dog Lake, Dakota Co. 1/16 BF, and two of these apparently overwintered here since they were reported through 2/25 KB. Single adults were present at Holman Field, Ramsey County. 1/23 BF

and at Black Dog Lake 1/30 DZ (probably same bird). The report from 2/14 Goodhue TEB is difficult to classify, but several gulls may have overwintered here (see under Herring Gull). Although this species regularly lingers until early Jan., it is accidental in mid-winter. Only north report was on the Duluth (2) CBC.

### **Herring Gull**

Overwintered along the North Shore in Cook, Lake and St. Louis (but number unknown). Thousands still present 12/4 Lake Pepin, Goodhue/Wabasha KB, and last seen in southeast on the La Crosse, Rochester, and Winona CBCs. In the Twin Cities area, peak of 2,000 on 12/11 at Lakes Calhoun/Harriet, Hennepin Co. KB, and last seen there 12/22 SC. The 450 at Black Dog Lake, Dakota Co. present 12/22 KB reduced to only 3 by 1/5. One lingered at Black Dog Lake until 2/5 RJ *et al.*, but apparently did not overwinter. Also present in mid-winter 1/22 Colville Park, Goodhue Co. (six) TBe.

### **Thayer's Gull**

Reported 12/4 Lake City, Wabasha Co. (3-4) RG, KB; 12/7 & 12/12 Colville Park, Goodhue Co. (2) RG & AB, and until 12/18 Lakes Calhoun/Harriet, Hennepin Co. (2) KB *et al.* Peak of seven at Black Dog Lake, Dakota Co. 12/21-22 KB, and three first-winter birds still present 1/9-13 on the Minnesota R. near Black Dog Lake, Dakota/Hennepin BF, SC, KB. Two of these lingered until 1/19 mob, and one until 1/31 KB, providing the latest dates for the south. No north reports.

### **ICELAND GULL**

Reported 12/4 Lake City, Goodhue/Wabasha counties KB (*The Loon* 65:97-98).

### **LESSER BLACK-BACKED GULL**

Adult present since 21 November at Lake Minnetonka, Hennepin Co. remained at Lakes Calhoun/Harriet, Hennepin Co. and Black Dog Lake, Dakota Co. until 12/22 KB *et al* (*The Loon* 64:232).

### **Glaucous Gull**

Reported in Dec. and Jan. Cook KMH, and 1/



**Eastern Screech-Owl, 14 February 1993, Bloomington, Hennepin County. Photo by Steve Zehner.**

29 through Feb. Duluth mob; only north reports. One immature was seen 12/4 Lake City, Goodhue County. KB. At least four individuals were present in the Twin Cities with a peak of two adults, one immature at Lakes Calhoun and Harriet, Hennepin County 12/8-18 KB, SC *et al.* One adult and one immature present at Black Dog Lake, Dakota County until 12/22 KB.

**GREAT BLACK-BACKED GULL**

Reported 12/16 Duluth, St. Louis Co. KE (*The Loon* 65:50-51).

**Rock Dove**

Reported from 83 counties (48 l.y.) throughout the state. CBC total 16,079.

**Mourning Dove**

Reported from 29 counties (22 l.y.) statewide



**Snowy Owl, 22 February 1993, Aitkin County. Photo by Warren Nelson.**

with only 6 north reports including overwintering in Otter Tail SDM, **Koochiching** GM (second consecutive winter), Pennington KSS, and St. Louis KE, plus the Fargo/Moorhead CBC. Overwintered in most of the south, but comparatively few Feb. reports. CBC total 334.

#### **Eastern Screech-Owl**

Reported from 21 counties (17 l.y.) with north reports 12/20 Becker BBe, 12/23 Pennington KSS, and the Fargo/Moorhead and Long Prairie CBCs. CBC total 31.

#### **Great Horned Owl**

Reported from 38 counties throughout the state with a CBC total of 114.

#### **Snowy Owl**

Approximately 43-48 individuals reported from 22 counties throughout the state (105 from 17 counties l.y.). Most reports were from the northwest region, unlike last year's record invasion in the northeast. Reported as far south as Cottonwood ED and Jackson JCBC in the southwest, and Houston and Winona mob in the southeast.

#### **Northern Hawk Owl**

Approximately 12 individuals (record 142 l.y.) reported from Cook (1) DPV, Lake (5) mob, St. Louis (3) mob, Aitkin (2) mob and Carlton (1 near Barnum, KE).

#### **Barred Owl**

Reported from 25 counties (22 l.y.) as far west as Roseau, Becker and Brown counties CBC total 18.

#### **Great Gray Owl**

Approximately 18 individuals (record 196 l.y.) reported from Cook (1) SOL, Lake (4-5) mob, St. Louis (5) mob, Aitkin (3) mob, 12/12 Roseau (2) PS, 1/16 Lake of the Woods (1) PS, and 2/25 Becker (1) BBe.

#### **Long-eared Owl**

Reported from Cottonwood CBC.

#### **Short-eared Owl**

Reported from St. Paul NE CBC (second year in a row).

#### **Boreal Owl**

Reported 1/7 from Duluth *vide* KE; 1/29 Ely, St. Louis County SW/MS (female responded to tape of singing male); 2/17 Biwabik, St. Louis Co. (found dead) SW/MS, and 2/21 Grand Marais, Cook County (found dead) SW/MS.

#### **Northern Saw-whet Owl**

Reported 12/15 Rice TBo, 2/8 Hennepin AH, 2/17 St. Louis County (found dead) *vide* KE, 2/23 Cook (found dead) SW/MS, plus (overwintering?) in Winona mob (including two on Winona CBC). Also reported on Rochester CBC (count week).

#### **Belted Kingfisher**

Reported from 15 counties included overwintering in 8 southern counties; other south reports were single December dates. In the north, overwintered in Otter Tail County (2) SDM, and seen 12/10 Beltrami PS. CBC total 14.

#### **Red-headed Woodpecker**

Reported from 13 eastern counties as far north and west as Todd and Crow Wing (Long Prairie and Crosby CBCs; only north reports). CBC total 52.

#### **Red-bellied Woodpecker**

Reported from 40 counties (31 l.y.) as far north as Aitkin, Becker and Clay. CBC total 478.

#### **Yellow-bellied Sapsucker**

Reported 1/1-5 Hennepin RB (*The Loon* 65:96-97), one of the latest dates on record. Also three other reports, but none had details for a species that is only casual in early winter, and accidental later in Jan. and Feb. These included overwintering 12/29-2/19 Washington TEB (and recorded on Afton CBC; same bird?), plus the Winona CBC and 1/20 Le Sueur RG.

#### **Downy Woodpecker**

Reported from 60 counties (51 l.y.) throughout the state. CBC total 1801.

#### **Hairy Woodpecker**

Reported from 55 counties (50 l.y.) throughout



Northern Saw-whet Owl, 9 February 1993, Hennepin Co. Photo by Anthony Hertzell.

the state. CBC total 954.

### **Three-toed Woodpecker**

Six reports (only two l.y.); the most reports since 1985–86. 12/6 Lake (Hwy 1) *fide* KE, 12/12 Roseau (Hwy 310) PS, 12/29 Cook (Sea Gull Lake) *fide* PB, 2/3 Koochiching (near Ray) PS, 2/4 Cook (Lima Mt. Rd.) *fide* KE, and 2/5 Lake (Co. 23) PB.

### **Black-backed Woodpecker**

Thirteen individuals reported from only six counties (twelve inds. from nine counties l.y.), including Roseau PS & SDM, Beltrami (Bemidji CBC *fide* DJo), Koochiching KB, Lake mob, Cook mob, and 2/13 Carlton CM.

### **Northern Flicker**

Reported from 31 counties (22 l.y.). Only north reports were the Duluth and Grand Forks CBCs, and 12/24 Wilkin SDM. The majority of reports (excluding CBCs) were in January, with as many as eight on 1/16 Renville RJ. CBC total 39.

### **Pileated Woodpecker**

Reported from 48 counties (41 l.y.) throughout the state. CBC total 181.

### **Horned Lark**

Reported from 55 counties (45 l.y.) statewide with a Christmas Bird Count total of 571 (675 l.y.). Overwintering noted only in southern regions as far north as Goodhue in the east and Lac Qui Parle in the west. December reports (including CBCs) came from all across the south, additionally reported as far north as Roseau in the west. In January this western component apparently contracted and the species was seen mostly in southern regions, where there was an increase in sightings. Unusual for January were the reports from 1/29 Cook KMH and 1/29 Roseau PS. As usual, by early to mid-February this species had invaded as far north and east as Beltrami and Aitkin, plus 2/7 Cook PKL. Thousands noted in Otter Tail 2/28 SDM.

### **Gray Jay**

Reported from 9 counties (11 l.y.) as far south as Aitkin and as far west as Roseau. CBC total

101.

### **Blue Jay**

Reported from 81 counties (51 l.y.) statewide with a CBC total of 5,084.

### **Black-billed Magpie**

Reported from 12 counties (16 l.y.) mainly in the northwest, but also as far east as St. Louis and as far south as Aitkin and Becker. CBC total 23.

### **American Crow**

Reported from 81 counties throughout the state, even in the far north (overwintering?). CBC total 7,416.

### **Common Raven**

Reported from 23 counties (21 l.y.) in range as far west as Kittson and Polk, and as far south as Pine and Kanabec. Also reported from the south in Anoka JH, Isanti PKL (no date), on Wild River CBC (2), and 1/31 Chisago AB. CBC total 770 (1,281 l.y.).

### **Black-capped Chickadee**

Reported from 81 counties (51 l.y.) statewide with a CBC total of 11,706.

### **Boreal Chickadee**

Reported from eight counties (five l.y.) including Roseau, Lake of the Woods, Beltrami, Koochiching, St. Louis, Lake,



**Carolina Wren, January 1993, Millville, Wabasha County. Photo by Beryl Nass.**

Cook, and Aitkin. CBC total 18.

#### **Tufted Titmouse**

Reported from Olmsted mob, Houston EMF, and 2/28 Fillmore AB.

#### **Red-breasted Nuthatch**

Reported from 36 counties (31 l.y.). The only two counties in the west central and southwest regions were Otter Tail and Cottonwood. Although most observers reported them as very scarce, numbers appeared higher in the far north. CBC total 290 (459 l.y.).

#### **White-breasted Nuthatch**

Reported from 64 counties (47 l.y.) statewide with a CBC total of 2,403.

#### **Brown Creeper**

Reported from 33 counties (27 l.y.) in all regions except the far northwest. In the northeast and north central regions, reported as far north as Cook (Grand Marais CBC), 1/2 Lake SW/MS, 2/27 Lake DPV, and 2/27-28 Koochiching KB, although these latter two records may have been early migrants. In the west, reported as far north as Clay, Becker and Otter Tail. CBC total 109.

#### **Carolina Wren**

One report, from December and January Millville, Wabasha Co. BN.

#### **Winter Wren**

Reported overwintering in Hennepin DM et. al (originally found on Excelsior CBC), and Washington TEB (no details), plus 12/20-23 Otter Tail SDM (*The Loon* 65:98-99), 12/16 Houston *fide* PB (no details), and the La Crosse (Minnesota portion) CBC.

#### **Golden-crowned Kinglet**

Numbers up. Reported from 17 counties (8 l.y.) statewide as far north as 12/5 Lake DPV and 12/12 & 1/29 Roseau SSt & PS (2-3 found in Hwy 310 bog for second consecutive Jan.). CBC total 33.

#### **Eastern Bluebird**

Reported overwintering in Houston EMF, Dakota (3) *fide* JD, and Rice (maximum 19 on Faribault CBC) mob. Also reported in the

south from Brown JS, 12/17 Dakota *fide* PB, and the Wabasha and St. Paul NE CBCs. North reports from 12/17 Otter Tail SDM and the Grand Marais CBC.

#### **Townsend's Solitaire**

At least **fifteen** individuals reported (the most ever in winter for Minnesota) (*The Loon* 65:00), mostly along the North Shore. Cook Co. reports included a flock of four on the Croftville Rd. 12/11 KMH, and three were on the Grand Marais CBC including one at Croftville, and two near the Devil Track R. (one of which had been present since mid-Nov.). There were also two additional but unconfirmed reports in Grand Marais *fide* KMH (which would bring the total for the winter to 17 individuals). Reports in St. Louis County include three in Duluth mob, one at French R. mob, one in Ely on 12/12 SSc, and one near Meadowlands 12/21 *fide* KE. Only south reports were 12/20 Wright AB; 1/16 & 1/31 Yellow Medicine RJ, RG & PS; and 2/3 (to end of period) Ramsey KB.



**Varied Thrush, 15 January 1993, Park Rapids, Hubbard County. Photo by Don Wilkins.**

#### **Hermit Thrush**

**Five** reports (one l.y.): Rochester CBC, 12/27-28 Brown JS, 1/16 Yellow Medicine RJ, RG, 1/22 Rice TBo, and 1/21 Hennepin BF.

#### **American Robin**

Reported from 26 counties (25 l.y.) as far

north as Grand Marais CBC, and overwintering in Koochiching and Roseau. Large numbers (50–100+) reported overwintering along the Minnesota River in Brown, Yellow Medicine and Renville, and in some Twin Cities locations.

#### **Varied Thrush**

Eleven individuals reported from 12 counties (apparently the most ever) including overwintering birds in Grand Marais, Cook Co., and Minneapolis/St. Paul, Hennepin/Ramsey Co. mob. Additional reports from 12/20 Otter Tail SDM, until 12/22 Wilkin mob; until 1/5 Duluth, St. Louis Co. *fide* KE; 1/5 Lake *fide* KE; 1/3–7 Mille Lacs mob; 1/10 Olmsted CS, AMP; 1/24 Sherburne RJ, 2/24 Clay LCF, and 2/27 Koochiching KB.

#### **Gray Catbird**

Reported until 12/25 Otter Tail SDM.

#### **Northern Mockingbird**

Reported 2/28 Scott KG et al. (*The Loon* 65:101).

#### **Brown Thrasher**

Reported on the Austin CBC (no details included); and from Tofte, Cook County until 1/3 *fide* PB.

#### **Bohemian Waxwing**

Scarce again. Reported from only 13 counties (14 l.y.). Numbers down in Duluth, but numbers up in Two Harbors and Ely. Large flocks noted 1/16 Roseau (500) SDM, and 2/25 Beltrami (400+) DJo. Only two south reports: 12/28 Carver (2) DM, and 1/26 Washington (60) WL. CBC total 559 (1,437 l.y.).

#### **Cedar Waxwing**

Reported from 35 counties (19 l.y.) statewide. Only seven north reports, all from Dec. and early Jan. CBC total 808 (348 l.y.).

#### **Northern Shrike**

Decreased from last year's good showing, but still widespread. Reported from 52 counties (56 l.y.) throughout the state, with a CBC total of 69 (96 l.y.). Reports distributed evenly among the three months.

#### **European Starling**

Reported from 80 counties (48 l.y.) statewide with a CBC total of 13,590.

#### **Yellow-rumped Warbler**

No less than six reports this season. Reported in Dec. 12/6 Cook KMH, and on the Excelsior, Afton (no details), and Winona CBCs (2 reported but no details given). Jan. reports at a feeder until 1/8 St. Louis *fide* KE, and 1/18 Yellow Medicine KB (away from feeders).

#### **Northern Cardinal**

Reported from 42 counties (37 l.y.) from as far north as 12/1–13 Cook County SOL, Duluth mob, the Crosby (count week) and Long Prairie CBCs, 12/27 Otter Tail SDM, 12/2 Wilkin PS, Becker (no date) BBe, and overwintering in Marshall Co. *fide* KSS. CBC total 1702.

#### **Rufous-sided Towhee**

Only report overwintering at feeder in Winona *fide* CS (no details; recorded on the Winona CBC — same bird?).

#### **American Tree Sparrow**

Numbers up. Reported from 44 counties (31 l.y.) throughout the state as far north as 1/18–2/15 Cook SOL, the Duluth and Baudette CBCs, 12/19 Becker BBe, and 12/16–1/10 Clay LCF. CBC total 4,222. Although some observers reported continued scarcity, others reported abundance, with 1000 reported on the Hastings/Etter CBC.

#### **Field Sparrow**

**Overwintered** at feeder in Eagan, Dakota Co. MO *et al.* (and recorded on the Bloomington CBC count week).

#### **BLACK-THROATED SPARROW**

Third state record seen at Doran, Wilkin Co. feeder until 12/27 FKS, mob (*The Loon* 65:49–50).

#### **Savannah Sparrow**

A tail-less individual at Rice Co. feeder 1/18–2/1 OR *et al.* provided the state's first winter record (*The Loon* 65:95–96).

### **Fox Sparrow**

Reported overwintering in Cook SOL *et al.* and two seen on Rochester CBC.

### **Song Sparrow**

Reported from 16 counties. Overwintered in Cook KMH, the only north report. Most other counties except Lyon and Olmsted were represented by only a single date with all in December and January except 2/12 Rice and 2/28 Houston (possibly early migrants?). CBC total 25.

### **Swamp Sparrow**

Casual in winter. Reported on the Hastings/Etter CBC (details?), 12/22 Dakota County (Black Dog Lake) KB, until 1/9 Hennepin (Purgatory Cr.) SC, and 1/17 Hennepin (Bass Ponds) TT.

### **White-throated Sparrow**

Reported from 14 counties (15 l.y.) mostly from the Twin Cities area southeast, but also Lyon in southwest, and the following north reports: 12/20 Otter Tail SDM, Aitkin PB & WN, and the Duluth and Grand Marais CBCs. CBC total 30 including 16 on the Rochester CBC.

### **White-crowned Sparrow**

Reported on Faribault CBC (no details); only casual in winter.

### **Harris' Sparrow**

Reported overwintering at a feeder in Waterville, Le Sueur County (including on CBC) mob; and in Hanley Falls, Yellow Medicine Co. HK. Also reported on the Lac Qui Parle, Cottonwood, Lamberton and Fairmont CBCs.

### **Dark-eyed Junco**

Numbers about average. Reported from 54 counties (46 l.y.) statewide as far north as the border in Cook mob (overwintering), 2/20 Beltrami PKL, 2/27 Koochiching KB, and the Warren and Roseau CBCs. CBC total 3,838 (2,369 l.y.).

### **Lapland Longspur**

Very scarce despite mild Dec. weather and record number of Snow Buntings. Reported

from only nine counties (the lowest in over ten years; 19 l.y.) including Lyon and Murray (no dates, overwintering?), 1/1 Freeborn RJ, 1/1 Rice County mob, 1/3 Dakota and Ramsey AB, and 1/18 Lac Qui Parle KB. Also reported on the Lamberton, Mountain Lake, Marshall and Warren (only north report) CBCs. No report of returning migrants in February except possibly 2/28 Dakota/Goodhue JD (only February report). CBC total 152 (45 l.y.).

### **Snow Bunting**

Very widespread. Reported from 64 counties (apparently a record; only 35 l.y.) statewide with a CBC total of 7,678 (5,111 l.y.). High numbers (over 1,000) on Mountain Lake and Baudette CBCs.

### **Red-winged Blackbird**

Reported from 22 counties (17 l.y.) statewide, with north reports from Grand Marais, Crosby, Tamarac NWR and Fargo/Moorhead CBCs, plus 1/18 Lake of the Woods SDM. Large numbers were reported on the Marshall CBC (342), 2/1 Dakota (300) fide PB, and 2/28 Scott (250) RG (early migrants). CBC total 566 (99 l.y.).

### **Meadowlark, sp.**

Ten reports (two l.y.), perhaps the most ever: 12/2 Otter Tail (two "Westerns") RG, 12/16 Wilkin ("Western") SDM, 12/20 Dodge PKL, 12/21 Winona PS, until 12/22 St. Louis KE, 1/5 Mower (three "Eastern") RRR, 1/22 Le Sueur ("Western") RG, 2/1 Rock (two "Westerns") ND, and 2/24 Watonwan ("Western") BBo. Also reported on the Lamberton CBC. None of these reports had details adequate enough for specific identification.

### **Yellow-headed Blackbird**

Reported 12/2 Otter Tail RG (no details), and 1/21 Rice FKS.

### **Rusty Blackbird**

Reported from 15 counties (nine l.y.). Overwintered in Otter Tail SDM, and probably Hennepin mob. More widely reported on CBCs but the only north reports were from Baudette and Duluth.

### **Brewer's Blackbird**

Reported on the Baudette CBC for the second year in a row.

### **Common Grackle**

Reported from 31 counties (31 l.y.) statewide as far north as Cook SOL, St. Louis mob, Otter Tail SDM, Becker BBe, and Pennington KSS; overwintering was reported from all these locations except Cook where it remained until 1/1. CBC total 148 (99 l.y.).

### **Brown-headed Cowbird**

Only reports with details were on the La Crosse (Minnesota portion) CBC (2), 1/26 Rice FKS, and 1/29 Dakota MO.

### **Northern Oriole**

One remained at Duluth feeders until 12/1 *vide* KE.

### **Pine Grosbeak**

Reported from 12 counties (16 l.y.) in northern regions as far south as Carlton and Aitkin, and as far west as Becker and Roseau, with a CBC total of 489 (1,659 l.y.). No south reports for second year in a row, but normal numbers reported in far north.

### **Purple Finch**

Numbers about average. Reported from 38 counties (35 l.y.) statewide with a CBC total of 365 (275 l.y.). Far north reports included the Duluth, Bemidji, Crookston, and East Grand Forks CBCs, plus 1/16 Lake of the Woods, 2/3 Koochiching, and 2/11 Polk — all PS.

### **House Finch**

Numbers much higher than previous. Reported from 36 counties (19 l.y.) as far north as Hoyt Lakes, St. Louis Co. AE; and Thief River Falls, Pennington Co. KSS. CBC total 835 (262 l.y.) with 204 on the Rochester CBC.

### **Red Crossbill**

Only reports from 12/12 & 1/30 Lake SW/MS & *vide* KE, 12/22 & 2/27 St. Louis KE & SSc, the Beltrami Island CBC, and 1/27 Hennepin (4) SC (only south report). CBC total one (three l.y.).

### **White-winged Crossbill**

Twelve reports from seven counties in far north along border from Cook to Roseau, plus 12/16 Otter Tail SDM. Reported as very scarce, with no CBC reports, but large numbers seen in the spruce bogs of Koochiching Co. in late Feb. KB.

### **Common Redpoll**

Downside of two-year cycle. Reported from only 21 counties (44 l.y.). Very scarce even in the north, with none in Duluth all winter, but noted as abundant in Koochiching in late February. Apparently none overwintered in the south since all 7 southern counties reporting were represented by only one or two dates. CBC total 644 (13,092 l.y.). No Hoarys reported.

### **Pine Siskin**

Numbers up. Reported from 40 counties (29 l.y.) statewide with high numbers noted in the north. Many feeders in far north had 100–200+ individuals, and 1500 were seen 1/16 Roseau SDM in an unharvested sunflower field. CBC total 3,577 (652 l.y.).

### **American Goldfinch**

Widespread and common. Reported from 51 counties (33 l.y.) statewide with reports from all 4 northeast region counties (none l.y.) including overwintering in Ely and Grand Marais. CBC total 3,705 (1,721 l.y.).

### **Evening Grosbeak**

Reported from 17 counties (14 l.y.) as far west as Roseau and Becker, and as far south as the Sherburne NWR and Cedar Creek CBCs, and 1/1 Anoka PKL (only south reports). CBC total 895 (752 l.y.).

### **House Sparrow**

Reported from 84 counties (45 l.y.) statewide, with a CBC total of 25,648.

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**Corrections to The Season:** Delete Northern Hawk Owl 10/5 Aitkin DS (*The Loon* 65:74) and Tundra Swan 11/28 Beltrami DS (*The Loon* 65:67). Change Worm-eating Warbler 10/10 to 10/1 Washington DS (*The Loon* 65:80).

SPECIES	Alfon	Albert Lea	Aurora	Austin	Baudette	Beltrami Island	Bemidji	Bloomington	Carlton-Cloquet	Cedar Creek Bog	Coltonwood	Crookston	Crosby	Detroit Lakes	Duluth	Excelsior	Fairmont	Fargo-Moorhead	Faribault	Fergus Falls	G. Forks/E. G. Forks	Grand Marais	Grand Rapids	Hastings-Eter	Hibbing	
Pied-billed Grebe	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	
Red-necked Grebe	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Am. White Pelican	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Great Blue Heron	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	
Trumpeter Swan	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Tundra Swan	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	
Snow Goose	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Canada Goose	171	0	0	179	0	0	1	3733	0	1	0	0	3	7	0	2700	4025	0	282	6017	0	0	0	308	0	
Wood Duck	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	
Green-winged Teal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	
Am. Black Duck	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	53	0	2	0	
Mallard	264	640	0	491	0	0	12	4343	0	74	0	0	3	0	69	1955	160	0	271	394	2	331	129	310	0	
Gadwall	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	
Am. Wigeon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	
Redhead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	
Ring-necked Duck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	
Lesser Scaup	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Scaup sp?	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	
Harlequin Duck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	
Oldsquaw	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	282	0	0	0	
Surf Scoter	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	
Common Goldeneye	31	0	10	0	0	0	1	6	5	0	0	0	0	0	51	1	1	0	0	77	0	48	0	13	0	
Bufflehead	0	0	0	0	0	1	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	6	0	0	0	
Hooded Merganser	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Common Merganser	0	0	0	0	0	0	52	0	0	0	0	0	0	12	0	0	0	0	0	0	1	0	0	0	0	
Red-br. Merganser	0	1	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	
Ruddy Duck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	
Turkey Vulture	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	
Bald Eagle	12	0	1	7	0	0	5	4	0	1	1	0	3	0	0	21	11	0	0	12	2	0	6	5	3	0
Northern Harrier	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Sharp-sh. Hawk	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	
Cooper's Hawk	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	
Northern Goshawk	0	0	1	2	0	1	0	0	0	1	0	3	1	1	0	0	0	0	0	0	1	1	1	0	0	
Accipiter sp?	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	
Red-shldr. Hawk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Red-tailed Hawk	9	2	0	9	0	0	17	0	3	1	0	0	0	0	3	11	0	0	19	0	0	0	0	8	0	
Rough-legged Hawk	0	0	0	0	0	1	0	1	0	0	0	0	2	0	0	0	0	0	2	0	0	0	0	2	0	
Buteo sp?	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Golden Eagle	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	
American Kestrel	2	1	0	3	0	0	5	0	0	0	0	0	0	0	0	4	0	0	4	1	1	0	0	11	0	
Merlin	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	
Peregrine Falcon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Large falcon sp?	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Gray Partridge	0	15	0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	39	0	0	0	0	0	0	0	
R.-neck. Pheasant	8	54	0	26	0	0	11	0	0	0	5	0	1	0	27	0	0	0	1	38	13	0	0	6	0	
Ruffed Grouse	1	0	1	0	0	0	1	0	4	2	0	0	3	0	0	10	0	0	0	0	0	11	5	0	0	
Gr. Prairie Chicken	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Wild Turkey	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	
American Coot	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	36	0	0	8	0	0	0	1	0	0	
Common Snipe	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	
Ring-billed Gull	0	0	0	0	0	0	188	0	0	0	0	0	0	2	12	0	0	0	0	0	0	0	0	0	0	
Herring Gull	0	0	0	0	0	0	252	0	0	0	0	0	0	97	22	0	0	0	0	0	0	203	0	0	0	
Glaucous Gull	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Gr. Blk.-backed Gull	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Gull sp?	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Rock Dove	292	354	56	181	128	0	210	377	44	113	73	131	27	201	2070	128	12	329	372	216	100	7	398	261	12	
Mourning Dove	0	4	0	10	0	0	12	0	0	0	0	0	0	0	7	13	2	1	14	1	0	0	0	5	0	
E. Screech-Owl	0	0	0	8	0	0	2	0	6	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	
Great Horned Owl	0	1	1	11	0	0	1	1	0	0	9	2	0	2	4	5	1	2	0	5	0	0	0	1	1	
Snowy Owl	1	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	
Barred Owl	0	1	0	4	0	0	1	0	0	0	0	0	0	1	0	0	0	1	1	0	1	2	0	0	0	
Great Gray Owl	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Long-eared Owl	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Short-eared Owl	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
N. Saw-whet Owl	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Belted Kingfisher	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	2	0	0	1	2	0	0	0	0	0	
Red-head. Woodpecker	0	0	0	10	0	0	0	0	0	4	0	0	1	0	0	0	0	0	2	0	0	0	0	0	0	

1992 Christmas Bird Count totals.

SPECIES	LaCrosse/LaCrescent														Species Totals										
	Isabella	Lac Qui Parle	Lamberton	Long Prairie	Mankato	Marshall	Minneapolis North	Mt. Lake/Window	Owatonna	Rochester	Roseau	Sax-Zim	Sherburne NWR	St. Cloud		St. Paul	St. Paul NE Suburban	Tamarac NWR	Wabasha	Warren	Waterville	Wild River	Willmar	Winona	
Pied-billed Grebe	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
Red-necked Grebe	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Am. White Pelican	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
Great Blue Heron	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	
Trumpeter Swan	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	2	0	0	0	0	2	0	0	19	
Tundra Swan	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	87	88	
Snow Goose	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
Canada Goose	0	3000	0	0	1218	643	3013	0	893	15200	0	0	0	1659	1649	163	0	40	0	0	0	18	28	71951	
Wood Duck	0	0	0	0	0	1	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	14	
Green-winged Teal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	
Am. Black Duck	0	0	0	0	1	0	1	0	2	0	0	0	1	6	11	0	8	0	0	0	0	0	0	21	110
Mallard	0	13	593	0	247	0	1792	0	216	313	0	0	644	3470	668	0	41	0	123	1	51	588	18208		
Gadwall	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	
Am. Wigeon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	
Redhead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
Ring-necked Duck	0	0	5	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	9	
Lesser Scaup	0	0	2	0	2	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	7	
Scaup sp?	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
Harlequin Duck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
Oldsquaw	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	284	
Surf Scoter	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
Common Goldeneye	15	0	0	0	0	0	110	0	44	0	0	14	79	160	0	0	0	0	0	0	0	1	667		
Bufflehead	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	13	
Hooded Merganser	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	1	4	
Common Merganser	0	0	62	0	0	0	6	0	1	0	0	1	80	0	0	0	0	0	0	0	0	0	519	736	
Red-br. Merganser	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	
Ruddy Duck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
Turkey Vulture	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
Bald Eagle	0	31	60	0	3	1	5	0	3	0	4	2	4	1	4	4	8	0	18	1	96	217			
Northern Harrier	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
Sharp-sh. Hawk	0	0	0	0	0	1	1	0	2	0	0	0	1	2	0	0	0	0	0	0	0	0	0	12	
Cooper's Hawk	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	2	0	0	9	
Northern Goshawk	0	1	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	0	0	0	0	0	0	17	
Accipiter sp?	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
Red-shldrd. Hawk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	
Red-tailed Hawk	0	1	40	0	12	0	3	0	5	26	0	2	9	26	0	20	0	4	6	1	11	249			
Rough-legged Hawk	0	0	0	0	0	0	0	0	2	0	1	0	1	2	0	1	0	0	2	1	4	22			
Buteo sp?	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	
Golden Eagle	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2	5	
American Kestrel	0	1	8	1	0	1	0	1	1	3	0	2	0	7	2	0	2	0	1	0	5	67			
Merlin	0	0	0	0	0	0	0	0	0	1	0	0	2	0	0	0	0	0	0	0	0	0	0	5	
Peregrine Falcon	0	0	0	0	0	0	0	0	2	0	0	0	2	1	0	0	0	0	0	0	0	0	0	5	
Large falcon sp?	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
Gray Partridge	0	16	0	0	0	0	0	4	6	0	0	0	0	0	0	3	0	0	0	0	0	0	0	95	
R.-neck. Pheasant	0	66	0	40	4	0	138	2	37	22	22	0	9	6	50	0	0	28	3	23	0	640			
Ruffed Grouse	0	0	0	0	0	0	0	0	2	0	0	2	0	2	2	1	0	0	0	0	2	49			
Gr. Prairie-Chicken	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	
Wild Turkey	0	0	8	0	0	0	0	0	57	0	0	0	0	0	0	0	0	0	0	0	0	69	142		
American Coot	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	47	
Common Snipe	0	0	0	0	0	0	0	0	0	0	0	0	2	4	0	0	0	0	0	0	0	0	0	7	
Ring-billed Gull	0	0	1	0	0	0	0	0	0	0	0	0	19	0	0	0	0	0	0	0	0	0	0	222	
Herring Gull	0	0	87	0	0	0	0	0	2	0	0	0	11	0	0	0	0	0	0	0	0	0	216	890	
Glaucous Gull	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Gr. Blk.-backed Gull	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Gull sp?	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	
Rock Dove	0	100	365	65	56	154	234	95	25	247	517	12	1	195	858	6352	156	0	119	91	44	80	29	192	16079
Mourning Dove	0	0	92	3	0	9	0	2	0	1	24	0	0	3	0	22	54	0	19	0	9	18	0	9	334
E. Screech-Owl	0	2	4	0	0	0	2	1	0	0	3	0	0	1	0	0	0	0	0	0	0	0	0	0	31
Great Horned Owl	0	10	12	3	2	0	2	2	5	1	4	0	0	2	4	18	1	0	1	0	0	0	0	0	114
Snowy Owl	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Barred Owl	0	0	0	0	0	0	0	1	0	0	1	0	0	0	2	1	0	0	0	0	0	0	1	18	
Great Gray Owl	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Long-eared Owl	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Short-eared Owl	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
N. Saw-whet Owl	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
Belted Kingfisher	0	0	0	1	0	0	1	0	0	2	0	0	1	0	1	0	0	0	0	0	0	0	1	14	
Red-head. Woodp.	0	0	0	0	3	0	0	0	7	5	0	0	6	0	0	9	0	1	0	0	1	0	1	52	

1992 Christmas Bird Count totals, continued.

SPECIES	Afton	Albert Lea	Aurora	Austin	Baudette	Beltrami Island	Bemidji	Bloomington	Carlton-Cloquet	Cedar Creek Bog	Cottonwood	Crookston	Crosby	Detroit Lakes	Duluth	Excelsior	Fairmont	Fargo-Moorhead	Faribault	Fergus Falls	G. Forks/E. G. Forks	Grand Marais	Grand Rapids	Hastings-Ester	Hibbing	
Red-bell. Woodpecker	12	9	0	19	0	0	0	11	0	5	19	0	8	8	0	31	5	0	15	2	0	0	0	10	0	
Y.-bellied Sapsucker	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Downy Woodpecker	31	30	13	11	10	0	9	80	3	17	24	9	34	44	124	94	14	9	74	33	3	213	4	25	13	
Hairy Woodpecker	12	20	11	0	18	cw	11	34	6	6	26	13	36	25	40	38	5	6	21	20	9	83	7	7	11	
Blk-back. Woodpecker	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	
Northern Flicker	1	0	0	0	0	0	0	1	0	5	0	0	0	0	1	1	1	0	2	0	0	1	0	0	1	0
Pileated Woodpecker	cw	0	1	0	4	0	3	10	1	4	3	1	14	13	11	3	0	2	3	6	1	3	3	1	7	
Horned Lark	0	206	0	8	0	0	0	0	0	0	0	2	0	0	0	0	10	0	3	1	0	0	0	0	0	
Gray Jay	0	0	10	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	38	4	0	8	
Blue Jay	106	128	65	168	19	0	89	166	11	245	21	10	162	84	45	245	40	13	157	90	1	134	37	120	32	
Black-billed Magpie	0	0	0	0	13	0	0	0	0	0	0	5	0	cw	0	0	0	0	0	0	0	0	0	0	0	
American Crow	126	142	0	161	2	0	29	605	21	124	48	8	51	11	110	689	47	89	556	88	39	19	15	66	3	
Common Raven	0	0	135	0	37	11	8	0	11	1	0	0	1	0	102	0	0	0	0	0	0	118	81	0	2	
Blk.-capped Chickadee	134	83	488	204	125	10	419	349	84	235	135	19	536	213	1307	526	40	32	179	195	17	803	320	158	170	
Boreal Chickadee	0	0	1	0	0	6	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	5	0	0	0	
Tufted Titmouse	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Red-br. Nuthatch	8	3	45	1	3	4	1	3	1	9	0	0	1	0	19	0	0	0	4	0	0	21	8	3	19	
White-br. Nuthatch	48	35	12	86	13	0	65	84	5	50	44	10	62	120	59	160	20	26	68	61	9	13	34	47	32	
Brown Creeper	0	7	0	1	0	0	0	5	0	11	7	0	1	1	2	3	2	0	1	1	0	2	0	0	0	
Winter Wren	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	
Golden-cr. Kinglet	0	0	0	0	0	0	0	0	0	2	0	0	1	0	7	3	0	0	0	0	0	0	0	0	0	
Eastern Bluebird	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19	cw	0	1	0	0	0	
Townsend's Solitaire	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	3	0	0	0	
Hermit Thrush	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
American Robin	53	1	0	4	0	0	7	31	1	0	3	0	0	1	4	13	2	0	0	2	1	2	0	0	1	
Varied Thrush	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	1	0	0	0	
Gray Catbird	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	
Brown Thrasher	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Water Pipit	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Bohemian Waxwing	0	0	15	0	24	0	26	0	0	0	0	0	17	0	347	0	0	0	0	0	0	105	0	0	25	
Cedar Waxwing	14	0	0	5	0	0	91	71	0	0	0	1	12	15	cw	49	0	8	0	0	0	0	0	0	0	
Northern Shrike	0	0	1	1	0	0	0	1	2	3	4	0	1	1	4	3	cw	0	cw	3	0	1	2	1	1	
European Starling	124	139	31	180	27	0	38	885	5	2	64	247	117	37	909	1160	118	44	2566	418	128	58	225	304	59	
Yell.-rump. Warbler	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Northern Cardinal	61	25	0	34	0	0	0	121	0	16	7	0	cw	1	2	190	5	0	59	0	0	0	0	31	0	
Rufous-sided Towhee	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Am. Tree Sparrow	23	120	0	174	1	0	0	62	0	63	173	0	0	5	1	130	19	0	176	2	0	0	0	1000	0	
Field Sparrow	0	0	0	0	0	0	0	cw	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Fox Sparrow	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	
Song Sparrow	0	0	0	6	0	0	0	0	0	0	3	0	0	0	0	1	0	0	5	0	0	1	0	0	0	
Swamp Sparrow	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	
White-thr. Sparrow	0	0	0	2	0	0	0	0	0	0	0	0	0	0	3	3	0	0	1	0	0	2	0	1	0	
White-cr. Sparrow	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	
Harris' Sparrow	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	
Dark-eyed Junco	84	186	0	185	0	0	1	98	0	23	56	2	cw	15	8	132	44	14	202	5	3	26	0	182	0	
Lapland Longspur	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Snow Bunting	0	593	0	378	1639	0	210	0	48	0	2	240	370	283	2	0	2	97	206	707	156	0	133	0	50	
Red-winged Blackbird	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	25	40	8	22	0	0	1	0	0	0	
Meadowlark sp?	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	
Rusty Blackbird	0	6	0	1	0	0	0	0	0	1	0	0	0	0	1	0	9	0	1	3	0	0	0	0	0	
Brewer's Blackbird	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Common Grackle	0	11	2	2	0	0	0	4	1	0	4	0	9	0	3	2	3	0	0	2	0	3	0	2	1	
Brown-head. Cowbird	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Blackbird sp?	0	0	0	0	0	0	0	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pine Grosbeak	0	0	96	0	19	22	49	0	0	0	0	0	0	0	7	0	0	0	0	0	0	119	5	0	19	
Purple Finch	15	0	0	0	0	0	2	13	0	6	1	7	0	7	4	1	27	0	17	6	2	0	0	7	0	
House Finch	0	20	0	4	0	0	0	91	0	0	0	0	2	30	2	51	1	1	33	56	0	0	0	26	0	
Red Crossbill	0	0	0	0	0	1	0	0	0	0	0	0	0	0	cw	0	0	0	0	0	0	0	0	0	0	
Crossbill sp?	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Common Redpoll	0	1	82	0	103	9	57	0	2	0	0	0	1	8	0	0	0	0	8	0	0	34	0	0	13	
Pine Siskin	13	0	660	0	325	219	70	2	cw	63	0	2	128	67	24	40	5	241	76	29	6	91	53	0	178	
American Goldfinch	91	82	8	73	0	0	61	185	79	49	13	8	93	51	117	195	20	6	188	23	0	4	16	44	26	
Evening Grosbeak	0	0	152	0	103	0	0	0	7	24	0	0	55	0	106	0	0	0	0	0	0	124	22	0	52	
House Sparrow	251	1128	50	988	21	0	140	995	5	374	455	1140	260	702	576	1184	80	737	837	1107	1140	39	60	701	12	

Total Individuals 2013 4053 1949 3696 2639 285 1622 12942 347 1536 1211 1874 2020 1955 6314 9916 4761 1706 6530 9608 1621 3022 1569 3678 747

### 1992 Christmas Bird Count totals, continued.

SPECIES	Lac Qui Parle																								Species Totals	
	Isabella	Lac Qui Parle	LaCrosse/LaCrescent	Lamberton	Long Prairie	Mankato	Marshall	Minneapolis North	Mt. Lake/Window	Owatonna	Rochester	Roseau	Sax-Zim	Sherburne NWR	St. Cloud	St. Paul	St. Paul NE Suburban	Tamarac NWR	Wabasha	Warren	Waterville	Wild River	Willmar	Winona		
Red-bell. Woodp.	0	3	48	2	11	17	7	12	1	11	46	0	0	20	2	9	55	0	18	0	5	19	13	27	478	
Y.-bellied Sapsucker	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	53	
Downy Woodpecker	40	19	71	21	13	30	5	39	22	39	101	2	4	51	6	58	128	18	22	16	19	77	37	42	1801	
Hairy Woodpecker	11	19	32	14	13	14	14	19	7	22	47	4	11	14	5	36	76	17	22	10	8	30	12	32	954	
Blk-back. Woodp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
Northern Flicker	0	2	4	0	0	6	1	0	0	0	4	0	0	0	1	2	1	0	1	0	0	0	0	3	39	
Pileated Woodpecker	0	1	7	0	4	0	1	3	0	2	5	2	2	4	1	5	18	6	2	1	3	6	12	2	181	
Horned Lark	0	24	0	9	0	0	49	0	82	5	56	0	0	0	0	2	0	3	0	46	20	0	45	571		
Gray Jay	26	0	0	0	0	0	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0	101	
Blue Jay	32	24	244	21	73	55	36	114	28	111	345	15	20	541	41	111	545	146	59	22	30	137	41	105	5084	
Black-billed Magpie	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	523	
American Crow	0	36	472	76	51	356	165	189	88	249	486	0	0	152	22	779	666	1	84	8	41	257	88	101	7416	
Common Raven	42	0	0	0	0	0	0	0	0	0	17	195	0	0	0	0	7	0	0	0	2	0	0	0	770	
B.-capped Chickadee	191	40	457	84	68	109	112	263	48	157	307	15	357	425	55	331	945	259	89	41	32	295	128	117	11706	
Boreal Chickadee	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	10	0	0	0	28	
Tufted Titmouse	0	0	0	0	0	0	0	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3	
Red-br. Nuthatch	36	0	7	0	0	1	0	2	0	0	5	0	34	7	0	5	15	6	4	0	0	9	0	6	290	
White-br. Nuthatch	1	17	127	25	24	44	34	44	22	76	105	6	2	67	34	74	227	72	28	14	12	86	46	53	2403	
Brown Creeper	2	1	5	3	0	2	7	3	0	2	14	0	0	1	0	3	13	1	0	0	0	5	3	109		
Winter Wren	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	
Golden-cr. Kinglet	0	0	0	0	0	0	7	2	0	0	4	0	0	0	0	6	0	0	0	0	0	0	0	1	33	
Eastern Bluebird	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	2	0	0	0	0	0	0	25	
Townsend's Solitaire	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	
Hermit Thrush	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
American Robin	0	2	197	0	0	3	0	0	0	1	0	0	1	0	54	67	0	1	0	0	4	38	494			
Varied Thrush	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	
Gray Catbird	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
Brown Thrasher	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
Water Pipit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
Bohemian Waxwing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	559	
Cedar Waxwing	0	12	0	32	0	31	10	20	0	0	24	0	0	55	2	59	123	4	0	0	52	67	51	808		
Northern Shrike	0	5	0	3	2	0	1	1	1	1	3	0	4	7	1	0	6	2	0	0	3	0	0	0	69	
European Starling	0	421	506	63	11	563	139	250	97	302	619	21	12	6	134	1749	238	0	150	13	13	140	56	202	13590	
Yell.-rump. Warbler	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	4
Northern Cardinal	0	6	257	12	2	45	6	37	0	49	125	0	0	12	2	71	249	0	89	1	7	44	19	117	1702	
Rufous-sided Towhee	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	
Am. Tree Sparrow	0	130	159	364	8	38	290	4	194	42	209	0	0	180	0	13	140	0	163	0	220	20	0	99	4222	
Field Sparrow	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Fox Sparrow	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	3	
Song Sparrow	0	0	3	3	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	25	
Swamp Sparrow	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
White-thr. Sparrow	0	0	0	0	0	0	1	0	0	1	16	0	0	0	0	0	0	0	0	0	0	0	0	0	30	
White-cr. Sparrow	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	
Harris' Sparrow	0	2	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	
Dark-eyed Junco	0	46	374	93	3	122	57	40	67	148	340	0	0	166	8	98	291	8	261	11	59	81	45	254	3838	
Lapland Longspur	0	0	0	30	0	0	30	0	57	0	0	0	0	0	0	0	0	0	35	0	0	0	0	0	152	
Snow Bunting	0	0	0	13	143	15	0	60	1038	793	20	206	0	0	0	40	0	0	22	147	40	25	0	7678		
Red-winged Blackbird	0	0	92	3	0	0	342	0	0	3	0	0	0	0	1	0	1	12	0	2	0	0	6	566		
Meadowlark sp?	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
Rusty Blackbird	0	0	0	4	0	0	6	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	33	
Brewer's Blackbird	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
Common Grackle	0	0	34	2	0	13	0	0	1	11	2	0	0	3	0	2	0	2	0	0	0	17	12	148		
Brown-head. Cowbird	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	
Blackbird sp?	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	
Pine Grosbeak	87	0	0	0	0	0	0	0	0	16	49	0	0	0	0	1	0	0	0	0	0	0	0	0	489	
Purple Finch	0	0	31	0	9	7	0	6	37	11	11	0	0	15	0	33	5	9	0	50	14	12	365			
House Finch	0	10	0	4	3	10	52	20	6	64	204	0	0	1	6	88	29	0	0	5	0	5	11	835		
Red Crossbill	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
Crossbill sp?	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	
Common Redpoll	68	0	0	0	0	0	0	0	0	0	1	205	3	0	0	15	7	0	26	0	0	0	0	0	644	
Pine Siskin	4	128	19	0	2	7	10	28	0	4	40	323	69	20	0	32	43	414	6	97	0	33	0	6	3577	
American Goldfinch	6	10	197	101	82	30	27	43	23	121	150	0	59	183	23	125	432	19	133	18	53	229	71	138	3705	
Evening Grosbeak	30	0	0	0	0	0	0	0	0	0	60	41	10	0	0	0	109	0	0	0	0	0	0	0	895	
House Sparrow	0	476	967	536	255	1046	787	489	760	927	987	22	60	299	186	1639	693	60	314	668	302	362	94	737	25648	
Total Individuals	615	1677	5653	1635	845	4213	3219	6727	2653	4544	20529	722	1146	2470	3711	17127	6524	1174	1738	1099	1213	2134	926	4082	183867	

## 1992 Christmas Bird Count totals, continued.

Fall 1993

## Contributors to the Seasonal Report

PB	Parker Backstrom	OJ	Oscar L. Johnson
KB	Karl Bardon	BK	Byron Kinkade
TEB	Tom & Elizabeth Bell	RRK	Ron & Rose Kneesern
BBe	Betsy Beneke	HK	Henry C. Kyllingstad
TBe	Tom Bennett	PKL	Pat & Ken La Fond
DBe	Dave Benson	TL	Tim Lamey
TBo	Tom Boevers	WL	William H. Longley
BBo	Brad Bolduan	SOL	Sandy & Orvis Lunke
AB	Al Bolduc	DWM	Don and Wynn Mahle
DBo	Don Bolduc	GM	Grace Marquardt
JB	Jerry Bonkoski	DM	Dennis Martin
TBr	Terry Brashear	CM	Craig Menze
RB	Richard Brasket	SDM	Steve & Diane Millard
DC	Doug Campbell	BN	Beryl Nass
SC	Steve Carlson	DN	Dave Neitzel
PC	Pat Colon	WN	Warren Nelson
JD	Jeff Daines	MO	Mark Otnes
TD	Tim Dawson	AMP	Anne Marie Plunkett
ND	Nelvina DeKam	JR	Joanie Robinson
CR/CD	C. Rowan and Chris N. DeBold	OR	Orwin A. Rustad
ED	Ed Duerksen	CS/KC	Carol F. Schmidt/Kim Claypool
KE	Kim Eckert	SSc	Steven Schon
FE	Fred Eckhardt	CS	Carol Schumacher
AE	Audrey L. Evers	DS	Drew Smith
LCF	Laurence and Carol Falk	TS	Tom C. Sobolik
BF	Bruce A. Fall	JS	Jack Sprenger
LF	Lawrence W. Filter	KSS	Keith & Shelly Steva
HJF	Herbert and Jeanette Fisher	FKS	Forest & Kirsten Strnad
EMF	Eugene and Marilyn Ford	SSt	Steve Stucker
MF	Merrill J. Frydendall	PS	Peder Svingen
RG	Ray Glassel	HT	Howard Towle
KG	Karol Gresser	TT	Tom Tustison
AH	Anthony Hertz	DPV	Dan & Pam Versaw
KMH	Ken and Molly Hoffman	JW	John Wallner
RH	Robert E. Holtz	TW	Terry Wiens
HH	Harlan Hostager	SW/MS	Steve Wilson & Mary Shedd
JH	James L. Howitz	DZ	Dave Zumeta
JCBC	Jackson County Bird Club		
NJ	Nancy A. Jackson	mob	many observers
RJ	Robert Janssen	<i>et al.</i>	and others
DJe	Doug Jenness	l.y.	last year
DJo	Douglas P. Johnson	CBC	Christmas Bird Count

# Breeding Birds of Rice Lake National Wildlife Refuge, Aitkin County

JoAnn M. Hanowski and Gerald J. Niemi

## Introduction

Rice Lake National Wildlife Refuge (NWR) in north central Minnesota (Aitkin County) is located near the southern border of the more contiguous forested area of northern Minnesota. The refuge is approximately 18,000 acres in size of which over 5,300 acres is forested (Figure 1). The refuge is primarily wetlands (35%) and lakes (21%) with a small area of grassland (8%). Breeding bird surveys have been conducted in grassland areas of the refuge, but no quantitative data on breeding birds in forested areas is available. Future management decisions in terms of developing a timber management plan for the refuge would be aided by a more thorough understanding of effects of management activities on wildlife in the refuge, and in particular effects on forest birds.

The purpose of our studies was to identify bird species and their relative abundance in forested habitats of the refuge; specifically to: (1) determine the distribution, relative abundance, and species composition of birds in forested habitats of the Rice Lake NWR; (2) begin refining avian/habitat relationships so that they can be used to aid forest management activities; and (3) determine differences in bird community composition between fragmented and unfragmented forest areas of the refuge.

## Study Area and Methods

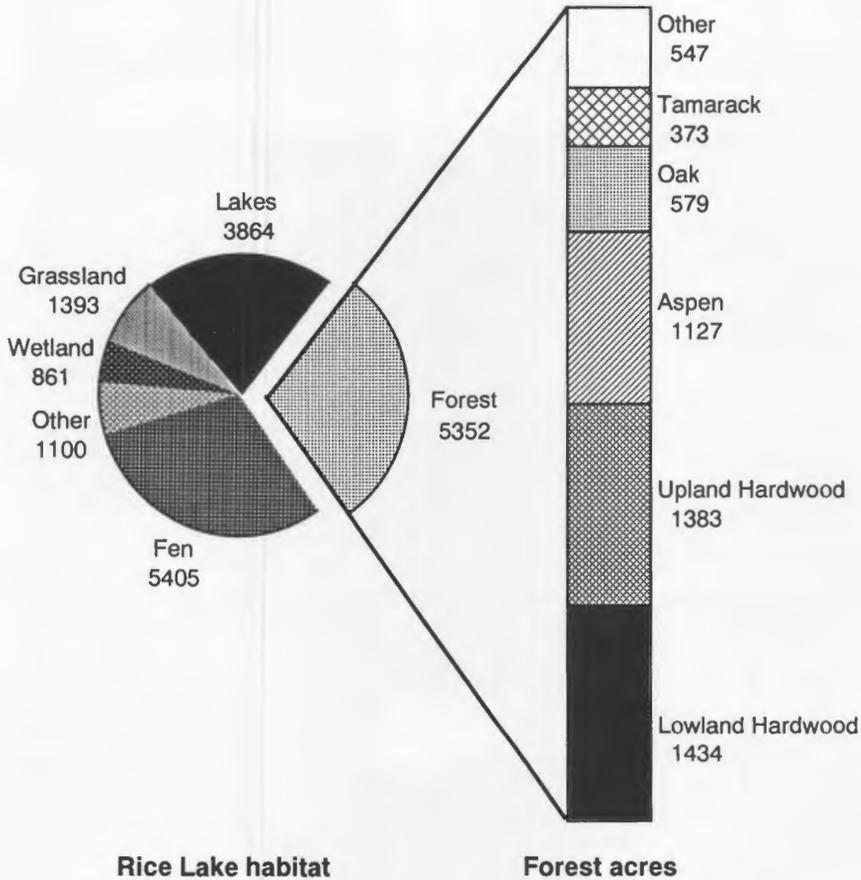
We focused our studies on birds of forested habitats on the Rice Lake NWR. Of the 5300 acres of forested habitats, approximately 27% are classified as upland hardwoods, 26% lowland hardwoods, and 21% aspen. The remaining forest types are oak (11%), tamarack (7%), and others (including black spruce, cedar, and balsam fir). The forested area can be generally divided into three types: (1) a large block of forest in the southeast corner of the refuge that can be regarded as forest interior

habitat; (2) smaller stands of forest (fragmented timber stands) in the west and southwest area of the refuge; and (3) bog islands located in the northern portion of the refuge (Figure 1).

We have developed methodology (Hanowski and Niemi in press) for a regional, habitat specific monitoring program and have established programs in three national forests in the Great Lakes area (Chippewa, Superior, and Chequamegon). In general, study areas are selected by a proportional random stratified design in which habitat types are sampled in the proportion that they are present.

We followed the same guidelines in selecting study areas for monitoring in Rice Lake NWR with some exceptions. The major difficulty in adhering strictly to the guidelines previously established was that habitat patches in the refuge were not mapped in the same fashion as those in national forests. Instead of using the more strict study area selection criteria, we selected study areas to address the main questions of interest. We first identified the three areas of interest (e.g., fragmented, unfragmented, and bog islands) and considered each area separately for selection as study areas. The bog islands did not meet the size criteria (most were < 40 acres) and because they were of lowest priority for monitoring (e.g., generally not harvested) they were dropped from the selection process. The first step in selecting stands to sample from the other two areas was to map habitat patches based on recent air photos and USGS topographical maps. Stands identified from this process were then randomly selected for sampling.

A total of 32 stands were identified (96 points) for sampling. Twenty stands were located in the fragmented areas of the refuge and 12 stands in the unfragmented forest area. Fragmented stands were in forested areas that were between 40 and 160 acres while



**Figure 1. Proportion of total acres of Rice Lake NWR in habitat types (left) and number of acres of each forest type (right).**

unfragmented stands were in the forested area of > 320 acres. The final number of points sampled within habitat types closely approximated the proportions of habitat present (e.g., 72 in upland deciduous; 18 in conifer; 6 in lowland deciduous). The one exception was the lower number of points within lowland deciduous habitat in comparison with the proportion of that habitat type on the refuge. This type was not readily accessible by roads.

All stands were located and census points were marked on aerial photos. Each stand was visited prior to censusing to permanently mark locations and routes of travel between points. We conducted one bird census (10 minutes in duration) at each point during the first week in

June 1992 using the point-count method (Reynolds et al. 1980). Points were censused once because we wanted to replicate points rather than replicate censuses. Statistically this is a more efficient use of resources (e.g., people power, travel, etc.) when a relatively large number of points needs to be sampled. Point counts are adequate for determining relative abundance of singing passerine species, but is inadequate for raptors and waterfowl species. Due to the timing of the census, the method also probably underestimates relative densities of early nesting species (e.g., many permanent residents including woodpeckers and chickadees).

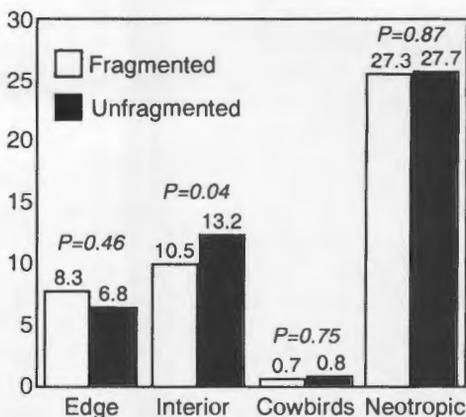
Two trained observers conducted the cen-

suses which were done from 0.5 hours to 4 hours after sunrise (see Hanowski and Niemi in press). Censuses were conducted only during good weather (e.g., wind < 15 mph and no precipitation). Types of stands censused (forest cover type) were stratified by time of morning. For example, we avoided sampling all lowland conifer stands early or late in the morning. Forest cover types censused were also stratified by observer; each observer sampled relatively the same number of stands in each forest type.

We recorded weather (cloud cover, temperature, and wind speed) and time of day the census was conducted. All birds heard or seen within 100 m from the center point were recorded in a circle with estimates of their distance from the center point.

We identified migration guilds for each species including permanent resident, short-distance migrant, and long-distance migrant. In addition, because we were interested in effects of stand size (e.g., fragmentation) we included a classification for species that are area sensitive. We used our personal data and several literature sources (see Blake et al. 1992 for references) to classify each species to guilds. Our classification system has been developed over the past 8 years with more than 100,000 observations of birds from northern Wisconsin, Minnesota, and Michigan.

Because the major objective of the study was to provide a species list and habitat associations for birds occurring in the Rice Lake NWR, few statistical comparisons were done. The terms higher, lower, more, or less in the results and discussion refer only to empirical observations and standardized values by area. An exception applies to t-tests that were completed to compare birds in fragmented and unfragmented areas within the refuge. T-tests were completed on mean values that were first transformed (when appropriate) to meet assumptions of parametric statistical tests (e.g., normality and homogeneity of variances (see Sokal and Rohlf 1981). In general, mean values presented by habitat group represent the average based on all point counts within that habitat group. Statistical tests (e.g., t-tests) were completed for the total of three points within each stand. A rarefaction procedure was used to standardize the number of species



**Figure 2.** Mean number of pairs/stand of birds classified as edge, forest interior, and long distant migrant species, and number of Brown-headed Cowbirds in fragmented and unfragmented areas of the Rice Lake NWR in June 1992. More forest interior birds were observed in unfragmented than fragmented stands ( $P < 0.05$ ).

observed to a standard unit of area (James and Rathbun 1983). This was done to make relevant comparisons of number of species observed between habitat types within the Unit that had different numbers of acres censused (see Niemi 1987).

## Results

**Bird communities.** A total of 59 species and 1095 individuals were observed on 96 points during censuses in June. The Ovenbird, Red-eyed Vireo, Veery, Least Flycatcher, Eastern Wood Pewee, and Great Crested Flycatcher were recorded on about half of all points. Fifteen species occurred on only one point (Table 1).

Total number of species observed was highest in upland deciduous habitat (49 species) and lowest in upland conifer types (16 species). We observed 22 species in lowland deciduous stands and 32 species in lowland conifer habitats (Table 1). On average, 8.1, 8.7, 8.5 and 7.6 species were recorded/point in upland deciduous, upland conifer, lowland deciduous, and lowland conifer habitat respectively. However, when counts were standardized to the same area by rarefaction, we would

expect to record about the same number of species in all habitat types (range 16.4 in upland deciduous to 17.1 in lowland deciduous).

On average, lowland deciduous habitat had the highest number of individuals/point (13.0) and lowland conifer the lowest number (10.7 individuals/point). Mean number of individuals/point was 11.4 in upland deciduous and 12.0 in upland conifer (Table 1).

Six species, Ovenbird, Least Flycatcher, Great Crested Flycatcher, Black-and-white Warbler, Veery, and Red-eyed Vireo were observed in all four habitat groups within the refuge (Table 1). Twelve species were found only in upland deciduous forests, most were observed only one or two times (Table 1). These species included; Broad-winged Hawk, Ruffed Grouse, Pileated Woodpecker, Eastern Phoebe, American Crow, White-breasted Nuthatch, Winter Wren, Gray Catbird, Yellow-throated Vireo, Black-throated Green Warbler, Canada Warbler, and Indigo Bunting (Table 1). The most abundant species in upland deciduous forest were the Ovenbird, Black-and-white Warbler, Red-eyed Vireo, Least Flycatcher, and Veery (Table 1).

The Red-breasted Nuthatch and Magnolia Warbler were the only species exclusively observed in upland conifer habitat (Table 1). The most abundant species in this type were: Black-and-white Warbler, Ovenbird, Red-eyed Vireo, Veery, and Great Crested Flycatcher (Table 1).

The five most abundant species observed in lowland deciduous habitat were the Red-eyed Vireo, Ovenbird, Common Yellowthroat, Black-and-white Warbler, and Cedar Waxwing. The Sedge Wren was the only species that was exclusively observed in this habitat type (Table 1).

Five species, Common Flicker, Golden-crowned Kinglet, Yellow Warbler, Yellow-rumped Warbler, and Palm Warbler were only found in lowland conifer habitat (area that was sampled) in the refuge (Table 1). The most abundant species were: Nashville Warbler, Golden-crowned Kinglet, Black-and-white Warbler, Common Yellowthroat, and White-throated Sparrow (Table 1).

*Bird guilds.* Permanent resident species were most abundant in lowland deciduous habitat in comparison with other types on the

Refuge. Overall, percentage of individuals within this group was lower than all other migration types in all habitats. Long-distance migrants accounted for the largest proportion of migration groups in all habitat types. More than 75% of all individuals in upland habitats were long-distance migrants. In lowland habitat types, short-distant migrants were more prevalent but were still less common than long-distance migrants.

More (t-test;  $P = 0.037$ ) area sensitive species were observed in the "unfragmented" forest located in the southeast portion of the refuge in comparison to forests that were more "fragmented" (Figure 2). Although more birds that are associated with edges were observed in the fragmented areas, this comparison was not statistically significant (Figure 2). The number of long-distance migrants and Brown-headed Cowbirds were almost equal in fragmented and unfragmented areas of the refuge (Figure 2).

## Discussion

*Bird communities.* Bird community composition within forested areas of the Rice Lake NWR are similar to those found in forested regions of northern Minnesota and Wisconsin. Numbers of individuals within habitat groups in the refuge were within the range reported for the Chippewa, Superior, and Chequamegon National Forests in 1992 (Hanowski and Niemi 1992a, 1992b, 1992c, 1993). Overall species richness is difficult to compare across habitats within the refuge or to other areas in the Great Lakes area because of differences in area (or amount) of each habitat that is sampled.

A comparison of mean number of species observed on a point, however is relevant because all points are about the same size. The number of species observed/point in the refuge was highest for upland conifer types (10/point) and lowest in lowland conifer (8/point). The species richness pattern in the refuge was different from that observed in other Great Lakes national forests. In these areas, species richness is generally highest in lowland habitats and lowest in the upland deciduous types (Hanowski and Niemi 1992a, 1992b, 1992c, 1993). Differences in habitat heterogeneity within forest types and relative composition

of regional forests probably account for these differences between areas.

Overall, almost all species observed in our northern Minnesota and Wisconsin studies were observed in Rice Lake NWR. Exceptions were species that have more northerly distributions or specific habitat requirements. For example, although the refuge is within the range of the Pine Warbler in Minnesota there is not suitable habitat (e.g. large areas of mature pine) for this species in the refuge. Other species, like the Connecticut Warbler, Yellow-bellied Flycatcher, Lincoln's Sparrow, and Swainson's Thrush were not observed within lowland conifer areas of the refuge, but these species presently have a more northerly distribution in the State. Species that were observed in the refuge that have primary distributions to the north were the Northern Waterthrush, Golden-crowned Kinglet, Northern Parula, Magnolia Warbler, Palm Warbler, and Black-throated Blue Warbler. However, with the exception of the Golden-crowned Kinglet most of these species were only observed once or twice and could have been late migrants passing through the area in early June.

*Migration guilds.* Presence and relative proportion of individuals within migration guilds is related to age, structure, and complexity of the habitat. Permanent residents such as woodpeckers and nuthatches require mature trees with large boles for nesting and feeding. Proportion of permanent residents was lowest in lowland conifer primarily because the trees in these habitats are generally too small for excavating cavities. The larger proportion of short-distance migrants in lowland conifer habitats is most likely related to the amount of shrubs present due to the more open nature of the canopy. Many short-distance migrants (e.g., sparrows) require shrubs for nesting. The greatest proportion of individuals within all habitat types were classified as long-distance migrants. We have also found this pattern in other Great Lakes National Forests (Hanowski and Niemi 1992a, 1992b, 1992c, 1993).

*Bird habitat relations.* The most abundant bird found in all upland forested point counts in 1992 was the Ovenbird (Rice Lake, Chequamegon, Superior, Chippewa). The Red-eyed Vireo was also one of the five most

abundant species found in all areas. It was the second most abundant in all the national forests, but the third most abundant in the Rice Lake NWR. The Black-and-white Warbler was the second most abundant in the refuge, but was not one of the five most abundant in any national forest. This species has been reported to be sensitive to forest fragmentation since it is not normally found in forests smaller than 150 acres (Whitcomb et al. 1981). However, the species does occur in smaller woodlots that are close to more extensive forest areas (Galli et al. 1976). The two other most abundant species in the refuge, Least Flycatcher and Veery, were among the five most abundant species in the Chippewa National Forest.

The Nashville Warbler was the most abundant species in lowland conifer habitat types in all areas in 1992 (Chippewa, Chequamegon, Superior, and Rice Lake National Forests). There was less correspondence in the five most abundant species in lowland conifer habitat between areas as there was in the upland deciduous types. For example, the Golden-crowned Kinglet, Black-and-white Warbler, Common Yellowthroat, and White-throated Sparrow were most abundant in the refuge. None of these species were among the five most abundant species in the Superior or Chequamegon National Forests, but two species (White-throated Sparrow and Common Yellowthroat) were two of the five most abundant species in the Chippewa National Forest (Hanowski and Niemi 1992a). These differences may be due to the relative proportion of lowland conifer habitat types (e.g., black spruce, tamarack, mixed swamp conifer) sampled in each forest. For example, the mixed swamp conifer generally includes several lowland deciduous and coniferous tree species. This diversity in tree species generally results in a greater number of bird species that are associated with deciduous trees being found in these areas.

*Habitat fragmentation.* There is much evidence from eastern United States (Robbins et al. 1989) and central United States (Illinois; Blake and Karr 1984) (Wisconsin; Ambuel and Temple 1983) that some bird species are sensitive to forest fragmentation. That is, some species require large areas of forest to

Species	Upland Deciduous (N=72)		Upland Conifer (N=3)		Lowland Deciduous (N=6)		Lowland Conifer (N=15)		Total (N=96)	
	Mean	SE	Mean	SE	Mean	SE	Mean	SE	Mean	SE
Broad-winged Hawk	0.01	0.01							0.01	0.01
Ruffed Grouse	0.01	0.01							0.01	0.01
Black-billed Cuckoo	0.08	0.03			0.17	0.17			0.07	0.03
Yellow-bellied Sapsucker	0.19	0.05					0.07	0.07	0.16	0.04
Downy Woodpecker	0.04	0.02	0.33	0.33					0.04	0.02
Hairy Woodpecker	0.07	0.03			0.17	0.17	0.07	0.07	0.07	0.03
Northern Flicker							0.07	0.07	0.01	0.01
Pileated Woodpecker	0.07	0.03							0.05	0.02
Eastern Wood-Pewee	0.58	0.07	0.67	0.33	0.50	0.22			0.49	0.06
Alder Flycatcher	0.06	0.06					0.07	0.07	0.05	0.04
Least Flycatcher	0.79	0.11	0.33	0.33	0.83	0.31	0.47	0.13	0.73	0.09
Eastern Phoebe	0.01	0.01							0.01	0.01
Great Crested Flycatcher	0.42	0.07	0.67	0.33	0.67	0.21	0.47	0.17	0.45	0.06
Blue Jay	0.15	0.05			0.50	0.34	0.20	0.11	0.18	0.04
American Crow	0.03	0.03							0.02	0.02
Black-capped Chickadee	0.06	0.03			0.17	0.17	0.07	0.07	0.06	0.02
Red-breasted Nuthatch			0.33	0.33					0.01	0.01
White-breasted Nuthatch	0.03	0.02							0.02	0.01
Brown Creeper	0.01	0.01					0.13	0.09	0.03	0.02
Winter Wren	0.01	0.01							0.01	0.01
Sedge Wren					0.17	0.17			0.01	0.01
Golden-crowned Kinglet							0.53	0.27	0.08	0.05
Veery	0.75	0.08	0.67	0.33	0.67	0.21	0.53	0.17	0.71	0.07
Hermit Thrush	0.10	0.04					0.47	0.19	0.15	0.04
Wood Thrush	0.26	0.07			0.50	0.34			0.23	0.05
American Robin	0.18	0.05			0.33	0.21	0.13	0.09	0.18	0.04
Gray Catbird	0.01	0.01							0.01	0.01
Cedar Waxwing	0.13	0.10			1.33	1.33			0.18	0.11
Yellow-throated Vireo	0.10	0.04							0.07	0.03
Red-eyed Vireo	1.58	0.09	2.00		2.00	0.37	0.40	0.19	1.44	0.09
Golden-winged Warbler	0.04	0.02					0.13	0.09	0.05	0.02
Nashville Warbler	0.33	0.08			0.33	0.33	2.67	0.36	0.69	0.12
Northern Parula	0.06	0.03			0.17	0.17	0.07	0.07	0.06	0.02
Yellow Warbler							0.07	0.07	0.01	0.01
Chestnut-sided Warbler	0.26	0.06	0.33	0.33					0.23	0.05
Magnolia Warbler			0.33	0.33					0.01	0.01
Black-throated Blue Warbler	0.01	0.01	0.33	0.33					0.02	0.01
Yellow-rumped Warbler							0.13	0.09	0.02	0.01
Black-throated Green Warbler	0.10	0.04							0.07	0.03
Blackburnian Warbler	0.04	0.02					0.20	0.11	0.06	0.02
Palm Warbler							0.07	0.07	0.01	0.01
Black-and-white Warbler	0.40	0.06	1.00		0.50	0.22	0.20	0.14	0.40	0.05
American Redstart	0.13	0.04			0.17	0.17	0.07	0.07	0.11	0.04
Ovenbird	2.15	0.10	2.00	0.58	1.83	0.54	0.53	0.17	1.87	0.10
Northern Waterthrush	0.01	0.01			0.33	0.21	0.27	0.15	0.07	0.03
Mourning Warbler	0.36	0.08	0.33	0.33	0.33	0.21			0.30	0.06
Common Yellowthroat	0.38	0.07			0.83	0.40	0.73	0.18	0.45	0.07
Canada Warbler	0.03	0.02							0.02	0.01
Scarlet Tanager	0.33	0.06	0.33	0.33					0.26	0.05
Rose-breasted Grosbeak	0.13	0.04			0.17	0.17	0.13	0.09	0.13	0.04
Indigo Bunting	0.01	0.01							0.01	0.01
Chipping Sparrow	0.04	0.03					0.33	0.13	0.08	0.03
Song Sparrow	0.04	0.02					0.13	0.09	0.05	0.02
Swamp Sparrow	0.01	0.01					0.07	0.07	0.02	0.01
White-throated Sparrow	0.10	0.04	0.33	0.33			0.53	0.13	0.17	0.04
Brown-headed Cowbird	0.26	0.06	0.33	0.33			0.20	0.14	0.24	0.05
Northern Oriole	0.03	0.02							0.02	0.01
Unidentified passerine	0.10	0.04	0.33	0.33					0.08	0.03
Unidentified woodpecker	0.28	0.06	1.00		0.33	0.21	0.33	0.13	0.31	0.05
Individuals/point	11.40	0.30	12.00	0.58	13.00	1.46	10.67	0.61	11.41	0.27
Species/point	8.07	0.24	8.67	1.20	8.50	1.28	7.60	0.40	8.04	0.21

Table 1. Mean and standard error (SE) of birds observed/point in four habitat types (and total) in the Rice Lake National Wildlife Refuge in June 1992.

breed successfully (see Finch 1991). One objective of this study was to compare birds in small forest fragments to an area of rather large contiguous forest located in the southeast corner of the refuge. These areas were assigned to fragmented or unfragmented groups based on information provided by the refuge and by a cursory look at aerial photographs. Fragmented stands were smaller in size and isolated (e.g., surrounded by grassland or wetlands).

The pattern of more edge birds (not significant) in fragmented areas in comparison with unfragmented stands is expected. In parallel, the unfragmented stands had significantly more area-sensitive species than fragmented stands. Numbers of neotropical migrants and Brown-headed Cowbirds, however did not differ between fragmented and unfragmented stands. This is contrary to what has been reported previously in fragmented forests (e.g., Blake and Karr 1984). Again, we feel that these results are preliminary but they do deserve further study. Rice Lake NWR is on the border of the more fragmented forests of Minnesota, and the issue of forest fragmentation in Minnesota in general needs more attention.

Data gathered on relative abundance and habitat association of birds within the Rice Lake NWR in 1992 should be viewed as baseline information and not the definitive list of forest species that occur in the refuge. Bird abundance varies considerably from year to year (Blake et al. 1992) and, therefore, there is some uncertainty in predicting effects of management plans based on one year of monitoring. Because bird communities within the refuge are quite similar to those found in the northern forests of the Great Lakes region, effects of gross habitat changes (e.g., conversion of forest to non-forest) would closely follow those patterns found in other regions (Hanowski and Niemi 1992a, 1992b, 1992c, 1993). More subtle management (e.g., uneven aged management) effects are less predictable because few studies have been completed in Minnesota.

#### Acknowledgments

Funding for this work was provided by Rice Lake National Wildlife Refuge and the Nongame Division of the Minnesota Depart-

ment of Natural Resources. We thank Cal Harth, Rita Hawrot, and Kent Montgomery for completing the bird surveys and Ann Lima for compiling and analyzing the data. Steve Lewis provided helpful comments on an earlier draft. This is contribution number 105 of the Center for Water and the Environment.

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## Proceedings of the Minnesota Ornithological Records Committee

Kim R. Eckert

The following records were voted on January - June 1993 and found to be Acceptable:

- Iceland Gull, 4 December 1992, Lake City, Wabasha County (vote 7-0; *The Loon* 65:97-98).
- Carolina Wren, 6 September 1992, Richfield, Hennepin County (vote 7-0).
- Common Moorhen, 26 June 1992, Zippel Bay State Park, Lake of the Woods

County (vote 5-2; *The Loon* 65:102).

- Great-tailed Grackle, 2-10 April 1993, Wells L., Rice County (vote 10-0; *The Loon* 65:148-150).
- Eurasian Wigeon, 20 April-4 May 1993, Beebe L., Wright County (vote 7-0; *The Loon* 65:154-155).
- Laughing Gull, 22 April 1993, near Hokah, Houston County (vote 7-0; *The Loon* 65:103).

• Clark's Grebe, 1 May 1993, L. Traverse, Traverse County (vote 7-0; *The Loon* 65:151-152).

• Lesser Black-backed Gull, 2 May 1993, near L. George, Anoka County (vote 7-0; *The Loon* 65:153-154).

The following records were voted on January - June 1993 and found to be Unacceptable:

• Northern Wheatear, 26 December 1992, Stillwater, Washington County (vote 0-7). There were several things in the documentation which were inconsistent with this species, including the bird's "slow" movements and its appearance at a bird feeder. It was thought the bird might have been a female Red-breasted Nuthatch, which would fit the description given.

• Curlew Sandpiper, 3 October 1992, Duluth, St. Louis County (vote 0-10). The lengthy documentation was difficult to follow, and it was often unclear if the description was of the bird in question, the other shorebirds with it, or a field guide illustration. While it was agreed the identification might have been correct, no one was convinced that Dunlin or White-rumped Sandpiper was fully eliminated, and it was felt that a first state record should be more clearly described.

• Northern Hawk Owl, 14 December 1992, Jackson, Jackson County (vote 2-5). The description and sketch were mostly consistent with this species, except that it was described as "whiter ... under his tail." This feature alone would preclude a hawk owl, which is barred on its under tail coverts in the same way as the rest of the underparts. It was thought the bird was more probably an Accipiter, most likely a Northern Goshawk, which would match the head pattern and underparts shown in the sketch.

• Eurasian Tree Sparrow, 4 April 1993, Coon Rapids Dam Park, Anoka County (vote 0-7). The brief description included no mention of a black smudge on the ear coverts, and it was felt this record of such

an unusual species could not be acceptable without this key field mark.

• Black-shouldered Kite, 7 May 1993, Bloomington, Hennepin County (vote 0-10). While it was unanimously agreed the identification, based primarily on manner of flight and whitish appearance, may well have been correct, the experienced observer was unable to provide anything more than a vague plumage description of the distant bird in flight. It was felt that a first state record should be documented by a much more thorough description.

• Black-headed Grosbeak, 8-16 May 1993, Pomroy L., Kanabec County (vote 2-5). Since separation of female grosbeaks, which are variable in plumage, is often difficult, a complete and careful description is necessary to document this species. Though the relatively unstreaked and orangish underparts of this bird were noted, its supercilium was described as whiter than those of the Rose-breasted with it, while female Black-headed tend to have buffier superciliums.

• Scott's Oriole, 16 May 1993, Fort Snelling State Park, Hennepin County (vote 0-7). The entire description only included mention of a black head, yellow rump, yellow breast and white wing bars. It was felt that such an unusual species should be documented with a much more thorough description.

• Curlew Sandpiper, 26 May 1993, Medicine L., Hennepin County (vote 1-9). The identification of this standing shorebird was based entirely on its "dark red breast" and "slightly decurved bill." However, other shorebirds have rusty underparts, some of which can have slightly decurved bills. The bird was also described as having a "black crown," which does not fit a Curlew Sandpiper; there was also no mention of a white rump, and it is difficult to accept a record of such an unusual species without this key field mark.

**8255 Congdon Boulevard, Duluth MN 55804.**

# A Minnesota Great-tailed Grackle

Kevin Smith

Who would have ever guessed that doing chores for my neighbor would have generated so much excitement. On Sunday evening, 4 April 1993, during Spring migration, after finishing chores on my neighbor's farm west of Faribault, my wife, Julie, and I heard a loud clacking sound coming from the pond area behind the barn. Upon further investigation, we discovered a bird on top of a post about twenty-five yards away. With the sun at our back and the time approximately 5:00 P.M., we could tell this was not a native Minnesota bird. How could we be certain of this without binoculars? Living just a short distance away, we hurried home, retrieved a pair of 7x35 Tasco binoculars, a pair of 7x35 Bushnell binoculars and a Peterson *Eastern Field Guide*, quickly returned and found the large black bird still sitting on the post. With binoculars in one hand and the field guide in the other, we studied all the characteristics of the bird, listened to all the different sounds it made, and came to the conclusion that it was either a Great-tailed Grackle or a Boat-tailed Grackle. Uncertain of our identification, we called a fellow member of the Rice County Bird Club, Forest Strnad. Forest recommended that we contact the M.O.U. hotline, which we did. That same evening, Ray Glassel, a member of the

M.O.U., drove down from the Twin Cities and confirmed that the bird was a Great-tailed Grackle.

The following morning is when all the excitement began. Before 7:00 A.M., the first of three car loads of visitors arrived. Although they were the only ones to see the Great-tailed Grackle that day, that didn't discourage anyone else from their effort to witness this first sighting of a Great-tailed Grackle in Minnesota. Car load after car load of fellow birders stopped by our home in search of this unusual find. We met people from all parts of Minnesota, and it was a wonderful experience. Everyone was absolutely courteous and considerate of us and our neighbors. We were pleased to announce that the large bird was relocated only a short distance up the road, and was spotted on the following Saturday morning, 10 April 1993. At that time, fellow birders were able to record its various sounds and photograph the bird, but more importantly, many of the first visitors were able to return and add a Great-tailed Grackle to their bird list for Minnesota. I would like to close by saying "Thank you and it was a real joy to meet and visit with all who stopped in, and those who called ahead with questions."

3693 Cannon Lake Trail, Faribault, MN 55021.

## A Minnesota Great-tailed Grackle with Notes on the Species' Range Expansion in the Midwest

Raymond Glassel

On the afternoon of 4 April 1993, I received a call from Forest Strnad of Faribault informing me that Kevin Smith, who lives on Cannon Lake west of town, had

seen a Great-tailed Grackle at his residence. Forest described the vocalizations of the bird and it did not sound like a Common Grackle. I drove down to Faribault as soon as I hung up



**Great-tailed Grackle, 10 April 1993, Cannon Lake, Rice Co. Photo by Warren Nelson.**

and upon arriving at Mr. Smith's house he told me that at the moment the grackle was perched in a large tree across the road from his house. We walked over for a closer look. I could see it was a large grackle with a very large bill, flattish head and a huge tail which was much longer than its body. It was a male with a prominent yellow eye. Several times it vocalized with what I would describe as "Chock Chock" sound followed by a loud, rising whistle. Soon it flew across the road and landed on the ground. The legs were noticeably long, the body had a purplish iridescence with no trace of bronze. The long tail drooped down almost to the ground, with the outer feathers presenting a scalloped look.

The bird was seen again the next morning for a few hours and some birders from the

Twin Cities were able to see it. It could not be located that afternoon and was not seen again until 1:30 P.M. on 9 April when Bruce Harris and I relocated it about 3/4 of a mile south of Mr. Smith's on the shore of Wells Lake. We saw it flying, perched in low trees and walking on the ice of a small pond with Common Grackles for contrast. It was seen again the next day, 10 April, the last sighting of which I am aware.

This is the second record of this species for Minnesota, the first being one seen in Dakota County on 19 June 1982 by Paul Egeland. He had only a brief look at the bird and was unable to see the eye color. It was accepted by the Minnesota Ornithological Records Committee as a Great-tailed/Boat-tailed Grackle. It was most likely a Great-tailed Grackle as the

- 1915 Texas – nested at Austin.  
 1944 Texas – recorded at Forth Worth.  
 1953 Oklahoma – first state record at Norman.  
 1958 Oklahoma – first state nesting at Norman.  
 1963 Kansas – first state record in Harvey Co.  
 1969 Kansas – first state nesting at Great Bend and Wichita.  
 1969 Arkansas – first state record in Lafayette Co.  
 1972 Missouri – first state record at Springfield.  
 1976 Arkansas – first state nesting at Ashdown.  
 1976 Nebraska – first state record in Phelps Co.  
 1977 Nebraska – first state nesting at Hastings and Boys Town.  
 1979 Missouri – first state nesting at Big Lake State Park (ten nests).  
 1982 Minnesota – first state record in Dakota Co.  
 1983 Iowa – first state record in Mills Co. First state nesting record in Fremont Co.  
 1985 Ohio – first state record in Ottawa Co.  
 1987 Ontario – first provincial record, a female photographed at Atikokan.  
 1988 South Dakota – first state record at Yankton.  
 1988 Iowa – nested at Eagle Lake, Hancock Co. Northernmost nesting site in the United States, about 30 miles south of Faribault Co., Minnesota.  
 1991 Indiana – first state record in Sullivan Co.  
 1993 Minnesota – second state record at Faribault, Rice Co.

**Table 1. Chronology of the expansion of the mid-American race, *Quiscalus mexicanus prosopidicola*.**

Boat-tailed Grackle has no history of wandering and the Great-tailed Grackle is in the process of a range expansion.

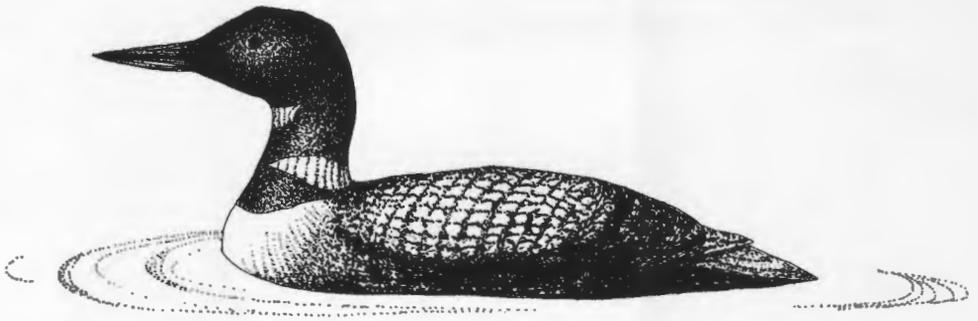
All three races of the Great-tailed Grackle have been undergoing range expansions (*The Loon* 55:83). As of 1900 in the United States they were found only in southern Texas from San Antonio to Brownsville. At present the species as a whole has been recorded from 21 additional states and three Canadian provinces. Nesting populations have been reported from 13 states. The majority of the expansion has been since 1960.

Table 1 shows a chronology of the expansion of the mid-American race, *Quiscalus mexicanus prosopidicola*.

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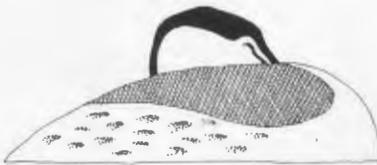
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8219 Wentworth Avenue S, Bloomington, MN 55420.



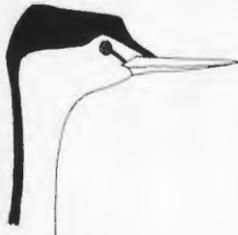
## NOTES OF INTEREST

**CLARK'S GREBE IN TRAVERSE COUNTY** — Concluding a rather unproductive birding trip through west-central Minnesota on 1 May 1993, Anthony X. Hertz and I stopped at the federal dam at the north end of Lake Traverse in Traverse County. About 70 Western Grebes were congregated on the waters below the narrow dam. As Tony concentrated on photographing the Western Grebes just a few feet away, I scanned a group of about 30 grebes roughly 100 feet downstream. My binoculars stopped on one grebe that stood out as being slightly different. Unlike the solid gray flanks of the Western Grebes, the flanks on this sleeping bird were considerably lighter, white, with short horizontal gray streaks.



Clark's Grebe

Western Grebe



Clark's Grebe and Western Grebe, 1 May 1993, Lake Traverse, Traverse Co.  
Drawing by Parker Backstrom.

Although virtually sure that the bird was a Clark's Grebe because of the lightness of the flanks, I had to wait to see the head and neck before I could conclude this absolutely; in its sleeping posture, the head and neck were tucked into its back feathers. I called Tony over, then retrieved my telescope from my car and trained it on the bird. It was not long before it raised its head and removed any doubt about its identity. Most obvious were the eyes, set off against the face by the white feathers encircling them completely except for a narrow dark line of unfeathered facial skin running from the front of the eye to the upper bill. The thin dagger-like bill was a bright orange-yellow with an obvious red blush at its base. The bill was much brighter than the dull greenish-yellow bills of the nearby Western Grebes. It also lacked the obvious broad dusky culmen of the Westerns. By direct comparison, the black stripe running down the back of the long neck of the Clark's was narrower in width than the hindneck stripe of the Western Grebes. On two or three occasions as I watched the bird, I could see and hear it call. The call of the Clark's Grebe consisted of a single staccato "kreeet," different from the double-syllabled "kree-kreet" calls of the Western Grebes, which also rose in pitch on the second syllable. While I was writing field notes, Tony saw the Clark's Grebe engage in a courtship display dance across the water with a Western Grebe. On one occasion, a Great Blue Heron flew across the river channel, passing just a couple of feet above the grebes. The Clark's Grebe (only) made a panicked plunge below the water as the heron passed over it. We observed the bird for about 15 minutes before it disappeared downstream around a bend in the river. The location of our sighting is the same location where an adult Clark's Grebe was seen with two young in July and August of 1991 (*The Loon* 63:220-225). Parker Backstrom, 3409 Emerson Ave. S #4, Minneapolis MN 55408.

**PRAIRIE WARBLER IN POPE COUNTY** — On 1 May 1993, in the midst of a period of heavy rain, Carol Braaten, who lives six miles north of the town of Cyrus in northwestern Pope County, found an injured bird in her barn. The bird, while still alive, was wet and lethargic. Efforts to revive it failed and the bird soon died. She tentatively identified the bird as a male Prairie Warbler. She contacted the Morris Wetlands Office of the U.S. Fish & Wildlife Service in Morris, Stevens County, about her find. Biologist Donna Reichmann retrieved the bird and confirmed its identity. The bird was eventually given to the University of Minnesota/St. Paul for inclusion in its bird skin collection.

This is the seventh record of this accidental species in Minnesota and the first confirmed by a specimen. Parker Backstrom, 3409 Emerson Ave. S #4, Minneapolis, MN 55408.

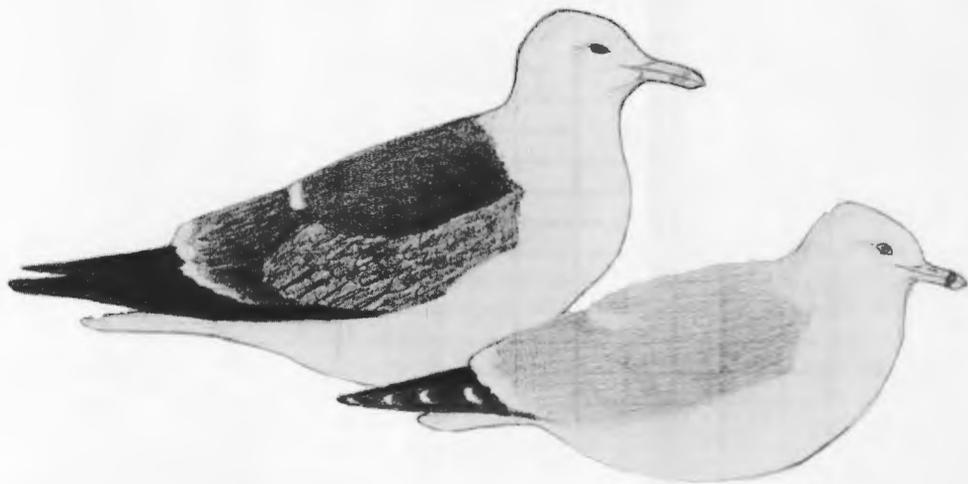


**Prairie Warbler, 1 May 1993, Cyrus, Pope County. Photo of specimen by Anthony Hertzell.**

**LESSER BLACK-BACKED GULL IN ANOKA COUNTY** — On 30 April 1993, I discovered a large concentration of gulls near Lake George in Anoka County. Over 2,000 birds were present in one agricultural field alone, and I estimated that between 6,000–7,000 birds were present in the area when they gathered to roost that night on Lake George. About 90% of these gulls were adult Ring-billed, but small numbers of Herring Gulls, a few Bonaparte's Gulls, and both an adult and a first-year Thayer's Gull were present. I spent three hours scanning the gulls in this field between 30 April and 2 May before I discovered a third-year Lesser Black-backed Gull on the morning of 2 May. Because of its considerably darker mantle, this gull was visible among the numerous other gulls present even with binoculars. The following description of the gull is based on a drawing and field notes made during observation. The primaries were jet black when folded, with no visible white tips or mirrors on the outer primaries. When preening, whitish edges were visible on the tips of the inner primaries, but these were not visible when the wing was folded. The mantle was a solid, dark gray, contrasting slightly with the black primaries. The tertials were slightly darker than the mantle and close in color to the primaries, but each feather was blackish on the basal three quarters, white on the tip and mottled in between. The coverts appeared worn and were probably remnant from a previous plumage; they were a very dark brown in color rather than dark



gray or black like the mantle and primaries, and were slightly mottled with light feather edges. The entire wing and mantle was dark blackish, contrasting with the white body plumage on the belly, breast, head, and undertail, which had no dark smudging. The tail was mostly white, but had black markings on the tip of at least some of the retrices. I never saw the gull in flight, so other details of the tail and underwing were not observed. In overall size, the Lesser Black-



**Lesser Black-backed Gull with Ring-billed Gull, 30 April 1993, Anoka County. Drawing by Karl Bardon.**

gray or black like the mantle and primaries, and were slightly mottled with light feather edges. The entire wing and mantle was dark blackish, contrasting with the white body plumage on the belly, breast, head, and undertail, which had no dark smudging. The tail was mostly white, but had black markings on the tip of at least some of the retrices. I never saw the gull in flight, so other details of the tail and underwing were not observed. In overall size, the Lesser Black-

backed Gull appeared to be slightly smaller and slimmer than most of the Herring Gulls present, with the primaries extending slightly more than a bill-length beyond its tail. The bill was noticeably smaller than that of the Herring Gulls; it appeared to be closer in size to that of the Ring-billed Gulls, but was slightly longer and distinctly thicker. There was a dark smudge near the tip of the bill on both the upper and lower mandibles at the gonys, forming a ring similar to the adult Ring-billed Gulls, but not as distinct. The rest of the bill, including the very tip, was a dirty yellow. The eye appeared dark when I observed the bird, but because of the distance the gull was from me (1–200 meters), and the poor lighting conditions (overcast with fog and mist), I could not satisfactorily determine if the eye was light or dark. The legs were not visible. The gull was seen by Peder Svingen and Steve Carlson later the same day. Peder was able to confirm that the legs were yellowish and the iris was actually light rather than dark. Although Ray Glassel and I searched for the gull on 4 May, there were considerably fewer gulls loafing in the field where the Lesser Black-backed Gull had been seen, and we were unable to relocate it. The roost count at Lake George on the evening of 3 May yielded only about 2,400 birds, about 30% of what it had been on 30 April, so the Lesser Black-backed Gull may have also left at this time. The large numbers of gulls present at such a late date seemed unusual, especially since most were adult Ring-billeds, and copulation among pairs was observed frequently, indicating that most of these birds were still migrating northward to breeding colonies. Since its discovery in Minnesota in 1984 (*The Loon* 56:40-43), the Lesser Black-backed Gull has been recorded in the state about 13 times, including at least once every year for the past seven years from 1987–1993; it is now considered a Casual in Minnesota (*The Loon* 65:33). This species has been recorded in eight different months, from 9 August to 25 December in the fall, and 31 March to 6 May in the spring. All records have been from eastern Minnesota, with most of these records from the greater Twin Cities area (eight), plus three records in October and November in Duluth and Grand Marais, and two records in April and May in Red Wing and Winona in the southeast. **Karl Bardon, 1430 - 100th Ave. NW, #212, Coon Rapids, MN 55433.**

**A EURASIAN WIGEON IN WRIGHT COUNTY** — On 20 April 1993, I spotted a male



Eurasian Wigeon in a flooded field just north of Beebe Lake in Wright County. While looking over 14 other species of waterfowl, I noticed a “red-headed” duck swimming directly away from me. The view was through leafless tree branches and at a distance of approximately 200 yards. The bird turned just enough for me to see the field marks I needed for a conclusive identification. As I started to pan my scope along, thinking it was another Redhead, the wigeon turned its side to me. It was obviously a Eurasian

Wigeon, as it was a picture-book male. Watching the bird for about 15 minutes, while noting details and habit, I pondered who would be home at mid-afternoon to call. Leaving the bird feeding with American Wigeons, I left to call and get my camera. I got several pictures through my scope and several people saw the wigeon that day, as well as into early May. **Gary N. Swanson, 8841 - 5th St. NE, Buffalo, MN 55313.**

**COMMENTS ON THE EURASIAN WIGEON RECORD** — On 22 April 1993, I called



Steve Oehlenschlager, a leading waterfowl breeder and collector who lives in Maple Grove, Minnesota. Steve knows all or most of the collectors/breeders in the area and works with them on a regular basis (he is also Dick Oehlenschlager’s nephew). I explained the situation surrounding the male Eurasian Wigeon found by Gary Swanson near Beebe Lake in Wright County on 20 April (and still present as of the time of this writing, 24 April) and asked him whether he knew of anyone from the area who might be missing a male Eurasian Wigeon. Besides himself, he told me that he knew of a couple of breeders in the area who keep the species. The most important of these breeders, Willard Hensen, has several pair that he breeds and keeps in open-topped pens. However, Steve felt sure that Mr. Hensen

kept his birds pinioned. Another breeder (I was not told his name) who lives roughly five miles west of Buffalo has pinioned birds as well. Steve keeps most of his birds "full-wing," but was not missing any Eurasian Wigeons. Most breeders in that area (including the breeders he knows) keep their breeding birds pinioned, and those breeders keep their adult ducks leg-banded as well. Normally, adult male ducks have an aluminum band placed on their right leg while adult female ducks have the band on their left leg. Plastic bands are often used as well. The purpose of these bands is to allow the owners to track age and lineage for reproductive purposes. Had the Wright County bird been a young (sub-adult) bird, Steve felt that there would have been a reasonable chance that it had escaped from a collection before it was banded. I got good looks at the right leg of the bird and determined that there was no band of any kind. I was unable to determine that there was no band of any kind on the right leg. When I left the site on the evening of the 20th, Barb and Denny Martin were present. I asked them to try to determine whether or not the left leg had a band on it. I talked with Denny on 21 April and he told me that he had clearly seen the entire left leg and determined there to be no band of any kind. The Wright County wigeon was an adult male, at least two years old. Eurasian Wigeons do not attain full adult plumage until their second fall (Oehlenschläger). Unlike American Wigeons, which can possess almost full white wing patches at under two years of age, Eurasian Wigeons have incomplete, spotty white wing patches until October of their second year, when they do acquire the full, clean, white upper wing coverts; they have undergone two complete molts at this point (Oehlenschläger). I saw this bird rise up and flap on several occasions and could see that it had full, clean, white shoulders. Waterfowl sales usually take place in the spring, giving breeders an opportunity to add to their collections or sell "excess stock" to other breeders. Steve told me that there were no adult male Eurasian Wigeons or male/female pairs for sale in the area this spring (there were a few hens of this species for sale); all adult males he knows about in the area are accounted for. **Parker Backstrom, 3409 Emerson Ave. S #4, Minneapolis, MN 55409.**

**THAYER'S GULL SEEN IN THIEF RIVER FALLS** — On 15 April 1993, I saw a Thayer's



Gull, first by the beach and then by the dock on the other side of the river — a total of 25 minutes of observation. I used both a spotting scope and binoculars. At the closest, the bird was 15 feet away and I still used the spotting scope. He had first attracted my attention because his head was smaller than the neighboring Herring Gulls. I also noticed that the beak was smaller; the tip of the beak was smaller than the neighboring Herring Gull. The legs were different from the Herring Gull, a darker pink. In fact, what really convinced

me that the bird must have been something other than a Herring Gull was that when I went looking for Thayer's Gull the following day and subsequent days, I realized that the Herring Gulls' legs were a very light pink and I would have been able to spot the Thayer's on that basis alone. The bird had a brown eye with a brown iris and ringed around with a reddish color. The beak was yellow, of course, and I noticed a red and a black spot. I know that red and black are not mentioned in the book, but that is what I saw. I did notice that the red on the beak was a different shade than the neighboring Herring Gulls. When I talked to Bob Janssen that night, he told me to look at the wing linings to be sure the bird was a Thayer's Gull. Well, when I went down to look for the bird the next day, it was gone. I told my neighbor Jeanie Joppru about the bird. She sometimes birds with me. Jeanie went down to the beach and she spotted the bird immediately. She noticed that the bird had a darker eye. She did see the bird fly and she noticed that the underwings were very light in color. She said the bird was very easy to spot; he was all by himself on the beach. She noticed that something about his head and beak did look different from the other neighboring Herring Gulls. I believe that this observation was significant because there have been no observations of Thayer's Gulls in northwest Minnesota and few observations of Thayer's Gulls in full adult plumage in the state (Bob Janssen, pers. comm.). **Shelley Steva, Route 4, Box 18, Thief River Falls, MN 56701.**

**YELLOW-THROATED WARBLER IN KANDIYOHI COUNTY** — On 13 May 1993, my



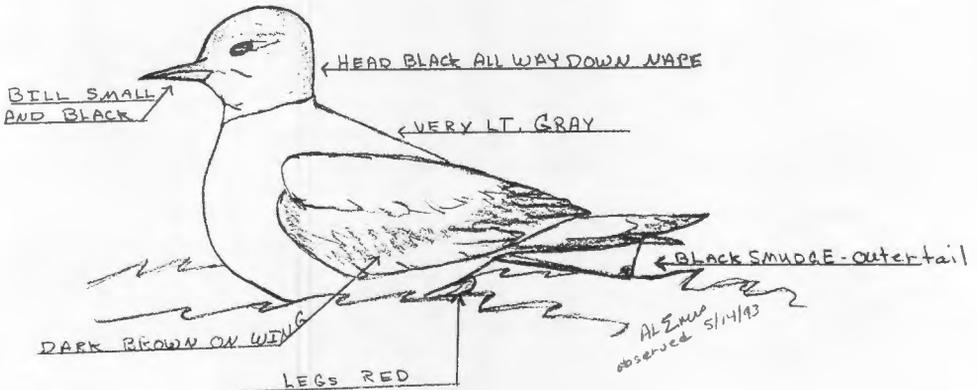
friend and I set out to find our year's first Scarlet Tanager. I was also hoping to add some warblers to my year's Kandiyohi County list. At about 6:15 P.M., we were talking east along a gravel road near Willmar, heavily wooded on both sides, when a small "warbler-like" bird caught my attention. I put my binoculars on it and shortly realized it was a bird I had never seen before. Due to its small size, vivid coloration, heightened activity, and feeding habits, I knew it was a warbler. The bird was in the upper canopy of a basswood and

was feeding alone at the far tips of the branches over the road, allowing excellent viewing. I didn't think identification would be difficult because of its distinctive markings and color patterns. The bird had a striking yellow throat patch that extended from the lower mandible to mid-chest, looking like a bib. The belly was white, with darker "striping" along the sides. The face included a black cheek patch which ended abruptly at a white eyebrow stripe. There were two white wing bars. The rest of the bird was a grayish-blue color. I could not see the top of the bird, except the head, while feeding. While watching the bird, I called out field marks so identification would be less difficult. The warbler stayed in view about a minute, before it flew to the south. With the aid of a field guide, I easily made a positive identification: Yellow-throated Warbler. It wasn't until I went to mark my checklist, several minutes later, that I realized the significance of the sighting. **Randy Frederickson, 416 - 19th St. NW, Willmar, MN 56201.**

**LITTLE GULL AT AGASSIZ N.W.R.** — On 14 May 1993, Joyce Banttari, Sandra Mann,



Cathy Nelson, and I birded Agassiz National Wildlife Refuge, Marshall County, on our birding tour around Minnesota's borders. After stopping at headquarters to pick up our key, we drove several of the dike roads which intersect the refuge. On our way out, around 4:00 P.M., we stopped to scan the gulls which were settling down in Headquarters Pool. As we scanned the 50-75 Franklin's Gulls which were sitting on the open water, I noticed a much smaller gull among them. I knew it wasn't a Bonaparte's because I had seen that species side-by-side with Franklin's before, and this gull was too small. I also noticed that the head was black, extending all the way down through the nape of the neck. At this point, I



**Little Gull, 14 May 1993, Agassiz N.W.R., Marshall Co. Drawing by Audrey L. Evers.**

alerted the other birders to look very closely at this bird for any identification features they could see. We had several field guides with us, so we consulted National Geographic and Peterson's guides. We observed that the bill was black, and there was no white marking around the eyes. Although the gull's back was a very pale gray, there was a considerable amount of dark brown marking on the wings. About this time, the whole flock picked up and flew off. We waited about a half-hour before it came back and flew above us and dipped down to the water very nicely. It was easy to pick out of the group due to the small size, brown pattern on the front of the wing, and small black bill. It sat again and came to within 50 feet of us. The sun was behind us and with my 10X binoculars, I had excellent views. According to the second edition of *National Geographic's Field Guide*, the Little Gull is a three-year gull. We decided this bird must be going into its third summer. It had red legs. The wing underlining was light, not the blackish shown for adult, and all that remained of a tail band was a black smudge on each outer edge. **Audrey L. Evers, 502 Partridge Road, Hoyt Lakes, MN 55750.**

**BAIRD'S SPARROWS AT FELTON PRAIRIE** — Although the Baird's Sparrow (*Ammodramus bairdii*) is only casual in Minnesota, this species does have a tendency to show up every few years in the tracts of native prairie grasslands southeast of Felton in Clay County.



On 26 June 1993, while leading a birding tour in this area, I located two, or probably three, Baird's Sparrows. Our first stop was at The Nature Conservancy's Blazing Star Prairie (northeast 1/4, section 5, T141N, R45W), and while scanning for Greater Prairie Chickens, I heard the unmistakable song of a Baird's Sparrow — a few "zip" introductory

notes followed by a loose, musical, low-pitched trill, the trill reminiscent of the end of the House Wren's song or of some of the phrases in the Winter Wren's song. This is a song I am very familiar with, since I see and hear this species each summer in Manitoba and North Dakota, but on this occasion, I only heard the song once and our group never saw the bird, so at the time I was not entirely certain there was actually a Baird's Sparrow here. We later went on to another prairie tract a mile farther west (north 1/2, section 6, T141N, R45W), and again I heard a Baird's Sparrow song. This time, as the bird continually sang, we were able to find and observe it at close range for the next half-hour or so, and two of us took several identifiable photographs. The most diagnostic plumage feature was the buff or pale orange median crown



**Baird's Sparrow, 26 June 1993, Felton Prairie, Clay County. Photo by Kim Eckert.**

stripe that widened towards the nape; the color of the crown was paler than on most Baird's Sparrows I have observed. There was also a spot or smudge on the ear coverts and two malar streaks; the lower streak was shorter and thinner and not easily seen. There were several random and thin streaks on the breast, although these streaks did not form a "necklace" pattern that is often mentioned in the field guides (and most other Baird's Sparrows I have seen similarly lacked a necklace). Also noted was the bird's more "normal" and rounded head profile; Baird's Sparrows lack the flat-headed profile of other members of this genus. Similarly, the tail was not that of a typical *Ammodramus* sparrow; it was clearly notched, similar to a Savannah Sparrow, and of "normal" length and width. Additionally, in flight the tail was narrowly but visibly edged in white — another field mark not mentioned in the standard field guides. I suspected that there were actually two Baird's Sparrows at this location since once a similar-looking sparrow flew in and briefly chased after the bird we were watching; also a couple of times, I thought I was hearing a second Baird's Sparrow in the distance farther north. Indeed, other birders on subsequent days confirmed that there were two individuals at this location, and because of their presence I have no doubt that there actually was a third Baird's Sparrow at Blazing Star Prairie, although I am not aware that anyone else saw or heard that individual. **Kim Eckert, 8255 Congdon Blvd., Duluth, MN 55804.**

#### HARLEQUIN DUCK OVERWINTERS IN OTTER TAIL COUNTY — Away from Lake



Superior in winter, there is probably no single area in the northern half of Minnesota with more open water than that found on the Otter Tail River in central and western Otter Tail County. Over the years, this stretch of water has harbored many species of overwintering waterfowl. The winter of 1992–93 saw the greatest diversity of ducks ever attempting (many successfully) to survive here until spring. A few thousand Canada Geese and several Trumpeter Swans were also present. Harlequin Ducks are occasionally seen away

from Lake Superior, but are always noteworthy when so encountered. It was, therefore, a pleasant surprise to have a wintering female from 14 December 1991 through the end of February 1992. This bird frequented the same short stretch of river in Fergus Falls for much of the winter and was easy to locate most of the time. Over the past 20 years, I've seen several Harlequins on Lake Superior, but they were always females or immature males. After so many years, I began to wonder if I would ever see an adult male. On 26 November 1992, Diane and I were checking the river in town about 10:00 A.M. Amidst the geese and Mallards, I spotted an adult male Harlequin Duck in the company of a drake Common Goldeneye. With its dark body, rusty sides, and numerous white hash marks, the adult male cannot be confused with any other species. Though at first glance, this regalia seems to have been donned haphazardly, it produces a striking and beautiful pattern that is very pleasing to the eye. Since 1956, there have been 19 reported records of Harlequins in Minnesota away from Lake Superior, with all seasons represented (Janssen, *Birds in Minnesota*, and Bob Janssen, pers. comm.). This includes the two Fergus Falls records. Nine occurred in winter, of which three were adult males. The male in Fergus Falls remained longer than any bird except one. A female spent 140 days in Austin, Mower Co., from 17 November 1986 to 4 April 1987 (*The Loon* 59:50, and Bob Janssen, pers. comm.). Unlike the female of the previous year, the male moved around more and was sometimes difficult to locate. I suspected, but was never able to conclusively prove, that he often left town with the goldeneyes to spend the daylight hours several miles downstream. This seemed to be so, since he was seen several times in late afternoon coming into the "levee," where many of the goldeneyes and other waterfowl loaf during the evenings. From early January on, he was quite predictable in his late afternoon appearances at the levee, usually in the company of the many Common Goldeneyes. There was often a high degree of interplay between the goldeneyes and the Harlequin. He was apparently stimulated by their presence and often assumed an aggressive role, interacting with both hens and drakes. His normal profile was with body low and head drawn down. When excited, he extended his neck, head erect, and cocked his tail at an

angle of at least 45 degrees. He also appeared to float higher in the water. This posture is common to many species of ducks in matters of territoriality, aggression, or courtship. Although a lot of time with the goldeneyes was spent loafing, preening, feeding, or sleeping, there were many occasions when the overt behavior of the Harlequin made it a joy to watch. He often chased both drakes and hens, though hens were most often the target of his aggression. Since there were no female Harlequins present, the goldeneyes were probably singled out because they approximate female Harlequins in size, body patterns, and behavior. The exaggerated courtship antics of the drake goldeneyes probably also served as a stimulus for the Harlequin. The Harlequin's actions toward the goldeneyes took several forms. The most commonly observed involved a "running" across the water in pursuit, the bird propelling itself only with its feet, keeping the wings held tightly against the body, with body and head lowered and the head pushed forward. In this manner, he chased goldeneyes of either sex. He also would dive a few feet behind the hens, attempting to surface near them. They in turn would often fly to "escape." Occasionally, he would surface and immediately burst into flight, literally flying out of the water in order to pursue a fleeing female goldeneye. Another routine involved an aerial performance with two or more goldeneyes. The Harlequin would take wing with them and all birds would fly in tight formation. In the late afternoon of 15 March, I watched the Harlequin take off with five or six goldeneyes, making a twisting flight circuit back and forth over the river. They would drop within a few feet of the water, then rise about 50 feet, putting on an aerobatic show as if running an invisible racecourse in the air. Upon landing, the Harlequin soon took off again with a drake and hen, re-enacting the procedure. During these performances, his distinct vocalizations could be heard. An apt colloquial name for this species is "sea mouse." Having heard this bird vocalize several times, I can attest that this name is very appropriate. To me, its call was similar to that of the "rubber ducky". It was a soft squeaking like that of a Blue-winged Teal or wigeon, but with more of a wheezy, whistled character. Only when stimulated by nearby goldeneyes was this call given. Another call, heard only once and preceded by the typical squeaking, was a nasal quacking. My notes for that day define it as if "a Western Grebe with laryngitis tried to quack." The rather outrageous appearance of this bird, coupled with its comical voice, made it difficult to take seriously at times. I doubt if the most serious student of bird behavior could maintain full scientific objectivity when studying this species. A dapper duck with a bit of theatrical flair — that's the Harlequin. **Steve Millard, 630 W. Laurel, Fergus Falls, MN 56537.**

**BLACK-HEADED GROSBEAK IN JACKSON COUNTY** — On Sunday or Monday, 6 or

7 June 1993, I heard a "new" bird at our place on a farm near Heron Lake, Jackson County. I didn't have binoculars with me at the time; however, on Wednesday, 9 June, I spotted the singer in a tree beside the house. The bird was smaller than a robin, had a black head, and lighter brown/black wings with two or three wing bars of varying width. The underbody was a vivid orange like that of a Northern Oriole and it had an equally bright orange triangle-shaped area above the tail or rump. The beak was light-colored or possibly streaked and was large and heavy. The song was clear, loud, and repeated the same three or four notes. The bird was high in each tree that it flew to and finally left the immediate area. I then consulted my bird books to see what I may have observed and also called Gudrun Hodnefield as an advisor to help me determine what it may have been. My books, Roger Tory Peterson's *Birds East of the Rockies*, and Reader's Digest Book of *North American Birds*, indicated a Black-headed Grosbeak. I did not note white on the underside. The second sighting was in early sunlight and the bird was vivid orange from a frontal view. My husband also saw it and says the beak was large and light-colored. The other possibility would be an Orchard Oriole, which has the colored rump, but the beak is different and the bird appears more slender than what I observed. The bird remained in our trees for about five days. **Elaine Schneider, Route 1, Box 149, Heron Lake, MN 56137.**



## PURPOSE OF THE MOU

The Minnesota Ornithologists' Union is an organization of both professionals and amateurs interested in birds. We foster the study of birds; we aim to create and increase public interest in birds; and to promote the preservation of birdlife and its natural habitat.

We carry out these aims: through the publishing of a magazine, *The Loon*; sponsoring and encouraging the preservation of natural areas; conducting field



trips; and holding seminars where research reports, unusual observations and conservation discussions are presented. We are supported by dues from individual members and affiliated clubs and by special gifts. The MOU officers wish to point out to those interested in bird conservation that any or all phases of the MOU program could be expanded significantly with gifts, memorials or bequests willed to the organization.

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## SUGGESTIONS TO AUTHORS

The editors of *The Loon* invite you to submit articles, shorter "Notes of Interest" and color or black & white photos. Photos should be preferably 5x7 in size. Manuscripts should be typewritten, double-spaced and on one side of sheet with generous margins. Notes of interest should be generally less than two typewritten pages double-spaced. Whenever possible, please include a copy of your manuscript on a 3 1/2 inch MS/DOS or Macintosh disk saved in text (ASCII) file format. If reprints are desired, the author should so specify indicating the number required. A price quotation on reprints will be sent upon receipt of information.

Club information and other announcements of general interest should be sent to the Newsletter editors. See inside front cover. Bird-sighting reports for "The Season" should be sent promptly at the end of February, May, July and November to Peder Svingen. See inside front cover.

# *The* **Loon**

WINTER 1993

VOLUME 65 – NUMBER 4



**The Loon**, Minnesota's magazine of birds, is published four times each year by the **Minnesota Ornithologists' Union**, the statewide bird club. Permanent address: J.F. Bell Museum of Natural History, 10 Church Street SE, University of Minnesota, Minneapolis, Minnesota 55455-0104. Anyone interested in birds may join. Any organization with similar aims may affiliate. All members receive our two publications: *The Loon* and the **MOU**piece.

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# The History of Colonial Waterbird Management in the Duluth-Superior Harbor 1937-1990

William L. Penning  
Francesca J. Cuthbert

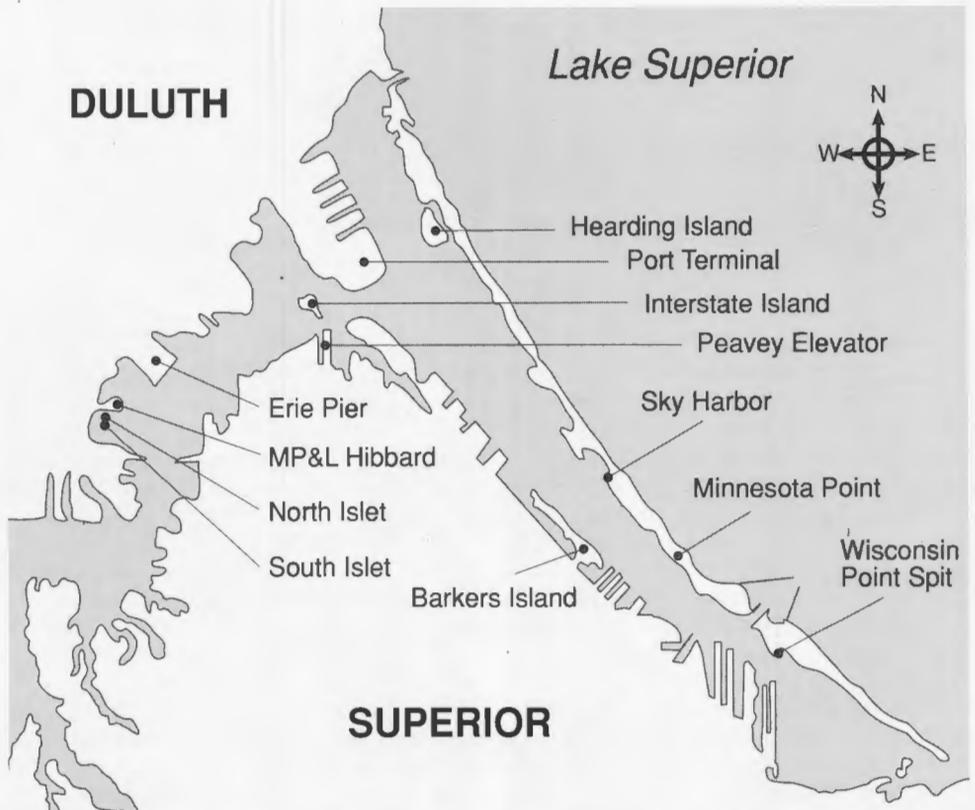
Declining populations of Common Terns (*Sterna hirundo*) in the western Great Lakes have created concern over the future of the species in this area (Harris and Matteson 1975, Haymes and Blokpoel 1978, Davis and Niemi 1980, Davis 1983, Cuthbert et al. 1984, Morris et al. 1992). Common Tern colonies have consistently been reported at five sites in Minnesota since the 1970s (McKernan and Cuthbert 1989), and one of these sites, the St. Louis River estuary (Figure 1), has been the focus of intensive management efforts of colonial waterbird populations since 1978. This paper summarizes the history of Common Tern and Ring-billed Gull (*Larus delawarensis*) populations in the St. Louis River estuary as well as the history of site use and management efforts.

## Early History

Records indicate that in the early 1930s over 2000 pairs of Common Terns probably nested in Minnesota (Roberts 1936, Minnesota Department of Natural Resources (MDNR) unpubl. records). Roberts (1936) reported 580 pairs of terns nesting at Spirit and Hennepin islands in Lake Mille Lacs in 1930 and over 1000 pairs nesting at Gull Island in Leech Lake in 1933. Unpublished records (MDNR) indicate there were 1000 pairs of terns nesting on Pine and Curry Island, Lake of the Woods, in 1932. However, breeding by Common Terns did not occur in the St. Louis River estuary until 1937 (Table 1) when one nest was found at Sky Harbor (MDNR unpubl. records). Between 1937 and 1974 this species nested at a number of different sites in the estuary. Records

of nesting are incomplete until 1976. For example, one pair nested on Minnesota Point in 1939 (Engstrom 1940), but the main colony was at Harbor (Hearing) Island from the early 1940s to 1954 (Hofslund 1952, Bronoel 1953, 1954, 1955). In 1956 the majority of pairs nested at a newly created sand spit off Superior, Wisconsin (Barkers Island), (Finseth 1957); there were 108 pairs at Barkers Island in 1957 (Cohen 1958). A large colony located on Minnesota Point from 1960-1961 (Cohen 1960, Cohen and Cohen 1961) was probably the main colony in the harbor until the early 1970s (Harris and Matteson 1975) and in 1972 there were 120 nests on recently deposited dredge spoils at the Port Terminal (H. Roberts, pers. comm. in Harris and Matteson 1975). In 1974 Harris and Matteson reported approximately 180 nests located at five different sites in the harbor. These sites were the Port Terminal, Sky Harbor Airport, the Minnesota Power and Light Hibbard Plant (MP&L), and North and South Islets (Harris and Matteson 1975). In 1975 Harris and Matteson were the first to warn that "the future of Common Terns (in the estuary) appears precarious." They suggested that habitat loss and degradation had the potential to extirpate the species from the estuary. They also discussed the likely Ring-billed Gull population explosion and its potential impacts on the tern population (Harris and Matteson 1975).

The first documented occurrence of breeding by Ring-billed Gulls in Minnesota was in Cook County in 1936 when a single nest was found on Lake Superior's North Shore (Thompson 1936). It was not until



**Figure 1. Common Tern and Ring-billed Gull colony sites and management areas in the St. Louis River Estuary.**

1957 (Table 2) that ring-bills were recorded nesting in the estuary at Barkers Island when Cohen (1958) reported one nest within the Common Tern colony. There were no further attempts by ring-bills to nest in the estuary until 1973 when 30 nests were found at a taconite loading dock on the Minnesota side. These nests were later abandoned and no young fledged (Janssen 1974). The ring-bill population significantly increased in 1974 when approximately 500 pairs were recorded at the Minnesota Power and Light Hibbard Plant (Harris and Matteson 1975). By 1977 the 1043 pairs nesting in the estuary accounted for approximately 35% of the ring-bills nesting in the U.S. portion of Lake Superior and formed the second largest colony in Lake Superior (Davis and Niemi 1980). The gull

population apparently peaked in 1986 at 8361 breeding pairs. Since that time the population has fluctuated between approximately 7500 and 8250 pairs in the estuary (Penning and Cuthbert 1990b). The exact locations of the colony have varied from year to year with major sites including the Hibbard Plant, the Duluth Port Terminal and the Peavey Globe Elevator.

#### **Cooperative Efforts and Management Plans**

In 1975 the Arrowhead Regional Development Commission (ARDC) formed the Metropolitan Interstate Committee (MIC) to help the states of Minnesota and Wisconsin manage the St. Louis River estuary as a single ecological unit. Because Common Terns nested on both sides of the border

throughout the estuary, the MIC became involved in tern management in 1978 when it initiated the development of a plan to relocate nesting Piping Plovers (*Charadrius melodus*) and Common Terns from the highly disturbed Duluth Port Terminal to other protected sites in the estuary (MIC 1978, Davis 1983).

From development of the tern relocation plan in 1978 through the 1985 field season, the MIC worked in concert with the MDNR and Wisconsin Department of Natural Resources (WDNR) to implement the plan. Starting in 1983 the MDNR began coordinating the project as the St. Louis River Estuary Colonial Bird Program and has published annual reports. Involvement by the MIC ceased in 1986 but the MDNR and WDNR have continued the effort to present.

Census work on both gulls and terns began in 1977 (Davis and Niemi 1980); since 1980 annual censuses have been conducted as a joint project between MDNR and WDNR. General trends for Common Terns show a stable population of approximately 190 pairs in the late 1970s with a peak of 237 pairs in 1981. In the mid 1970s there were less than 1000 pairs of Ring-billed Gulls in the harbor; by 1977 rapid population growth was occurring. Figure 2 shows that as the Ring-billed Gull population increased sharply the Common Tern population rapidly declined to a low of 68 pairs in 1986. Since that time the Common Tern population slowly increased to 124 pairs in 1990 (Penning and Cuthbert 1990a). The Common Tern was officially listed as "Endangered" in Wisconsin in 1979 (Anonymous 1989) and as a "Species of Special Concern" in Minnesota in 1984 (Coffin and Pfannmuller 1988). Estimates of Common Tern reproductive success (McKernan and Cuthbert 1989) in the estuary were made from 1982 to 1984 and 1989-1990 (Penning and Cuthbert 1990a, 1990b). Breeding pair data, census, reproductive success estimates and knowledge of factors affecting adult and juvenile survival have provided the data base from which management decisions have been made.

The work in the estuary involved the cooperation of many state and federal agen-

cies as well as private businesses and public utilities. Gaining the cooperation of all parties was an essential requirement for successful management of colonial waterbirds in the harbor. It was necessary to expend considerable effort on a yearly basis to ensure coordination and cooperation between each party.

### Site Histories: Management and Research Efforts

**Barkers Island** — The initial management plan designated three sites to be secured as safe nesting habitat for terns. These were Barkers Island, Hearing Island, and Interstate Island. The first area set aside in the estuary for terns was a portion of Barkers Island in the city of Superior, Wisconsin. Created by the United States Army Corps of Engineers (Corps) as a dredge spoil deposition site, this sandy, island is located at 46°43'05"N, 92°03'17"W. The management area was an easement granted by the city of Superior to WDNR as mitigation for the construction of the marina on Barkers Island. Based upon recommendations from research conducted by Davis and Niemi (1980), ARDC, MIC, MDNR, and WDNR, the first actual management for Common Terns in the estuary began in 1981 when the WDNR cleared 3.2 ha on Barkers Island. Tern decoys and recorded tern vocalizations were used at the site from 1983 to 1986 in an attempt to attract terns to the island. Both the decoys and the sound systems were modified versions of those used by Kress (1983). Despite management efforts, this historically active site failed to attract terns and was traded back to the city of Superior in 1987 for state ownership of a small spit on the west side of Wisconsin Point (F. Strand, WDNR, pers. comm.). Disturbance from an adjacent marina may have contributed to the failure to attract nesting terns to Barkers Island (F. Strand, WDNR, pers. comm.).

**Hearing Island** — Hearing Island (46°45'31"N, 92°05'00"W) is owned by the state of Minnesota and is designated as a Wildlife Management Area. The 13.49 ha island was created by the Corps prior to 1940 as a dredge spoil deposit site. In 1983,

5.2 ha were cleared of vegetation to create open sand beaches for tern nesting habitat. This was also the first year of the St. Louis River Estuary Colonial Bird Program, a cooperative effort between the MDNR, WDNR, MIC and ARDC that encouraged interstate and inter-agency cooperation. Unfortunately, habitat management met with strong local resistance as the island historically has been a recreational site for local residents and the presence of nesting terns necessitated closing the island to all human activities (Penning and Cuthbert 1990b). Tern decoys and recorded tern vocalizations were used at the site from 1983 to 1988 in an attempt to attract terns to the island. Pre-season trapping of mammalian predators was conducted in 1987. Significant human disturbance of nesting terns, vandalism, and predation problems (e.g. mink) led to the decision to halt management efforts on the island in 1989.

*Port Terminal* — The Port Terminal (46°45'15"N, 92°05'45"W) is constructed of dredge spoil material which converted the original site from a wetland to an extensive area of sand with little to no vegetation. Terns began nesting at this location in 1971; by 1974 rapid Ring-billed Gull population growth in the estuary was underway and many of the gulls nested at the Port Terminal starting in 1977. Increasing numbers of gulls, terns and Piping Plovers used the site in subsequent years. By the early 1980s this was the primary gull and tern colony site within the estuary.

The Port Terminal is a busy industrial area characterized by many activities that negatively impact nesting success. For example the city of Duluth stores snow on the site, there is much shipping activity in the vicinity, and anglers, sailors, and tourists are often seen in the area. Several earlier studies (Davis 1984, McKearnan and Cuthbert 1989) documented that the combination of these activities severely limited nesting success of Common Terns. Because of these disturbances and persistent problems with predation we recommend that terns be discouraged from using the Port Terminal as a nesting site. In 1984 limited discouragement activities were conducted

within the dunnage area at the Port Terminal (Davis 1984). Discouragement activities in 1984 consisted of tern research personnel repeatedly flushing birds (Davis 1984) from potential nest sites. In subsequent years owl decoys, Bird Scaring Reflective Tape (BSRT), and monofilament line (Morris et al 1992) were used to supplement human discouragement (Penning and Cuthbert 1990a). The dunnage area was used for storage and incineration of shipping containers and was determined to be unsuitable as a nesting area for terns. Full scale discouragement activities began in 1985 when intensive effort was made to prevent terns from nesting at the Port Terminal and Erie Pier (both highly disturbed industrial sites). These efforts were successful at both Erie Pier and the Port Terminal; there were only one and two nests respectively at these sites (Davis 1985). Discouragement activities were discontinued in 1989 when the terns moved directly to Interstate Island and did not attempt to nest at the Port Terminal (Penning and Cuthbert 1990a). Concurrent with discouragement activities, efforts were made to attract the terns to Hearing and Interstate islands. In 1989 predation by Red Foxes caused gulls at the traditional ring-bill colony at the Port Terminal to relocate into many smaller colonies spread throughout the estuary (Penning and Cuthbert 1990a). Many of these smaller colonies caused direct conflicts with industrial activities (e.g. gulls began nesting on a warehouse loading dock). Nests were destroyed in specific areas (under permits issued to the Duluth Port Authority) and BSRT (Bruggers et al. 1986) or monofilament line (Ostergaard 1981) was strung up in these areas to discourage nesting. BSRT also was used as a discouragement technique for terns in areas where they were particularly persistent in their nesting attempts. With the break-up of the main colony at the Port Terminal, new gull colonies started at the Peavey Globe Elevator, Erie Pier, and North and South Islets. Several sub-colonies also formed at the Port Terminal and were later abandoned. No gulls or terns nested at the Port Terminal in 1990–1991 (F. Strand pers. comm.). The same discouragement tech-

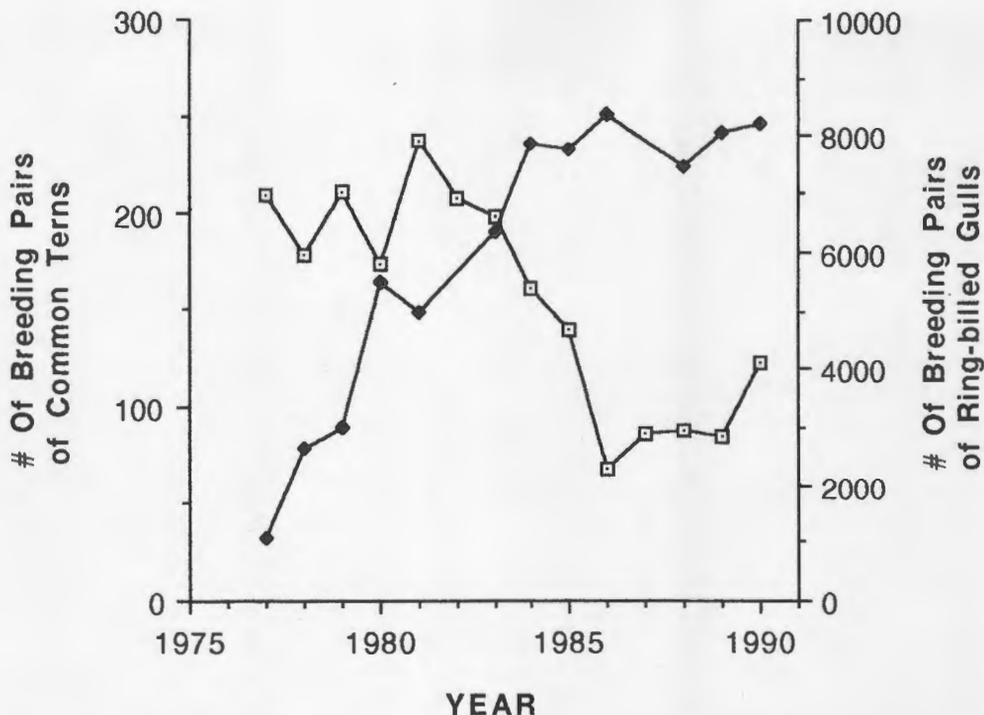


Figure 2. Historical records of the number of breeding pairs of Common Terns vs. number of breeding pairs of Ring-billed Gulls in the St. Louis River estuary, 1977 to 1990. Data for terns are represented by open boxes and those for gulls by solid boxes. A scale in 100s of pairs of terns is given on the left vertical axis. Similar information in 1000s of pairs of gulls is shown on the right vertical axis. Data were obtained from the scientific literature and unpublished Minnesota Department of Natural Resources records.

niques were used to a limited extent in 1988 when the colony began to expand and conflict with shipping activities.

**Peavey Globe Elevator** — The abandoned Peavey Globe grain elevator is located in Superior, Wisconsin ( $46^{\circ}11'37''N$ ,  $92^{\circ}06'23''W$ ) and is approximately 375m from Interstate Island. The site was never used for nesting by colonial waterbirds until 1989 when the Port Terminal gull colony dispersed. In 1989, 3830 pairs of ring-bills nested at this location. The substrate consists of an area of gravel fill in a rip-rap berm composed of broken slabs of concrete. During Penning's study (1993) the gulls nested on the exposed gravel and in the rip-rap. Since 1989 Peavey has been the major

gull colony in the harbor. The close proximity of this site to Interstate Island will probably lead to continued attempts by gulls to colonize the island as it is the closest available habitat for colony expansion (Penning and Cuthbert 1990b).

**Wisconsin Point** — In 1987 a small sand spit adjacent to Wisconsin Point ( $46^{\circ}41'45''N$ ,  $92^{\circ}00'40''W$ ) was added to the tern management area in exchange for the Barkers Island site. This location was occasionally used by terns in the early 1980s (R. Johnson, pers. comm.). The site was enclosed with a cyclone fence to decrease human intrusion; most of the vegetation within the enclosure was removed. Decoys and recorded vocalizations were used at the site in

	1937	1938	1939	1946	1947	1948	1949	1950	1951
Sky Harbor	1	2	1						
Port Terminal									
Erie Pier									
Grassy Point Islets									
Wisconsin Point									
Interstate Island									
Hearding Island				9	13	20	16	17	49
MP&L Hibbard									
Barkers Island									
North & South Islets									
Total	1	2	1	9	13	20	16	17	49

**Table 1a. Historical records of the number of pairs of breeding Common Terns in the St. Louis River estuary, 1937–1951. Data were obtained from the scientific literature and unpublished Minnesota Department of Natural Resources records.**

1988–1989. Because of past mammalian predation at Harding Island and the likelihood of predation at the new Wisconsin Point site a program of trapping was initiated both prior to and during the tern nesting season. Leg hold traps were used to remove potential predators (e.g. mink) before they caused a problem.

To discourage mammalian predators from entering the colony, electric fences, similar to those used in waterfowl management areas (Lokemoen et. al. 1982), were placed around the tern colony at Wisconsin Point in 1988. Tracks in the area indicate that the electric fences discouraged white-tailed deer and domestic dogs from entering the colony. However, a mink avoided both the traps and the electric fence in 1988 and destroyed 20 eggs before it was removed (Penning and Cuthbert 1990b). The major problem with the electric fence at the Wisconsin Point site was that the fence needed to extend over the water to be effective. Because the site was often exposed to severe wave action and seiches, floating vegetation frequently became attached to the wires and grounded the fence.

Nest boxes were used at Wisconsin Point in 1989. The idea for these boxes was derived from floating nesting platforms used in Britain and Germany (Anonymous 1983, Hoeger 1988) and extrapolated to land based platforms. Seventeen boxes were placed in the colony with the objective of attracting terns to nest on these sites el-

evated 15 cm above the natural substrate. During a major storm waves swept the entire sand spit and washed away the nest boxes and all nests both in and outside the boxes (Penning and Cuthbert 1990a) demonstrating that nest boxes are not effective at sites vulnerable to severe wave action. Since 1989 the Wisconsin Point site has been dropped from the management plan until large scale site modifications can be completed. Current plans are to build a large crib like structure of railroad ties filled with sand similar to one constructed at the Ashland Pier site in Ashland, Wisconsin (Matteson 1988).

*Interstate Island* — Securing Interstate Island (46°44'58"N, 92°06'34"W) into state ownership required considerable effort because ownership was divided among Wisconsin, Minnesota, and two private corporations. The island was constructed prior to 1940 by the Corps as a dredge spoil deposition site. Negotiations to obtain easements on the 3.43 ha island from the two private concerns were initiated in 1983 and an agreement was reached in 1988 which allows MDNR and WDNR to manage the entire island for tern habitat.

Increasing availability of dredge spoil islands provided habitat for Common Terns and led to stable populations in Lake Michigan in the 1970s (Schugart and Scharf 1983). However, by the late 1970s Scharf (1981) documented that shifting dredge material deposition patterns, which allowed

	1952	1953	1954	1955	1957	1961	1963	1964	1971
Sky Harbor						3	5	3	
Port Terminal									30
Erie Pier									
Grassy Point Islets									
Wisconsin Point									
Interstate Island									
Hearing Island	33	87	52	3					
MP&L Hibbard									
Barkers Island					108				
North & South Islets									
Total	33	87	52	3	108	3	5	3	30

**Table 1b. Historical records of the number of pairs of breeding Common Terns in the St. Louis River Estuary, 1952–1971. Data were obtained from the scientific literature and unpublished Minnesota Department of Natural Resources records.**

vegetative succession to occur, had an adverse effect on terns nesting on artificial islands in the St. Mary's River. With the cessation of dredge spoil applications to the island (probably in the 1950s), the island became dominated by Balsam Poplar and Eastern Cottonwood. The first removal of vegetation at Interstate Island took place in 1984 on portions of the island owned by Minnesota and Wisconsin. In 1985, 50 pairs of terns nested on the island, but all nests failed probably due to Great Horned Owl (*Bubo virginianus*) predation. The entire island was not under the jurisdiction of the two states and a large portion of it remained vegetated until 1989. In 1989 all vegetation on Interstate Island was removed by scraping to expose bare sand and the north and east sides of the island were refurbished with rip-rap.

In 1989 and 1990 the entire breeding population of terns in the estuary was attracted to this bare sand site. In 1989 tern chicks (64) fledged from the harbor for the first time since 1984. In 1990, 168 chicks fledged (Penning and Cuthbert 1990b). As a result of the habitat manipulation the island has also become an attractive nesting site for Ring-billed Gulls. Because ring-bills initiate nesting before the terns they are able to out compete the terns for limited nesting sites and gradually take over colony sites (Nisbet 1972, Morris and Hunter 1976, Davis and Niemi 1980, Courtney and Blokpoel 1983, Maxwell and Smith 1983,

Davis 1983, Miller 1987). Although gull encroachment was not yet a problem on the island, a policy of gull nest destruction was initiated in 1990 to prevent it from becoming so (Penning and Cuthbert 1990b). Nest removal efforts currently are initiated early in the season with a goal of discouraging nesting by gulls before a tradition of nesting on Interstate Island is established.

*Sky Harbor Airport* — Terns were recorded nesting intermittently at Sky Harbor Airport (46°43'23"N, 92°02'37"W) as early as 1937. Typical of other larid colonies in the estuary, the site consists of sand fill. Because of vegetation encroachment, the site was considered to be marginal tern habitat by the mid 1970s (Davis and Niemi 1980). Furthermore, there was a history of owl and mammalian predation at the site and terns often roosted on the runway and created a potential hazard to air traffic. Tern discouragement activities were carried out at Sky Harbor Airport from 1986 through 1989. BSRT and Great Horned Owl decoys were used to keep terns from establishing nests in the blow-outs along the shoreline and between the runway and taxi way. After the birds began using Interstate Island in 1989 it was no longer necessary to discourage tern use at Sky Harbor.

*Erie Pier* — Erie Pier (46°44'43"N, 92°08'37"W) is a contaminated dredge spoil disposal site still under construction by the Corps. Although gulls and terns have attempted to nest at the site in the past, nests

	1972	1973	1974	1976	1977	1978	1979	1980	1981
Sky Harbor	25	3	10	7	6	7	9	13	10
Port Terminal	120	12	160	150	185	148	178	161	227
Erie Pier									
Grassy Point Islets					11	20	18		
Wisconsin Point							0		
Interstate Island									
Hearing Island									
MP&L Hibbard			10		4	3	5		
Barkers Island									
North & South Islets			9						
Total	145	15	189	157	206	178	210	174	237

**Table 1c. Historical records of the number of pairs of breeding Common Terns in the St. Louis River Estuary, 1972–1981. Data were obtained from the scientific literature and unpublished Minnesota Department of Natural Resources records.**

were always abandoned early in the season. Physical disturbances (e.g. washouts and heavy equipment activities) have caused the abandonments. Because terns nested unsuccessfully at this continuously disturbed location in 1983, limited discouragement activities were conducted from 1984 to 1989. Despite occasional breeding attempts Erie Pier has never been an important colony site.

*Minnesota Power and Light* — The Minnesota Power and Light Hibbard Plant (46°44'07"N, 92°08'54"W) has been an important colony site for Ring-billed Gulls since at least 1974. Common Terns attempted to nest here in 1974 and 1977–1979 (MDNR unpubl. records). Three chicks fledged in 1974 (Harris and Matteson 1975) but efforts in later years were unsuccessful. Other than the annual census this site is not managed.

North (46°43'57"N, 92°09'22"W) and South (46°43'52"N, 92°09'21"W) Islets were used by ring-bills in the late 1970s and again in 1989–1990. The largest number of breeding pairs (1527) was recorded in 1990. The only nesting by terns occurred in 1974 when nine pairs were recorded (MDNR unpubl. records). Both of these tiny islands provide secure but limited nesting habitat for larids.

The Grassy Point Islets (46°43'28"N, 92°08'54"W) had small tern populations from 1976 to 1979 and again in 1983 but have not been used since that time.

### Conclusions

The recent successes at Interstate Island clearly indicate that providing secure nesting habitat is the most important factor in protecting and managing this population. Secure nesting habitat can be defined as open beach areas free from human disturbance, gull competition, and mammalian and avian predation. In the estuary this equates to islands; specifically Interstate Island. In 1989 the terns moved directly to Interstate Island and did not attempt to nest at the Port Terminal. Since 1989 Interstate Island has become the most secure and successful nesting habitat for terns in the estuary. To date, attempts to establish colonies at Hearing Island, Barkers Island and Wisconsin Point have failed.

On Hearing Island the cover formed by woody vegetation magnifies the predation problem. Human disturbance is also a major problem at this site. To make Hearing Island suitable for nesting Common Terns, all woody vegetation would need to be removed and human access strictly controlled. Both of these requirements are not politically feasible at this time. For unknown reasons terns were never attracted to the management site on Barkers Island. As a result of the lack of interest by the terns, Barkers Island was traded to the City of Superior for a portion of Wisconsin Point and a specified amount of work that was performed by the city at the Wisconsin Point tern management area.

	1982	1983	1984	1985	1986	1987	1988	1989	1990
Sky Harbor	17	29	29	79	33	0	0	0	0
Port Terminal	190	122	113	2	4	30	0	0	0
Erie Pier		24	4	1	0	0	0	0	0
Grassy Point Islets		22	0	0	0	0	0	0	0
Wisconsin Point			15	0	0	57	80	0	0
Interstate Island		0	0	50	0	0	0	81	124
Hearding Island		1	0	8	31	0	8	0	0
MP&L Hibbard									
Barkers Island									
North & South Islets									
Total	207	198	161	140	68	87	88	81	124

**Table 1d. Historical records of the number of pairs of breeding Common Terns in the St. Louis River Estuary, 1982–1990. Data were obtained from the scientific literature and unpublished Minnesota Department of Natural Resources records.**

The most attractive habitat for Common Terns at Wisconsin Point lies in a zone where nest washouts are frequent. Washouts can be avoided by altering the habitat so that the best areas for tern nests are considerably above the washout zone. Currently the best option is to build a crib-like structure for the terns similar to the one at the Ashland Pier. This site also needs to be protected from predation by aggressive pre-nesting season predator control programs.

Partially cleared islands, electric fences near the water, and nest boxes have not been effective. However, discouragement and attraction techniques have been successful and may have accelerated the relocation of the terns to areas where they have been successful in producing young. Providing secure open nesting habitat by totally clearing vegetation from isolated islands has been the most effective management technique.

Interstate cooperation between Minnesota and Wisconsin has been essential in managing the Common Terns in the estuary. Furthermore, the cooperation of local residents and business is necessary to prevent human/tern conflicts.

Despite good tern reproductive success in 1989–1990, management and monitoring efforts need to continue annually for at least a decade in the St. Louis River estuary to decrease the probability of population decline. Efforts should focus on: (1) vegetation control, (2) prevention of gull nesting

in prime and traditional tern nesting sites, (3) predator control, and (4) estimation of number of breeding pairs and chicks fledged per breeding pair. Although these activities should be directed at the current active site (Interstate), it may be necessary to modify conservation and management efforts if major changes occur in gull or tern populations or in the ecology of the St. Louis River estuary.

#### Update 1991–1993

Both gulls and terns nested successfully in the estuary during the summers from 1991 through 1993. In 1991 the first record of inter-colony breeding movement between Ashland, WI, and Interstate Island was documented when six terns banded at Ashland in 1988 were found breeding at Interstate Island. Inter-colony movement had long been suspected but had not been verified. In 1992, two terns banded at Interstate in 1989 and three banded at Interstate in an unknown year were found breeding on Interstate. This represents the first documentation of birds fledged from Interstate returning to breed. A two year old tern, originally banded on Interstate Island, was found breeding on Interstate in 1993. This is the first record of a two year old tern breeding in Minnesota. In 1993, 30 pairs of Common Terns attempted to nest at Fish Lake but they abandoned this site and re-nested at Interstate Island. Hines (1993) provides additional information about the Fish Lake site.

	1957	1973	1974	1976	1977	1978	1979	1980	1981
Mn Power Hibbard North & South Islets		30	500	308	573	1227	1273	1372	1224
Port Terminal			4		180	361	177	153	
Erie Pier			1		234	973	1477	2839	3747
Peavey Globe Elevator									
Interstate Island									
Grassy Point Islets					56	76	78		
Barkers Island	1								
Total	1	30	505	308	1043	2637	3005	4364	4971

**Table 2a. Historical records of the number of pairs of breeding Ring-billed Gulls in the St. Louis River Estuary, 1957, 1973–1981. Data were obtained from the scientific literature and unpublished Minnesota Department of Natural Resources records.**

*Ring-billed Gull* — Due to inclement weather the gulls were not censused in 1991. By 1992 gulls had completely abandoned the Peavey Globe Elevator site and were nesting on Interstate Island. This movement created additional gull management problems on Interstate. In 1991, a 1/2 meter wire mesh fence was constructed around the traditional tern nesting area on Interstate Island. This enclosure was effective in reducing interspecific competition between Ring-billed Gulls and Common Terns (Goodermote 1991–1993).

In 1992, 10,061 pairs of Ring-billed Gulls nested in the estuary; 1111 pairs were at the Minnesota Power and Light Hibbard Plant, 1186 pairs used North and South Islets, and 7764 pairs nested on Interstate Island. In 1993, 10,318 pairs of Ring-billed Gulls were recorded nesting in the estuary; 975 pair used the Minnesota Power and Light Hibbard Plant, 1151 pairs were recorded on North and South Islets, and 8192 pairs nested on Interstate Island.

*Common Tern* — In 1991, 152 pairs of Common Terns nested on Interstate Island; there were no other nesting attempts in the estuary. Reproductive success was 1.31 chicks/pair and a total of 199 chicks fledged. In 1992, 107 pairs of Common Terns nested on Interstate Island, 146 chicks fledged and reproductive success was estimated at 1.37 chicks/pair. In 1993, 162 pairs of Common Terns nested on Interstate Island and produced 145 chicks. Reproductive success declined to 0.88 chicks/pair

during this breeding season.

Penning (1993) reported that fledging rates greater than 1.10 are needed for population growth. The colony at Interstate Island exceeded this estimate in 1991–1992 but not in 1993. The mean annual fledging rate for 1989–1993 at Interstate Island was 1.15 chicks/pair per year. If management efforts continue to produce fledging rates at this level, the St. Louis estuary Common Tern population will remain stable or even increase in numbers.

#### Acknowledgments

Funding and equipment were provided by the Minnesota Department of Natural Resources Nongame Wildlife Fund, Wisconsin Department of Natural Resources, James W. Wilkie Fund for Natural History of the James Ford Bell Museum of Natural History, Chequamegon Birders; the Department of Fisheries and Wildlife, University of Minnesota and the Minnesota Agricultural Experiment Station. We especially thank L. Pfanmuller and F. Strand for their commitment to this project and A. M. Starfield, D.F. McKinney, L. Pfanmuller, G. Busacker and H. B. Tordoff for critically reviewing this manuscript. Many people have been involved with this project over the years; we especially acknowledge the assistance and collaboration of, D. Goodermote, B. Olson, C.A. Penning, J. Mooty, and F. Strand. T. Davis conducted much of the field work in the 1970s through 1987 and deserves special recognition for

	1983	1984	1985	1986	1988	1989	1990
Mn Power Hibbard	751	762	740	392	639	1820	1395
North & South Islets	0	0	0	0	0	1257	1527
Port Terminal	5608	7103	7015	7969	6828	942	0
Erie Pier	0	0	0	0	0	207	0
Peavey Globe Elevator	0	0	0	0	0	3830	4730
Interstate Island	0	0	0	0	0	0	572
Grassy Point Islets							
Barkers Island							
Total	6359	7865	7755	8361	7467	8056	8224

**Table 2b. Historical records of the number of pairs of breeding Ring-billed Gulls in the St. Louis River Estuary, 1983–1990. Data were obtained from the scientific literature and unpublished Minnesota Department of Natural Resources records.**

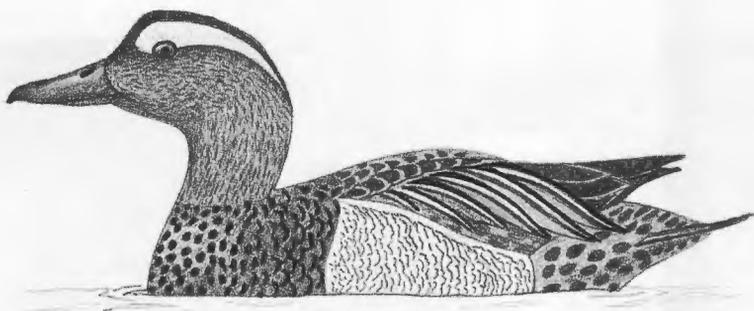
his enthusiasm and perseverance.

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Garganey and Eurasian Wigeon drawings by Parker Backstrom.

## The Spring Season (1 March to 31 May 1993)

Steve Carlson, Oscar Johnson, Scott Krych and Dick Ruhme  
Foreword by Peder Svingen

Spring 1993 recapitulated that of 1992, as cool temperatures once again persisted into the “summer” months. The season began with cold temperatures, continuing the late-February pattern noted in the winter summary (*The Loon* 65:116–118). By the third week, persistent fog helped bring temperatures above normal, especially in northeastern Minnesota, where it was seven to ten degrees warmer than usual during the last week in March. Several major winter storms tracked just south of Minnesota, so that March, usually our “snowiest” month, was relatively dry; however, some of these storms brushed the southern tier of counties with six to ten inches of snow. April temperatures were closer to normal but still on the cool side, especially in the

North toward the month. April rain showers added to the burden of melting snow in southern Minnesota, which delayed crop planting and set the stage for severe flooding, especially along the Minnesota river. During April and May, rainfall in southwestern and southeastern Minnesota was nearly twice normal in some areas. Temperatures in May continued slightly cooler than normal across the state, especially during the third week.

Impressively hardy was the American Bittern arriving in Becker County by 29 March, the earliest ever for northern Minnesota. Numbers of “southern” herons were modest compared to the previous spring, although southern Minnesota experienced one its best ever migration of Cattle Egrets. The

cold temperatures in the early part of the season retarded the opening of frozen lakes and many observers perceived a late waterfowl migration. Geese (other than Canadas) apparently shifted their migration to the west, as Snow Geese were extremely scarce and only one sizable flock of White-fronts was reported. On the other hand, several rare ducks were found, including at least three Cinnamon Teal, a drake Eurasian Wigeon in Wright County, and a second state record Garganey in Jackson County.

Yellow Rails were detected in several widely scattered locations; most unexpected were the two birds seen and heard in a wet pasture (dairy cows included) near Grand Marais! Shorebird migration was poor for the third spring in a row, despite good habitat in the flooded fields of southern and western Minnesota. Several species appeared late and in low numbers. One exception was four records of Red Knot (total of eight birds) which compares to only two records the previous spring and no records during all of 1991.

Casual larids were recorded briefly in Houston and Anoka counties, but neither could be located on subsequent days. Reports of Long-eared and Short-eared Owls were down. Passerine migration was relatively late through April, then picked up with the arrival of a brief warm spell in early May. Mockingbirds appeared as far north as Agassiz NWR while Loggerhead Shrikes were not significantly different from the previous spring's numbers. One of this season's White-eyed Vireos was presumably the same individual returning to

the campground near Reno, Houston County, for the third straight year. There is still much to learn about site fidelity of breeding and wintering species, not to mention the return of a migrant species or rare vagrant.

Warbler migration peaked later than usual in southern Minnesota (mob) and extended through 28 May in the Twin Cities, about one week late (Steve Carlson, pers. com.). Prairie Warbler was finally documented by specimen when a bird was found on a farm in Pope County. Two early May records of Worm-eating Warbler fit the general pattern of occurrence in the state, but three substantiated records of Kentucky Warbler (with more to follow in June) and at least five records of Hooded Warbler away from its breeding area in Scott County, were unexpected. Only one Yellow-breasted Chat was reported, as this species continues its marginal existence as a Regular member of the state's avifauna. More ominous was the complete absence of Henslow's Sparrow from O. L. Kipp State Park, Winona Co., for the second year in a row. Definitively recorded and photographed for the first time in Minnesota, a Great-tailed Grackle (also ominous?) in Rice County.

Additional insights and new questions can be found within the species accounts, which are dependent as always upon the contributions of nearly 100 dedicated observers. I would also like to acknowledge seemingly endless hours of effort by the team of seasonal report writers who are listed at the beginning of each report.

## KEY TO SEASONAL REPORTS

1. Species listed in upper case (**PACIFIC LOON**) indicate a Casual or Accidental occurrence in the state.
2. Dates listed in boldface (**10/9**) indicate an occurrence either earlier, later or within the earliest or latest dates on file.
3. Counties listed in boldface (**Aitkin**) indicate either a first county record or an unusual occurrence for that county. City of **Duluth** also boldface when applicable.
4. Counties listed in italics (*Aitkin*) indicate a first county breeding record.
5. Brackets [ ] indicate a species for which there is reasonable doubt as to its origin or wildness.

**RED-THROATED LOON**

Reported 5/10 Duluth LE.

**Common Loon**

Early south 3/27 Winona AM, 3/30 Dakota RJ, 4/2 Rice OR and Sherburne DO. Early north 3/26 Duluth ME, 4/4 Kanabec CM, 4/10 Becker AB.

**Pied-billed Grebe**

Early south 3/5 Dakota RG, 3/24 Hennepin TBe, 3/26 Sherburne DO. Early north 3/28 Otter Tail SMD, 4/1 Duluth TD, TW, 4/4 Aitkin WN.

**Horned Grebe**

Early south 4/2 Hennepin DB, SC, CH, and Kandiyohi CR/CD, 4/3 Anoka KB. Early north 4/20 Beltrami DJ, 4/24 Aitkin WN, 4/26 Lake DPV and Otter Tail CS/KC.

**Red-necked Grebe**

Early south 4/6 Ramsey RH, 4/9 Rice TF, 4/10 Brown JS, LeSueur PS and Renville SDM. Early north 4/2 St. Louis DPV, 4/6 Otter Tail SDM, 4/12 Douglas KKW.

**Eared Grebe**

Early south 4/16 Rock JP, 4/17 Big Stone, Lac Qui Parle DN, 4/24 Scott SK. Early north 4/30 Grant SDM, Pennington KSS.

**Western Grebe**

Early south 4/17 Big Stone DN and Wright KB, 4/18 Hennepin SC. Early north 4/29 Grant SDM, 5/12 Traverse AH, 5/5 Douglas JW.

**CLARK'S GREBE**

Reported 5/1 Traverse PB, AH (*The Loon* 65:151-152), 5/25 Traverse (same bird) HHu.

**American White Pelican**

Early south 3/1 Dakota AB, KB (overwintered), 4/3 Winona AM, 4/9 Wabasha DN. Early north 3/29 Becker BBe, 3/31 Koochiching GM.

**Double-crested Cormorant**

Early south 3/1 Dakota AB (overwintered), 3/28 Ramsey KB, 4/2 Sherburne DO. Early

north 4/6 Otter Tail SDM, 4/10 Grant AB, 4/12 Douglas KKW.

**American Bittern**

Early south 4/10 Lac Qui Parle DO, 4/22 Pipestone ND, 4/28 Rice TB. Early north 3/29 Becker BBe, 4/21 Aitkin WN, 4/28 Itasca TS.

**Least Bittern**

Only reports 5/16, 20 Winona KB, CS, 5/22 Anoka RH.

**Great Blue Heron**

Early south 3/10 Washington TEB, 3/16 Rice TB, 3/18 Stearns RG. Early north 3/25 Becker BBe, 3/26 Otter Tail SDM, 3/27 Douglas KKW and Wilkin RJ.

**Great Egret**

Early south 3/28 Dakota SK and Ramsey KB, 3/30 Lyon HK. Early north 4/7 Otter Tail SDM, 4/9 Douglas KKW, 4/12 Clay LCF.

**Snowy Egret**

Reported 4/24 Lac Qui Parle mob, 4/24 Yellow Medicine JH.

**Little Blue Heron**

Reported 5/11-12 Dakota KB, TT.

**Cattle Egret**

Early south 4/26-29 Rice FKS, 5/1 Nicollet LF and Pope AH. Early north 5/1 Traverse AH, 5/7 Grant DJ; peak 5/10 Freeborn RRK (30); total at least 105 individuals reported from 15 counties!

**Green-backed Heron**

Early south 4/23 Hennepin RB, 4/26 Houston EMF, 4/29 Anoka KB. Early north 4/28 Duluth TW, 4/29 Otter Tail SDM, 5/5 Aitkin WN.

**Black-crowned Night-Heron**

Early south 3/29 Ramsey OJ, 3/31 Pipestone ND, 4/6 Hennepin SC. Early north 3/29 Otter Tail SDM, 5/8 Becker BBe.

**Yellow-crowned Night-Heron**

Reported 4/17-20 Hennepin *fide* PB, 4/23



**Yellow-crowned Night Heron, 21 May 1993, Talcott Lake, Cottonwood County. Photo by Ed Duerksen.**

Murray ND, 5/21 Cottonwood ED.

**Tundra Swan**

Early south 3/20 Winona AM, 3/29 Wabasha WDM. Early north 3/28 Otter Tail SDM, 4/5 Aitkin WN and Clay LCF. Late south 4/21 Cottonwood ED, 4/26 Washington WL. Late north 5/15 Aitkin WN, 5/28 Clearwater AB.

**Mute Swan**

Reported 3/21–4/2 Dakota mob.

**Greater White-fronted Goose**

All reports: 4/1 Cottonwood ED, 4/12, 17–18 Big Stone KB, RJ, DN, 4/18 St. Louis (1) AE, 4/20 Washington SK, 5/11 Clearwater DJ.

**Snow Goose**

Early south 3/1 Rice FKS, 3/19 Lac Qui Parle FE. Early north 4/4 Otter Tail SDM. Late south 4/25 Lac Qui Parle EF, 5/8 Dakota DSm. Late north 5/31 Duluth DPV.

**ROSS' GOOSE**

Reported 4/24–25 Lac Qui Parle (1) MB, FE *et al.*

**Canada Goose**

Reported from 31 counties south, 17 counties north.

**Wood Duck**

Early south 3/3 Nicollet LF, 3/6 Winona DN, 3/14 Scott RG, RJ, TT. Early north 3/27 Clay LCF, 3/20 Otter Tail SDM, 3/28

Kanabec CM and Aitkin WN.

### **Green-winged Teal**

Early south 3/2 Dakota KB, 3/13 Scott RG, 3/25 Rice TB. Early north 3/23 Otter Tail SDM, 4/9 Aitkin WN, 4/10 Clearwater AB.

### **American Black Duck**

Early south 3/6 Dakota DN, 3/14 Goodhue DZ, 4/2 Hennepin DC. Early north 3/31 St. Louis AE, 3/11 Cook OSL, Koochiching KB and Lake DS.

### **Mallard**

Reported from 39 counties south, 22 counties north.

### **Northern Pintail**

Early south 3/1 Dakota KB, 3/13 Scott DN, 3/26 Winona CS. Early north 3/27 Cass *fide* DJ, Douglas KKW and Wilkin PS.

### **GARGANEY**

Second state record 5/1–5 Jackson CS *et al* (*The Loon* 65:55–57).

### **Blue-winged Teal**

Early south 3/25 Martin BBo, 3/26 Winona CS and Wright KB. Early north 3/30 Douglas KKW, 4/6 Becker BBe and Otter Tail SDM.

### **Cinnamon Teal**

Reported 4/24–25 Lac Qui Parle mob, 5/2 Lyon HK, 5/3 Lac Qui Parle (different location) JD.

### **Northern Shoveler**

Early south 3/19 Wright KB, 3/20 Dakota DN, 3/21 Hennepin RG. Early north 4/7 Clay BK, 4/10 Clearwater AB, 4/18 Aitkin NN and Duluth ME.

### **Gadwall**

Early south 3/6 Winona DN, 3/13 Scott DN, 3/21 Jackson County CS. Early north 4/13 Otter Tail SDM, 4/26 St. Louis AE, 5/4 Clay LCF.

### **EURASIAN WIGEON**

Reported 4/20–5/4 Wright GS *et al* (*The Loon* 65:154).

### **American Wigeon**

Early south 3/20 Nicollet LF, 3/21 Lac Qui Parle FE and Winona CS. Early north 3/27 Aitkin WN and Otter Tail SDM, 3/28 Clay LCF and Grant AB.

### **Canvasback**

Early south 3/1 Dakota KB (overwintered), 3/18 Winona CS, 3/26 Cottonwood ED, Olmsted JB and Rice TB. Early north 3/28 Traverse AB and Wilkin SDM, 4/9 Mahnomen DJ, BK.

### **Redhead**

Early south 3/11 Wright KB, 3/18 Winona CS, 3/20 Dakota SK, TT. Early north 4/9 Duluth ME, 4/19 Douglas KKW, 4/20 Becker BK.

### **Ring-necked Duck**

Early south 3/1 Olmsted JB, 3/20 Dakota BL, DN, 3/25 Cottonwood ED and Scott RG. Early north 3/27 Otter Tail SDM and Wilkin DS, 3/28 Douglas KKW.

### **Greater Scaup**

Early south 3/27 Chippewa HK, Lincoln KB and Scott DB. Early north 3/27 Wilkin PS, 4/9 Duluth ME and Mahnomen BK.

### **Lesser Scaup**

Early south 3/1 Winona CS, 3/3 Nicollet LF, 3/6 Olmsted JB. Early north 3/21 Itasca DZ, 3/28 Grant AB, 3/30 Douglas KKW.

### **Harlequin Duck**

Overwintered through 3/27 Otter Tail SDM (*The Loon* 65:158–159); also reported 5/7 Duluth *fide* KE.

### **Oldsquaw**

Reported 4/4 Carver DM, 5/7–8 Olmsted JB.

### **Surf Scoter**

Reported 5/3–7 Ramsey KB, DN, 5/25 St. Louis TW.

### **White-winged Scoter**

Reported 4/5 Dakota KB, 4/7–10 LeSueur TF, RG, 4/29 Grant SDM, 5/10–11 Hennepin SC, OJ, 5/29–30 Cook KE, DN, DS<sub>m</sub>.

**Common Goldeneye**

Late south 4/23 Wright DSm, 4/30 Hennepin SC, 5/4 Ramsey KB.

**Bufflehead**

Early south 3/14 Dakota RG, RJ, 3/19 Lac Qui Parle FE. Early north 3/12 Duluth TW, 3/29 Otter Tail SDM. Late south 5/10 Ramsey KB, 5/11 Hennepin OJ.

**Hooded Merganser**

Early south 3/3 Wright KB, 3/4 Olmsted JB, 3/11 Washington TEB. Early north 3/28 Kanabec CM, 3/30 Itasca JB/TS, 4/1 Aitkin WN.

**Common Merganser**

Late south 4/25 Anoka PKL and Hennepin SC, 4/26 Washington DS, 5/27 Winona KB.

**Red-breasted Merganser**

Early south 3/20 Ramsey, 3/24 Scott DB, 3/26 Dakota RG and Rice TB. Early north 4/5 Beltrami DJ, 4/7 Becker BBe, 4/8 Aitkin WN and Kanabec CM.

**Ruddy Duck**

Early south 3/22 Scott DB, 3/26 Ramsey RH and Wright KB. Early north 3/25 Otter Tail SDM, 3/27 Wilkin PS, 4/27 Kanabec CM.

**Turkey Vulture**

Early south 3/24 Winona AM, 3/29 Fillmore GMD, 3/30 Houston EMF. Early north 4/9 Wadena AB, 4/11 Pine DS, 4/13 Becker BBe.

**Osprey**

Early south 3/29 Fillmore GMD, 4/5 Dakota RJ, 4/10 Hennepin SC, Olmsted JB, Rice BL, TB and Winona DN. Early north 3/25 Becker BBe, 4/9 Wadena AB, 4/14 Aitkin WN.

**Bald Eagle**

Reported from 26 counties south, 17 counties north.

**Northern Harrier**

Early south 3/19 Dakota RG, 3/20 Anoka PKL, 3/21 Rice TB and Winona ND. Early north 3/22 St. Louis AE, 3/26 Otter Tail

SDM, 3/27 Roseau PS.

**Sharp-shinned Hawk**

Early south 3/3 Washington TEB, 3/4 Rice TB, 3/10 Olmsted JB. Early north 3/9 Beltrami DJ, 3/28 Aitkin WN, Otter Tail SDM.

**Cooper's Hawk**

Early south 3/14 Hennepin CS, 3/18 Rice TB, 3/21 Dakota SK. Early north 4/8 Becker BBe, 4/14 Pennington KSS, 4/17 Otter Tail SDM.

**Northern Goshawk**

Late south 5/5 Washington DS, 5/8 Olmsted JB.

**Red-shouldered Hawk**

Early south 3/18 Rice TB, 3/22 Washington WL, 3/26 Mower RRK, 5/15 Pipestone RJ. Early north 3/20 Aitkin WN, 3/21 Otter Tail SDM, 3/28 Becker BBe.

**Broad-winged Hawk**

Early south 3/29 Pipestone JP, 4/4 Blue Earth TEB and Goodhue OJ. Early north 4/7 Becker BBe, 4/19 Hubbard HJF, 4/20 Cook KMH.

**Swainson's Hawk**

Early south 4/4 Blue Earth TEB, 4/5 Olmsted JB, 4/17 Pipestone PS. Early north 4/28 Traverse PS, 5/25 Norman AB, 5/29 Clearwater DJ.

**Red-tailed Hawk**

Reported from 36 counties south, 16 counties north.

**Ferruginous Hawk**

Reported 5/8 Stevens *vide* PB, 5/25 Pope HH.

**Rough-legged Hawk**

Late south 4/18 Winona CS, 4/23 Hennepin TBr, 5/2 Lyon AB. Late north 4/17 Aitkin SC and Cook OSL, 5/14 Marshall KSS, 5/29 Clearwater DJ.

**Golden Eagle**

Late south 4/12 Lac Qui Parle RG, RJ, 4/16 Carver PS, 4/23 Houston AH. Late north 4/10 Polk AB, 4/12 Traverse RG, RJ, 4/18

Wilkin SDM.

**American Kestrel**

Early north 3/5 Becker BBe, 3/10 Kanabec CM, 3/14 Aitkin WN.

**Merlin**

Early south 3/20 Dakota OJ, 4/4 Swift BBo, 4/17 Ramsey RH. Early north 3/14 Wilkin SDM, 3/27 Otter Tail RJ, 3/30 Cook KMH and St. Louis TEB.

**Prairie Falcon**

Reported 3/21 Wilkin SDM.

**Peregrine Falcon**

Early south 3/1 Ramsey KB, 3/3 Hennepin TBr, 4/24 Carver DM. Early north 3/29 Duluth mob, 4/25 Aitkin WN. Reported from a total of 20 counties!

**Gyrfalcon**

Reported 3/7 Wilkin SDM.

**Gray Partridge**

Reported from 18 counties south, nine north.

**Ring-necked Pheasant**

Reported from eight north and 27 south counties.

**Spruce Grouse**

All reports: 3/3 Cook CR/CD, 3/13 St. Louis, 3/22 Koochiching KB, 4/3 Lake KE *et al*, 4/17 Lake AH, WN.

**Ruffed Grouse**

Reported from 17 north and nine south counties.

**Greater Prairie-Chicken**

Reported 3/7–5/31 Wilkin (max 76) mob Polk AB, 4/22 Clay JD, 4/14 Cass DJ, Hubbard (max 11) DJ.

**Sharp-tailed Grouse**

Reported from Aitkin, Becker, Clearwater, Roseau and St. Louis counties.

**Wild Turkey**

Reported from 18 south counties (some of

these were of questionable origin).

**Northern Bobwhite**

One report: 5/11 Houston JB.

**Yellow Rail**

All reports: 5/4–5/15 Aitkin WN, 5/25 Otter Tail (2) PS, 5/29 Lake of the Woods (1) PS, 5/30 Cook (2) KE *et al*.

**Virginia Rail**

Early south 4/18 Rock PS, 4/24 Lac Qui Parle MB, 4/25 Hennepin TT. Early north 5/6 St. Louis DBe, 5/6 Becker BBe.

**Sora**

Early south 4/2 Cottonwood ED, 4/22 Winona CS, 4/24 Hennepin SC. Early north 4/22 Roseau PS, 5/1 Becker BBe, 5/2 Kanabec CS.

**Common Moorhen**

All reports: 5/4–5/11 Houston FS, JB, 5/6 Steele KB, 5/16 Winona CS, 5/20 Winona KB.

**American Coot**

One overwintered in Dakota County at Black Dog Lake (SC). Early south 3/1 Winona CS, 3/14 Scott RJ, TT. Early north 3/28 Wilkin SDM, 4/1 Douglas LW, 4/8 Becker BBe.

**Sandhill Crane**

Early south 3/28 Hennepin KB, 3/28 Stearns KSS, 3/31 Houston EMF. Early north 3/28 Wilkin SDM and Kanabec CM, 4/7 Roseau PS.

**Black-bellied Plover**

All reports: 5/13 Steele KV, 5/15 Goodhue TT, BL, 5/21 Dakota DN, 5/24 Ramsey KB, 5/22–29 St. Louis DBE, 5/25–28 Stevens BBo, 5/24–25 Hennepin SC, 5/29–30 Lake of the Woods PS *et al*, 5/29 Cook KMH and Anoka PKL.

**Lesser Golden-Plover**

Early south 4/27 Nobles ND, 5/8 Steele KV, 5/9 Cottonwood ED. Early north 5/5 Otter Tail SDM, 5/10 Lake DPV, 5/29 Lake of the Woods PS.

**Semipalmated Plover**

Early south 5/8 Olmsted RJ, 5/12 Wabasha KB, 5/14 Freeborn MF. Early north 5/11 Kanabec CM, 5/15 Aitkin WN, 5/17 St. Louis DBE.

**Piping Plover**

Only report 5/29 Lake of the Woods PS.

earliest date north) PS, 4/25 Lac Qui Parle CJ, 4/29 Rice TB, 5/28 Clearwater (5) AB.

**Greater Yellowlegs**

Early south 3/27 Lac Qui Parle HK, 4/4 Winona DN, 4/13 Olmsted JB. Early north 4/27 Otter Tail CS/KS, 4/30 Kanabec CM. Late south 5/4 Jackson JF, 5/16 Winona CS.



**Marbled Godwit, 31 May 1993, Stearns County. Photo by Sr. Pamela Rae Kern OSB.**

**Killdeer**

Early south 3/23 Cottonwood ED, 3/24 Olmsted AP, 3/25 Rice TB. Early north 3/26 Becker BBe, 3/28 Traverse AB, 3/29 Cass JB/TS.

**American Avocet**

All reports: 4/22 Roseau (ties second

Late north 5/15 St. Louis AB, 5/29 Lake of the Woods PS.

**Lesser Yellowlegs**

Early south 4/24 Lac Qui Parle mob and Lyon HK, 4/28 Olmsted JB (very late this year). Early north 4/25 Clay LCF, 4/29 Otter Tail SDM, 5/3 Kandiyohi CJ. Late

south 5/20 Winona DB, 5/25 Hennepin DJ.  
Late north 5/15 Aitkin WN, 5/22 Clearwater  
AB.

### **Solitary Sandpiper**

Early south 4/29 Yellow Medicine PS, 4/29  
Rice TB, 4/30 Brown RJ. Early north 5/15  
Aitkin WN, 5/16 Kanabec CM. Late south  
5/25 Hennepin OJ and Brown RJ.

### **Willet**

All reports: 4/24 Lac Qui Parle (11) DB, 4/  
29 Otter Tail SDM, 4/30 Nobles ND, 5/2 St.  
Louis SS, 5/15 Wilkin SDM, 5/25 Polk AB.

### **Spotted Sandpiper**

Early south 4/23 Rice TB, 4/27 Murray ND,  
4/29 Blue Earth LF. Early north 4/30 Otter  
Tail SDM, 5/2 Clay LCF, 5/6 St. Louis DBE.

### **Upland Sandpiper**

Early south 4/29 Yellow Medicine PS, 4/30  
Watowan RJ, 5/8 Stearns JR. Early north  
5/3 Otter Tail SDM, 5/12 Clay LCF, 5/20  
St. Louis KR.

### **Whimbrel**

All reports 5/19–31 St. Louis mob, 5/19  
Lake DPV, 5/25–29 Cook KMH, DN.

### **Hudsonian Godwit**

Early south 4/18 Yellow Medicine KB, 4/24  
Lac Qui Parle RH, HK, 5/3 Jackson (4) RG.  
Early north 5/14 Otter Tail SDM, 5/16 Clay  
(5) LCF. Late south 5/14 Nobles (9) JP, ND,  
5/19 LeSueur RJ, 5/20 Stevens (15) BBo.

### **Marbled Godwit**

Early south 4/12 Big Stone AB, RJ, 4/28  
Ramsey mob. Early north 4/18 Wilkin (56)  
SDM, 4/21 Polk PS, 4/25 Clay LCF.

### **Ruddy Turnstone**

All reports: 5/21, 28 Rice TB, 5/2, 30 St.  
Louis mob, 5/20 Winona KB, 5/24 Olmsted  
JB, 5/25–29 Hennepin (16) SC, OJ, 5/26  
Waseca (2) RG, 5/28 Clearwater AB, 5/29–  
30 Cook TEB, 5/29 Lake of the Woods PS,  
5/31 Crow Wing KD.

### **Red Knot**

All reports: 5/23 St. Louis (4) mob, 5/24

Hennepin (1) SC, 5/28 Clearwater (1) AB,  
5/30 Lake of the Woods (2) KB.

### **Sanderling**

All reports: 5/11 Clay LCF, 5/13 Olmsted,  
5/17 Goodhue KB, 5/20 Stearns BBo, 5/21–  
29 St. Louis TEB, DE, 5/24–25 Hennepin  
SC, 5/24 Murray RG, RJ, 5/24 Pipestone  
RG, 5/24 Waseca (40) RG, 5/29–30 Lake of  
the Woods KB.

### **Semipalmated Sandpiper**

Early south 5/1 Carver DM, 5/2 Lincoln  
AB, 5/7 Anoka KB. Early north 5/1  
Kanabec CM, 5/14 St. Louis DN, 5/20  
Becker DJ. Late south 5/19 Rice TB, 5/31  
Hennepin SC. Late north 5/28 Clearwater  
AB, DJ, 5/29 St. Louis KR, 5/30 Lake of  
the Woods KB.

### **Least Sandpiper**

Early south 4/30 Cottonwood RJ, 5/7 Anoka  
KB, 5/8 Lac Qui Parle DN. Early north 5/6  
Kanabec CM, 5/8 Becker TEB. Late south  
5/25 Hennepin SC, 5/29 Benton JR and  
Dakota SK. Late north 5/25 Polk AB, 5/28  
Clearwater AB, 5/30 Lake of the Woods  
KB.

### **White-rumped Sandpiper**

Early south 4/30 Cottonwood ED, 5/4  
Jackson JF, 5/8 Yellow Medicine KB. Only  
north reports 5/29 Clearwater AB, DJ, 5/29  
Todd RJ, 5/29 Lake of the Woods PS, 5/31  
St. Louis DN. Late south 5/19 Steele KV, 5/  
20 Stevens BBo, 5/25 Hennepin OJ.

### **Baird's Sandpiper**

All reports: 5/2 Lyon BBo, 5/13 Olmsted  
JB, 5/13 Steele KV, 5/15 Aitkin WN, 5/16  
Anoka PKL, 5/25 Polk AB.

### **Pectoral Sandpiper**

Early south 4/24 Lac Qui Parle RH, 5/1  
Olmsted JB and LeSueur PS. Early north 5/  
10 Kanabec CM, 5/15 Aitkin WN, 5/16  
Clay LCF. Late south 5/20 Stevens BBo, 5/  
25 Dakota SD. Late north 5/28 Clearwater  
AB.

### **Dunlin**

Early south 5/3 Kandiyohi CJ, 5/13

Olmsted JB, 5/19 LeSueur RJ. Early north 5/16 Clay LCF, 5/20 Becker DJ, 5/25 St. Louis DN. Late south 5/24 Ramsey KB, 5/31 Hennepin SC.

#### **Stilt Sandpiper**

All reports: 5/17, 21 Rice TB, 5/20 Stevens BBo and Olmsted JB, 5/25 Polk AB.

#### **Short-billed Dowitcher**

Early south 5/2 Lyon AB, 5/7 Olmsted JB, 5/8 Yellow Medicine KB. All north dates 5/15 Otter Tail SDM, 5/25 Polk AB, 5/29 St. Louis KR, DPV. Late south 5/16 Rice TB, 5/20 Winona KB, 5/21 Cottonwood ED.

#### **Long-billed Dowitcher**

All reports: 5/1 Rock RJ, 5/2 Lyon AB, 5/6 St. Louis TD, 5/8 Houston RJ, 5/19 Olmsted JB, 5/19 LeSueur RJ.

#### **Common Snipe**

Early south 3/2 Hennepin SC, 3/2 Rock PS, 3/4 Washington DS (are these overwintering birds?). Early north 3/28 Aitkin WN, 4/6 Kanabec CM, 4/15 Otter Tail SDM.

#### **American Woodcock**

Early south 3/26 Rice TB, 3/29 Hennepin DZ. Early north 3/28 Aitkin WN, 3/30 Becker BBe.

#### **Wilson's Phalarope**

Early south 4/27 Lac Qui Parle PS, 4/29 Lyons HK, 5/8 Stearns JR. Early north 5/3 Red Lake KSS, 5/14 Otter Tail SDM, 5/16 St. Louis SS.

#### **Red-necked Phalarope**

All reports: 5/24 Waseca RG, 5/25 Hennepin SC and Polk AB, 5/29 Pennington KB.

#### **Parasitic Jaeger**

One report: 5/24–31 St. Louis KE.

#### **LAUGHING GULL**

Reported 4/22 Houston KB (*The Loon* 65:103).

#### **Franklin's Gull**

Early south 3/27 Lac Qui Parle KE, 4/10

Swift DO, 4/10 Pipestone RJ. Early north 4/12 Pennington KSS, 4/22 Roseau PS.

#### **Little Gull**

All reports: 5/14 Marshall AE, KSS, 5/21 St. Louis (2) *fide* KE, 5/25 St. Louis AH, 5/27 St. Louis KR.

#### **Bonaparte's Gull**

Early south 4/10 Hennepin SC, SK, LeSueur PS and Pipestone RJ. Early north 4/26 Aitkin WN, 4/27 Kanabec CM, 4/29 Wilkin SDM.

#### **Ring-billed Gull**

Reported from 13 north and 22 south counties.

#### **Herring Gull**

Reported from many north and 17 south counties.

#### **Thayer's Gull**

All reports: 4/2 Big Stone RJ, 4/12 Washington KB, 4/15 Pennington KSS, 4/17 Steele RG, RJ, 5/3 Anoka RG, RJ.

#### **LESSER BLACK-BACKED GULL**

Reported 5/2 Anoka KB *et al* (13th state record; *The Loon* 65:153–154).

#### **Glaucous Gull**

All reports: 3/25 St. Louis (7) TD, 4/12 Lac Qui Parle RG, 4/16 St. Louis DBE, 4/25 St. Louis (13) KB, TW.

#### **Caspian Tern**

Early south 4/27 Winona AM, 4/29 Dakota SK, 5/4 Ramsey RH. Early north 5/6 St. Louis TW, 5/12 Beltrami DJ, 5/19 Aitkin WN.

#### **Common Tern**

Early south 4/22 Cottonwood ED, 5/2 Ramsey RH. Early north 5/1 Douglas KW, 5/6 St. Louis TT, ME.

#### **Forster's Tern**

Early south 4/10 LeSueur PS, 4/16 Hennepin SC, 4/24 Brown JS. Early north 4/29 Otter Tail SDM, 5/3 Red Lake KSS, 5/9 Douglas KW.

**Black Tern**

Early south 4/24 Brown JS, 4/27 Ramsey RG, 5/1 LeSueur PS. Early north 5/5 Grant SDM, 5/9 Douglas KW, 5/10 Otter Tail CS/KC.

**Rock Dove**

Reported from 14 north and 30 south counties.

**Mourning Dove**

Reported from 15 north and 21 south counties.

**Black-billed Cuckoo**

Early south 5/10 Fillmore SDM, 5/11 Houston JB, EMF, 5/15 Nicollet AH. Early north 5/7 Koochiching GM, 5/23 Clearwater AB, 5/30 Becker KSS.

**Yellow-billed Cuckoo**

All reports: 5/28 Houston FL and Blue Earth LF.

**Eastern Screech-Owl**

Reported from Cottonwood, Dakota, Hennepin, Houston, Murray, and Rice counties.

**Great Horned Owl**

Reported from 24 south and 10 north counties.

**Snowy Owl**

All reports: 3/7 Clay SDM, 3/21 Wilkin (3) SDM, Polk KSS, 3/4 St. Louis TD, 4/4 Aitkin WN, 4/9 Hennepin AH, 4/12 Clay LCF, 4/24 St. Louis ME, 5/10 St. Louis JC.

**Northern Hawk Owl**

All reports: 3/13 Lake (3) DSM, 3/20 Lake SW/MS, 4/13 Lake (2) mob.

**Barred Owl**

Reported from 16 south and nine north counties.

**Great Gray Owl**

Total of 19 individuals reported from Aitkin, Lake, Koochiching, Roseau, and St. Louis counties, with four young in a nest in Aitkin County (WN).

**Long-eared Owl**

All reports: 3/27 Lake SW/MS, 4/9 Lake SW/MS, 4/10 Lake DS, 4/23 Dakota AH, 4/25 Clay LCF, 5/6 Marshall KSS.

**Short-eared Owl**

All reports: 4/4 Wilkin SDM, 4/11 Aitkin WN, 4/13 Wilkin SDM, 5/21 Pine AH.

**Boreal Owl**

All reports: 3/27 Lake SW/MS (8 males calling near Isabella) and 4/6-16 Lake mob.

**Northern Saw-whet Owl**

Reported from Aitkin, Anoka, Beltrami, Carlton, Cook, Hennepin, Lake, Lake of the Woods, Otter Tail, and Yellow Medicine (PS).

**Common Nighthawk**

Early south 4/17 Anoka JW, 5/7 Wright SDM. Early north 5/9 Cook OSL and Lake DSM, 5/17 Otter Tail CS/KC.

**Whip-poor-will**

Early south 4/27 Dakota KB, 5/1 Lac Qui Parle BL, 5/2 Houston EMF. Early north 5/9 Cook OSL, 5/28 Barber BBe, 5/29 Lake of the Woods PS.

**Chimney Swift**

Early south 4/22 Rice, 4/25 Dakota TT, 4/29 Blue Earth LF. Early north 5/2 Pennington KSS, 5/5 Kanabec CM, 5/18 Lake DPV.

**Ruby-throated Hummingbird**

Early south 5/2 Olmsted AP, 5/6 Lyon HK and Nicollet LF. Early north 5/8 Kanabec CM, Otter Tail CS/KC and Koochiching GM.

**Belted Kingfisher**

Early south 3/3 Scott and LeSueur PS, 3/7 Dakota TT. Early north 4/4 Kanabec CM, 4/9 St. Louis ME, 4/28 Beltrami DJ.

**Red-headed Woodpecker**

Reported from 10 north and 27 south counties.

**Red-bellied Woodpecker**

Reported from Aitkin, Becker, Carlton,

Otter Tail, Kanabec, and St. Louis counties in the north and 30 south counties.

#### **Yellow-bellied Sapsucker**

Early south 4/3 Hennepin DZ, CS, 4/4 Kandiyohi JR; early north 4/17 St. Louis SW/MS and 4/17 Aitkin WN. Also reported through 3/13 Brown JS (overwintered).

#### **Downy Woodpecker**

Reported from 33 south and 14 north counties.

#### **Hairy Woodpecker**

Reported from 29 south and 15 north counties.

#### **Three-toed Woodpecker**

All reports: four reports from Spruce Road in Lake County during the period. Also reported 3/21 Koochiching (2) KB.

#### **Black-backed Woodpecker**

All reports: 3/4–4/17 Lake mob, 3/6–5/30 Cook mob, 3/21 Koochiching KB, 3/27 Roseau PS, 4/30 St. Louis SS.

#### **Northern Flicker**

Early north 4/3 Aitkin WN, 4/7 Pennington KSS, 4/10 Koochiching KB.

#### **Pileated Woodpecker**

Reported from 20 north and 28 south counties.

#### **Olive-sided Flycatcher**

Early south 5/2 Hennepin TT, 5/5 Brown JS. Early north 5/10 Aitkin WN, 5/13 Beltrami DJ. Late south 5/30 Hennepin SC, 5/31 Freeborn DN.

#### **Eastern Wood-Pewee**

Early south 4/23 Hennepin TBr, 4/24 Lyon HK, 5/4 Fillmore GMD. Early north 5/15 Otter Tail SDM, 5/21 Clay LCF, 5/22 St. Louis KR.

#### **Yellow-bellied Flycatcher**

Early south 5/8 Winona CS, 5/11 Anoka KB. Early north 5/22 St. Louis KR, 5/26 Clay PS. Late south 5/30 Hennepin SC, 5/31 Brown JS and Rice TB.

#### **Acadian Flycatcher**

All reports: 5/10–18 Houston SDM, mob, 5/10–31 Hennepin OJ, mob, 5/15–31 Nicollet mob, 5/16 Winona CS, 5/31 Rice DZ.

#### **Alder Flycatcher**

Early south 4/24 Lyon HK (second earliest date for state), 5/8 Cottonwood ED, 5/12 Scott TBr. Early north 5/8 Lake DPV, 5/14 Polk KSS, 5/22 St. Louis DBe, KR. Late south 5/31 Brown JS, Freeborn DN and Hennepin SC.

#### **Willow Flycatcher**

Early south 5/6 Hennepin OJ, 5/8 Cottonwood ED and Yellow Medicine KB, PS, 5/11 Sherburne DO. Early north 5/9 Clay LCF, 5/29–31 Duluth KE, mob, 5/30 Grant SDM.

#### **Least Flycatcher**

Early south 4/23 Hennepin TBr, 4/27 Murray ND, 4/28 Dakota KB and Rice TF. Early north 5/6 Clay LCF and Kanabec CM, 5/7 Cook KMH, 5/8 Aitkin WN, Becker BBe and St. Louis TD, ME.

#### **Eastern Phoebe**

Early south 3/27 Murray ND, 3/28 Martin BBo, 3/29 Brown JS. Early north 3/28 Aitkin WN and Otter Tail SDM, 3/29 Becker BBe, 3/30 Kanabec CM.

#### **Great Crested Flycatcher**

Early south 4/28 Anoka KB, 5/4 Goodhue DC and Hennepin DB, 5/5 Dakota SK and Houston CS. Early north 5/6 Kanabec CM, 5/8 Aitkin WN and Becker BBe, 5/9 Douglas KKW.

#### **Western Kingbird**

Early south 5/6 Murray ND, 5/8 Yellow Medicine KB, PS, 5/13 Stevens BBo. Early north 5/10 Otter Tail CS/KC, 5/11 Clay LCF. Also reported 5/24–25 Duluth KE, KR, 5/29 Lake of the Woods PS, 5/30 Cook mob.

#### **Eastern Kingbird**

Early south 5/1 Steele KV, 5/3 Dakota SK and Hennepin SC, 5/4 Winona CS. Early north 5/5 Becker BBe and St. Louis TD,

AE, 5/6 Polk KSS, 5/8 Aitkin WN and Lake DPV.

### **Horned Lark**

Reported from 14 north and 32 south counties.

### **Purple Martin**

Early south 4/10 Rice TB and Rock RJ, 4/18 Kandiyohi DN, 4/21 Murray ND. Early north 4/16 Becker BK, 4/19 Koochiching GM, 4/24 Aitkin WN.

### **Tree Swallow**

Early south 3/29 Dakota RG, 3/30 Anoka PKL and Wabasha WDM. Early north 3/30 Grant KKW, 4/4 Itasca JB/TS, 4/5 Becker BBe.

### **Northern Rough-winged Swallow**

Early south 4/21 Washington TEB, 4/22 Hennepin OJ and Rice TB. Early north 4/27 Otter Tail CS/KC, 4/28 Traverse PS, 5/2 St. Louis SS.

### **Bank Swallow**

Early south 4/23 Ramsey AB, 4/24 Hennepin SC and Scott SK. Early north 4/30 Pennington KSS, 5/2 Otter Tail SDM, 5/5 Kanabec CM.

### **Cliff Swallow**

Early south 4/24 Big Stone DB and Lyon HK, 4/29 Hennepin TT. Early north 4/11 (earliest north date on record) Otter Tail SDM, 4/25 Aitkin WN, 4/30 Pennington KSS.

### **Barn Swallow**

Early south 4/12 Winona CS, 4/17 Faribault RJ and Rice DSm. Early north 4/19 Becker BK, 4/29 Beltrami DJ and Otter Tail SDM.

### **Gray Jay**

Reported from 14 north counties.

### **Blue Jay**

Reported from 21 north and 35 south counties.

### **Black-billed Magpie**

Reported from Aitkin, Beltrami, Clay,

Koochiching, Lake of the Woods, Pennington, Polk, Red Lake, Roseau, and St. Louis counties.

### **American Crow**

Reported from 23 north and 34 south counties.

### **Common Raven**

Reported from 15 north counties; one south report Anoka (resident) JH.

### **Black-capped Chickadee**

Reported from 21 north and 34 south counties.

### **Boreal Chickadee**

Reported from Aitkin, Cook, Koochiching, Lake, Lake of the Woods, Roseau, and St. Louis counties.

### **Tufted Titmouse**

All reports: 3/1-5/31 Houston (two to three daily) EMF, 5/10 and 5/28 Houston SDM, KB, 5/8 Ramsey RH, JW, 5/13 Olmsted JB.

### **Red-breasted Nuthatch**

Reported from 13 north and 13 south counties.

### **White-breasted Nuthatch**

Reported from 17 north and 33 south counties.

### **Brown Creeper**

Reported from 11 north and 28 south counties.

### **House Wren**

Early south 4/22 Cottonwood ED, 4/25 Houston EMF, Lac Qui Parle FE, Nicollet MF and Rice DN. Early north 4/26 St. Louis AE, 4/27 Otter Tail CS/KC, 5/4 Douglas KKW.

### **Winter Wren**

Early south 3/2 (overwintered) Hennepin SC, 3/3 (overwintered) Washington TEB, 3/24 Rice TB. Early north 4/15 St. Louis SW/MS, 4/16 Itasca JB/TS, 4/19 Cook KMH. Late south 5/20 Rice TB, 5/21 Hennepin SC.

**Sedge Wren**

Early south 4/27 Lac Qui Parle PS, 4/30 Hennepin SC, 5/2 Brown JS. Early north 4/30 Aitkin DN, 5/5 Lake DPV, 5/8 Becker BBe and Kanabec CM.

**Marsh Wren**

Early south 4/18 Rock PS, 4/24 Lyon HK, 4/25 Hennepin SC. Early north 5/3 Becker BK, 5/8 Cook KMH and Lake DPV, 5/15 Aitkin WN and Otter Tail SDM.

**Golden-crowned Kinglet**

Early north 3/29 Clay LCF, 4/5 Lake DPV, 4/9 Polk KSS. Late south 5/1 Nicollet LF, 5/3 Washington PC, 5/12 Hennepin DZ.

**Ruby-crowned Kinglet**

Early south 3/23 Sherburne DO, 3/28 Nobles ND. Early north 3/29 Douglas KKW, 4/3 Pennington KSS, 4/17 Beltrami DJ. Late south 5/22 Houston CS, 5/29 Hennepin SC, TT.

**Blue-gray Gnatcatcher**

Early south 4/23 Rock ND, 4/24 Goodhue BL and Lyon HK, 4/27 Carver DN. Two north reports 5/19 Grant SDM, 5/31 Crow Wing WN.

**Eastern Bluebird**

Early south 3/1 Blue Earth and Nicollet MF, 3/3 Scott PS, 3/4 Rice TB. Early north 3/2 Becker BBe, 3/23 Aitkin WN, 3/27 Otter Tail SDM.

**Townsend's Solitaire**

All reports: 3/2–20 Ramsey (same bird from winter season) KB, SC, 3/4–27 St. Louis (three locations) ME, TW, mob, 3/7 Scott DM, 3/21 Otter Tail SDM. 29 individuals for 1992–93 (*The Loon* 65:110–115).

**Veery**

Early south 5/1 Hennepin TBr, TT and Lyon HK, 5/4 Anoka KB and Steele KV, 5/6 Winona CS. Early north 5/4 Clay LCF, 5/8 Cook KMH and Douglas KKR, 5/10 Pine JR.

**Gray-cheeked Thrush**

Early south 4/17 Pipestone JP, 4/21 Winona

AM. Early north 5/8 Kanabec CM, 5/9 Becker BBe, 5/11 Clay LCF. Late south 5/24 Houston EMF, 5/27 Hennepin SC.

**Swainson's Thrush**

Early south 4/16 Blue Earth LF, 4/17 Pipestone JP. Early north 5/6 Clay LCF, 5/8 Aitkin WN, Becker BBe and Kanabec CM. Late south 5/30 Brown JS and Hennepin TT, 5/31 Freeborn DN.

**Hermit Thrush**

Early south 3/29 Steele RG, 4/1 Rice OR, FKS. Early north 4/18 Aitkin WN, 4/19 Becker BBe, 4/20 St. Louis DBe. Late south 5/5 Hennepin SC, DZ, 5/6 Washington PC.

**Wood Thrush**

Early south 5/4 Anoka KB and Washington DN, 5/5 Mower RRR, 5/6 Rice TB. Early north 5/6 Kanabec CM, 5/9 Cook KMH, 5/10 Aitkin WN.

**American Robin**

Reported from 20 north and 33 south counties.

**Varied Thrush**

All reports: 3/20–21 Koochiching KB, 3/27 Swift RJ, through 3/27 Clay mob, through 3/28 Hennepin *fide* PB, 4/28 Washington EW.

**Gray Catbird**

Early south 4/22 Hennepin RB, 4/28 Ramsey KB, 4/29 Rice TB and Yellow Medicine PS. Early north 5/4 Becker BBe, 5/5 Kanabec CM, 5/6 Aitkin WN.

**Northern Mockingbird**

All reports: 3/1–5/1 Scott mob, 4/24 Winona AM, 4/24–27 Lac Qui Parle mob, 4/29–5/2 and 5/31 Aitkin WN, 5/2 Mower *fide* PB, 5/5 Dakota *fide* PB, 5/6–18 Hennepin (five individuals at four locations) TT, PT, TBr, OJ, 5/8 Washington DS, 5/14–15 Marshall AE, 5/16 Duluth *fide* KE, 5/25 Stevens BBo.

**Brown Thrasher**

Early south 4/19 Brown JS, 4/21 Hennepin DC, 4/22 Mower RRR and Winona CS.

Early north 4/28 Aitkin WN, Otter Tail SDM and Traverse PS, 4/30 Kanabec CM, 5/2 Clay LCF.

#### **American Pipit**

Early south 3/27 Lac Qui Parle MH, 4/24 Hennepin TT. Late south 5/8 Yellow Medicine KB, PS, 5/15 Dakota TT and Goodhue BL. Three north reports 5/11 Cook, KMH, 5/22 St. Louis DBe, KR, 5/30 Lake of the Woods KB.

#### **Bohemian Waxwing**

Reported from seven north counties. Late north 3/31 Pennington KSS, 4/18 Duluth AH, 4/27 Lake DPV. One south report 4/26 Ramsey (1) DZ.

#### **Cedar Waxwing**

Reported from 13 north and 30 south counties.

#### **Northern Shrike**

Late south 4/3 Anoka JH and Scott DC, 4/4 Cottonwood ED, 4/13 Hennepin OJ. Late north 4/5 Cook KMH, 4/9 Aitkin WN, 4/17 Lake AH.

#### **Loggerhead Shrike**

Reported from five north and 15 south



**Northern Mockingbird, 1 March 1993, Scott County. Photo by Peder Svingen.**

counties, with 26+ individuals. Early south 3/22 Anoka PKL, 3/27 Lac Qui Parle KE, 4/15 Dakota DSm. Early north 4/10 Clay DJ, 4/29 Wilkin SDM, 5/9 Douglas JW.

#### **European Starling**

Reported from 22 north and 30 south counties.

#### **WHITE-EYED VIREO**

Reported 5/9 Lake Louise State Park, Mower Co. (one) SDM, 5/9-15 Reno, Houston Co. (one; third consecutive year at this location) BP et al.

#### **Bell's Vireo**

All reports: 5/8-15 Wabasha WDM, DN, 5/23 Dakota (two) TT, 5/23 Winona CS.

#### **Solitary Vireo**

Early south 4/27 Hennepin SC, 4/30 Murray RJ. Early north 5/5 Clay LCF, 5/8 Cook KMH, Kanabec CM, Lake DPV and St. Louis KR. Late south 5/28 Brown JS and Hennepin SC, TT.

#### **Yellow-throated Vireo**

Early south 4/30 Washington PC, 5/6 Dakota KB, Goodhue DSm, Hennepin SC, Ramsey DB, DC and Rice TB. Early north 5/8 Becker BBe, BK and Kanabec CM, 5/10 Beltrami DJ, 5/14 Clay LCF.

#### **Warbling Vireo**

Early south 4/25 Washington PC, 5/2 Winona CS, 5/3 Hennepin DN. Early north 5/8 Becker BBe, Douglas KKW, Kanabec CM and St. Louis AE, 5/10 Aitkin WN.

#### **Philadelphia Vireo**

Early south 5/6 Ramsey DB, 5/8 Yellow Medicine KB, PS. Early north 5/9 Douglas JW, 5/10 Beltrami DJ, 5/12 Kanabec CM. Late south 5/28 Blue Earth RJ, Brown JS and Nicollet RJ.

#### **Red-eyed Vireo**

Early south 5/6 Ramsey DB, DC and Winona CS, 5/8 Anoka JW, Cottonwood ED and Yellow Medicine KB. Early north 5/10 Aitkin WN, 5/11 Cook PSp and St. Louis SS, 5/12 Becker BBe.

### **Blue-winged Warbler**

Early south 5/3 Washington PC, 5/6 Anoka JH, Goodhue DSm and Rice TB, 5/7 Hennepin SC, OJ and Winona CS. "Brewster's Warbler" 5/13 Anoka SC.

### **Golden-winged Warbler**

Early south 5/5 Lac Qui Parle FE, 5/6 Hennepin SC, CR/CD and Rice TB, 5/7 Winona CS. Early north 5/6 Becker BBe, 5/8 Aitkin WN, 5/9 Clay LCF and Douglas JW.

### **Tennessee Warbler**

Early south 4/26 Hennepin SC, 4/30 Wabasha CS. Early north 5/7 Kanabec CM, 5/8 Aitkin WN, Becker BBe and St. Louis mob. Late south 5/30 Hennepin, 5/31 Freeborn DN.

### **Orange-crowned Warbler**

Early south 4/23 Big Stone TEB, 4/24 Hennepin SC, TT and Lac Qui Parle AB. Early north 4/26 Kanabec CM, 4/29 Otter Tail SDM. Late south 5/19 Wabasha WDM, 5/21 Hennepin SC. Late north 5/22 Clay LCF and St. Louis DBe, ME, 5/29 Lake AH and Lake of the Woods PS.

### **Nashville Warbler**

Early south 4/24 Lyon HK, 4/26 Hennepin SC. Early north 5/6 Becker BBe and St. Louis TD, TW, 5/7 Clay LCF and Cook KMH. Late south 5/28 Hennepin SC and Lac Qui Parle FE.

### **Northern Parula**

Early south 5/2 Hennepin TT, 5/4 Goodhue DB, DC. Early north 5/6 Itasca PS, 5/7 Becker BBe, 5/8 Cook KMH and St. Louis TD, ME. Late south 5/20 Rice TB, 5/22 Nicollet DN.

### **Yellow Warbler**

Early south 4/29 Anoka KB, Hennepin SC, OJ, TT and Houston FL, 4/30 Pipestone RJ. Early north 5/5 Becker BBe, 5/6 Otter Tail SDM, 5/7 St. Louis SS.

### **Chestnut-sided Warbler**

Early south 5/6 Carver JD, Dakota DSm, Hennepin OJ, DZ, Olmsted JB, Ramsey DC

and Rice TB, 5/7 Lyon HK. Early north 5/5 Becker BBe, 5/7 St. Louis AE, 5/8 Aitkin WN and Itasca TS. Late south 5/31 Freeborn DN.



**Golden-winged Warbler, 29 May 1993, Deerwood, Crow Wing County. Photo by Warren Nelson.**

### **Magnolia Warbler**

Early south 5/5 Lac Qui Parle FE, 5/6 Anoka JW, Dakota DSm, Hennepin SC, TT and Ramsey DB, DC. Early north 5/7 St. Louis DBe, 5/8 Becker BBe and Kanabec CM, 5/9 Aitkin WN. Late south 5/28 Brown JS, 5/29 Hennepin TT.

### **Cape May Warbler**

Early south 5/2 Dakota KE, 5/5 Cottonwood ED. Early north 5/8 Becker BBe, Lake DPV and St. Louis AE, 5/10 Cook PSp and Kanabec CM. Late south 5/20 Hennepin SC, 5/21 Murray ND and Winona KB.

### **Black-throated Blue Warbler**

All reports: 5/11-14 Hennepin (two locations) TT, OJ, 5/23-29 Cook (two locations, seven+ individuals) KMH, KR, mob, 5/29 Lake (two locations, eight individuals) AH, DN.

### **Yellow-rumped Warbler**

Early south 4/2 Murray ND, 4/8 Winona KB. Early north 4/14 Polk KSS, 4/15 Lake SW/MS, 4/18 Aitkin WN and Clay LCF. Late south 5/22 Washington DS, 5/27 Hennepin SC.

**Black-throated Green Warbler**

Early south 5/1 Hennepin DC, TBr, TT and Rock RG, RJ, 5/2 Goodhue FL and Ramsey DZ. Early north 5/8 Cook KMH, Kanabec CM and St. Louis KR, 5/10 Aitkin WN. Late south 5/28 Hennepin SC, 5/31 Freeborn DN.

**Blackburnian Warbler**

Early south 5/2 Olmsted JB, 5/5 Murray ND. Early north 5/5 St. Louis AE, 5/6 Becker BBe and Kanabec CM, 5/8 Douglas JW, KKW. Late south 5/27 Brown JS, 5/28 Hennepin SC.

**YELLOW-THROATED WARBLER**

Reported 5/13 Kandiyohi RF (*The Loon* 65:156).

**Pine Warbler**

Early south 4/28 Winona CS, 4/29 Dakota TT, 4/30 Hennepin TT. Early north 4/27 Becker BBe, 5/3 Beltrami DJ, 5/6 Itasca PS and St. Louis TD, SW/MS, TW.

**PRAIRIE WARBLER**

Specimen 5/1 Pope CB. (The bird was photographed when it died soon after being found; this is the sixth state record and first documented record.) (*The Loon* 65:152).

**Palm Warbler**

Early south 4/23 Hennepin TBr, SC, 4/24 Winona AM. Early north 4/28 Becker BBe, 5/2 Clay LCF, 5/6 Cook KMH, Lake DPV and St. Louis TD. Late south 5/20 Hennepin SC, 5/23 Carver MB.

**Bay-breasted Warbler**

Early south 5/8 Dakota DS<sub>m</sub>, Ramsey AB and Steele KV, 5/9 Anoka SC and Hennepin PS. Early north 5/9 Kanabec CM, 5/10 Lake DPV. Late south 5/19 Anoka JW, 5/21 Washington PC. Late north 5/29 Lake AH, 5/30 Clay SDM.

**Blackpoll Warbler**

Early south 4/29 Hennepin SC, 5/1 Rock RG, RJ. Early north 5/6 Clay LCF, 5/8 Becker BBe and St. Louis ME, KR, TW. Late south 5/28 Hennepin SC, 5/31 Cottonwood ED. Late north 5/29 Aitkin WN and

Lake AH, 5/30 Cook KR, Lake of the Woods KB and Roseau PS.

**Cerulean Warbler**

Early south 5/6 Hennepin OJ, 5/7 Anoka KB, 5/8 Redwood KE, Rice TB and Winona CS. One north report 5/9 Otter Tail County CS/KC.

**Black-and-white Warbler**

Early south 4/28 Lyon HK, 4/29 Dakota TT, Hennepin SC and Rice TB. Early north 4/26 Becker BBe, 4/30 Clay LCF and Kanabec CM.

**American Redstart**

Early south 4/29 Rice TB, 5/1 Winona AM. Early north 5/6 Becker BBe, 5/7 Kanabec CM.

**Prothonotary Warbler**

Early south 4/30 Winona CS, 5/3 Rice TB, 5/6 Hennepin KB.

**WORM-EATING WARBLER**

Reported 5/8 Hennepin TT, 5/9 Washington DN.

**Ovenbird**

Early south 5/1 Carver DM, Hennepin County DC, TT, Lyon HK, Rock RJ and Washington PC, 5/2 Hennepin SC, AH, Houston DN, Rice TB and Winona CS. Early north 4/27 Itasca DB, 5/5 Becker BBe, Kanabec CM and Otter Tail SDM.

**Northern Waterthrush**

Early south 4/24 Hennepin TT, 4/28 Goodhue DC, Lyon HK, Rice TB. Early north 5/6 Becker BBe, Kanabec CM, 5/8 Cook KMH. Late south 5/27 Houston KB, 5/29 Hennepin SC.

**Louisiana Waterthrush**

Early south 5/1 Nicollet MF, 5/2 Chisago KE, Houston DN, Olmsted JB, Washington KE.

**Kentucky Warbler**

Reported more than usual, including one individual returning to Seven Mile Creek County Park 5/11-31 Nicollet RG *et al.*

Also reported 5/8 Murray DD, 5/9-10 Winona mob.

### Connecticut Warbler

Early south 5/8 Goodhue BL, 5/9 Hennepin DZ. Early north 5/8 Becker BBe, 5/15 Aitkin WN. Late south 5/28 Hennepin SC, 5/29 Brown JS.

### Mourning Warbler

Early south 5/8 Dakota DSm, Hennepin TT, Ramsey RH, JW and Rice TB, 5/9 Anoka SC and Hennepin DC. Early north 5/8 Kanabec CM, 5/10 Aitkin WN. Late south 5/29 Hennepin DZ, 5/31 Brown JS, Hennepin SC, JF and Nicollet TT.

### Common Yellowthroat

Early south 5/2 Dakota KB and Winona AM, CS, 5/3 Lyon HK, Wabasha CS and Washington PC. Early north 5/5 Becker BBe, 5/7 Clay LCF.

### Hooded Warbler

4/30 Hennepin JPo, 5/1 Hennepin TBr, SC, TT.

### Wilson's Warbler

Early south 4/29 Winona AM, 5/4 Murray ND and Winona CS. Early north 5/6 Clay LCF, 5/10 Lake DPV. Late south 5/25 Houston EMF, 5/28 Hennepin SC. Late north 5/25 Clay LCF, 5/29 Lake of the Woods PS.

### Canada Warbler

Early south 5/8 Goodhue HH, 5/9 Anoka PKL and Washington DN. Early north 5/8 Cook OSL, 5/15 Otter Tail SDM. Late south 5/30 Hennepin SC, 5/31 Hennepin JF and Nicollet TT.

### Yellow-breasted Chat

One report 5/9 LeSueur AB.

### Summer Tanager

Two reports 5/2-3 Lac Qui Parle *vide* FE, 5/3 Stevens *vide* PB.

### Scarlet Tanager

Early south 5/6 Ramsey AB, DC, 5/8 Anoka PKL, Carver DM, Goodhue HH, DZ,



Kentucky Warbler, 26 May 1993, Nicollet County. Photo by Dennis Martin.

Hennepin Sc, OJ, TT, Ramsey AB, Steele RJ and Winona CS. Early north 5/7 Becker BBe, 5/9 Clay LCF and Douglas KKW.

### WESTERN TANAGER

One report 5/2 Becker BK.

### Northern Cardinal

Reported from six counties north and 27 south.

### Rose-breasted Grosbeak

Early south 5/1 Dakota DSm, Hennepin SC, TT and Houston EMF, 5/2 Hennepin RB, Rice TB and Steele KV. Early north 5/5 Kanabec CM, 5/6 Becker BBe, Clay LCF, Otter Tail CS/KC, Pennington KSS and Duluth DBE.

### Blue Grosbeak

Three reports 5/22 Nobles ND, 5/24 Murray ND, 5/26 Rock JP.

### Indigo Bunting

Early south 5/5 Murray ND and Nicollet LF, 5/8 Cottonwood ED, Hennepin TT, DZ, Olmsted JB, Ramsey RH, JW, Rice TB, Steele KV, Wabasha BL and Winona AM, CS. Early north 5/8 Kanabec CM, 5/9 Aitkin WN and Becker BBe, BK.

### Dickcissel

Early south 5/6 Murray ND, 5/11 Brown JS.

**Rufous-sided Towhee**

Early south 4/16 Rock PS, 4/22 Houston KB. Early north 5/5 Kanabec CM, 5/6 Pennington KSS.

**American Tree Sparrow**

Late south 4/30 Hennepin TT, 5/3 Hennepin DN. Late north 5/8 Becker BBe, 5/26 St. Louis NJ.

**Chipping Sparrow**

Early south 4/4 Rice DB, 4/5 Rice JB, DC. Early north 4/8 Roseau NJ, 4/10 St. Louis ME.

**Clay-colored Sparrow**

Early south 4/24 Hennepin SC, 4/27 Hennepin OJ, 4/28 Big Stone PS. Early north 4/27 Pennington KSS, 4/29 Aitkin WN and Otter Tail SDM, 5/1 Clay LCF.

**Field Sparrow**

Early south 4/6 Hennepin SC, 5/9 Goodhue BL and Rice TB. Early north 4/27 Otter Tail SDM, 5/4 Clay LCF.

**Vesper Sparrow**

Early south 3/28 LeSueur TF, 3/29 Steele KV. Early north 4/18 Clay LCF and Wilkin SDM, 4/22 Beltrami PS.

**Lark Sparrow**

Early south 4/23 Hennepin OJ, 4/24 Goodhue BL. Early north 4/27 Becker BBe, 4/30 Clay LCF.

**Savannah Sparrow**

Early south 4/16 Rock PS, 4/18 Big Stone DN, Rice TB and Yellow Medicine KB. Early north 4/20 Otter Tail SDM, 4/22 Cook KMH.

**Grasshopper Sparrow**

Early south 5/3 Wabasha CS, 5/5 Cottonwood ED. Early north 5/8 Becker BBe, 5/10 Roseau NJ.

**Le Conte's Sparrow**

Early south 4/24 Lac Qui Parle AB, DB, 5/8 Yellow Medicine County KB, PS. Early north 5/10 Aitkin WN, 5/13 St. Louis SW/MS.

**Sharp-tailed Sparrow**

5/20 Washington SD, 5/31 Otter Tail SDM.

**Fox Sparrow**

Early south 3/26 Brown JS and Pipestone JP, 3/28 Nicollet MF. Early north 3/31 Aitkin WN, Kanabec CM and Pine JR, 4/1 Cook OSL. Late south 4/22 Hennepin OJ, 4/24 Hennepin DZ and Lac Qui Parle AB. Late north 4/24 Lake DPV and St. Louis TW, 4/27 Cook KMH.

**Song Sparrow**

Early north 3/30 Grant KKW, 4/2 Duluth DBe.

**Lincoln's Sparrow**

Early south 4/3 Cottonwood ED, 4/4 Scott MB, 4/24 Hennepin SC and Lac Qui Parle AB. Early north 4/24 Kanabec CM, 4/27 Clay LCF. Late south 5/23 Ramsey KB, 5/30 Hennepin SC.

**Swamp Sparrow**

Early south 3/28 Lyon HK, 4/3 Hennepin SC. Early north 4/18 St. Louis AE, 4/25 Aitkin WN.

**White-throated Sparrow**

Early north 4/10 St. Louis ME, 4/13 St. Louis TW. Late south 5/22 Brown JS, 5/23 Ramsey KB.

**White-crowned Sparrow**

Early south 4/24 Kandiyohi JR and Lac Qui Parle MB. Early north 4/23 Koochiching GM, 5/1 Marshall NJ. Late south 5/20 Stevens BBo, 5/28 Hennepin SC. Late north 5/28 Becker BBe and Koochiching GM, 5/29 Aitkin WN.

**Harris' Sparrow**

Early south 4/3 Faribault RJ, 4/26 Lac Qui Parle FE. Early north 4/20 Becker BK, 5/6 Clay LCF and Polk KSS. Late south 5/20 Stevens BBo, 5/21 Washington TEB. Late north 5/26 Otter Tail CS/KC, 5/28 Polk KSS and St. Louis SW/MS.

**Dark-eyed Junco**

Late south 5/3 Hennepin SC, Houston EMF, 5/8 Goodhue EL.

**Lapland Longspur**

Late south 4/25 Dakota TT, 5/2 Redwood AB. Late north 4/7 Polk PS, 5/12 Lake DPV.

**Smith's Longspur**

One report 5/2 Pipestone AB.

**Chestnut-collared Longspur**

One report 5/26 Clay PS.

**Snow Bunting**

Late north 4/14 St. Louis SW/MS, 4/27 St. Louis AE.

**Bobolink**

Early south 5/4 Carver RH, 5/10 Carver RB. Early north 5/5 Otter Tail SDM, 5/6 Kanabec CM and Polk KSS.

**Red-winged Blackbird**

Early north 3/24 Wilkin SDM, 3/26 Kanabec CM.

**Eastern Meadowlark**

Early north 3/30 Kanabec CM, 4/3 Aitkin WN.

**Western Meadowlark**

Early north 3/21 Kanabec CM, 3/24 Wilkin SDM.

**Yellow-headed Blackbird**

Early south 3/27 Martin BBo, 4/10 Brown JS, LeSueur PS and Pipestone RJ. Early north 3/28 Clay LCF, 4/13 Otter Tail SDM.

**Rusty Blackbird**

Early south 3/4 Ramsey KB, 3/6 Martin BBo. Early north 3/30 Grant KKW, 4/18 Aitkin WN and Cook KMH. Late south 4/21 Olmsted JB, 4/25 Dakota TT and Hennepin SC. Late north 4/26 Kanabec CM, 5/4 Becker BK and St. Louis AE.

**Brewer's Blackbird**

Early south 4/10 Lyon HK, 4/12 Rice DS. Early north 4/9 Polk KSS, 4/24 Clearwater DJ.

**GREAT-TAILED GRACKLE**

First confirmed state record, 4/4-10 Rice KS, mob (*The Loon* 65:148-150).

**Common Grackle**

Overwintered Pennington KSS. Early north 3/1 Norman BK, 3/14 Koochiching GM.

**Brown-headed Cowbird**

Early south 3/27 Lincoln KB, 3/28 Nicollet LF. Early north 4/5 Aitkin WN, 4/12 Kanabec CM.

**Orchard Oriole**

Early south 4/30 Cottonwood ED, 5/6 Brown JS, Hennepin KB and Ramsey DB, DC. Early north 5/18 Pennington KSS, 5/22 Grant KKW.

**Northern Oriole**

Early south 5/1 Nicollet LF, MF and Washington PC, 5/3 Hennepin SC. Early north 4/26 Becker BBe, 5/6 Aitkin WN, Becker BK, Otter Tail SDM and Pennington KSS.

**Pine Grosbeak**

Late north 4/21 Koochiching KB.

**Purple Finch**

Late south 5/8 Yellow Medicine KB, PS, 5/12 Sherburne TBr.

**House Finch**

Reported from 34 counties south, 14 north.

**Red Crossbill**

Late south 4/29 Dakota TT.

**White-winged Crossbill**

Reported from Cook, Koochiching and Roseau counties during March.

**Common Redpoll**

Late south 3/3 Wabasha WDM. Late north 3/25 Koochiching PS, 5/9 Duluth DBe.

**Pine Siskin**

Reported from 21 counties north, 20 south.

**American Goldfinch**

Reported from 20 counties north and 29 south.

**Evening Grosbeak**

Reported from eight counties north.

## House Sparrow

Reported from 18 counties north and 31 counties south.

### Contributors

Parker Backstrom PB  
Karl Bardon KB  
Tom & Elizabeth Bell TEB  
Betsy Beneke BBe  
David Benson DBe  
Janet Boe & Thom Soule JB/TS  
Tom Boevers TB  
Brad Bolduan BBo  
Al Bolduc AB  
Don Bolduc DB  
Jerry Bonkoski JB  
Carol Braaten CB  
Terry Brashear TB<sub>r</sub>  
Richard Brasket RB  
Mike Butterfield MB  
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Doug Campbell DC  
Steve Carlson SC  
Pat Colon PC  
Jeff Dains JD  
Gordon & Mary Jo Dathe GMD  
Tim Dawson TD  
Nelvina DeKam ND  
Dawn Doering DD  
Jim Duprey JD  
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Jay Hamernick JH  
Mike Hendrickson MH  
Anthony Hertzell AH  
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Robert Holtz RH  
Harlan Hostager HH  
James Howitz JH  
Hap Huber HHu  
Nancy Jackson NJ  
Coralie Jacobson CJ  
Robert Janssen RJ

Douglas Jenness DJe  
Al Johnson AJ  
Douglas Johnson DJ  
Oscar Johnson OJ  
Byron Kinkade BK  
Ron & Rose Kneesern RRR  
Scott Krych SK  
Henry Kyllingstad HK  
Pat & Ken Lafond PKL  
Fred Leshner FL  
Edwin Lins EL  
Bill Litkey BL  
William Longley WL  
Orvis & Sandy Lunke OSL  
Wynn & Don Mahle WDM  
Grace Marquardt GM  
Dennis Martin DM  
Craig Menze CM  
A. Steven Midthune AM  
Steve & Diane Millard SDM  
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Warren Nelson WN  
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Kim Risen KR  
Joanie Robinson JR  
C. Rowan & Chris DeBold CR/CD  
Orwin Rustad OR  
Carol Schmidt & Kim Claypool CS/KC  
Steven Schon SS  
Carol Schumacher CS  
Andrew Slate AS  
Drew Smith DS<sub>m</sub>  
Kevin Smith KS  
Thomas Sobolik TS  
Dave Sovereign DS  
Jack Sprenger JS  
Paul Springer PSp  
Keith & Shelley Steve KSS  
Forest & Kirsten Strnad FKS  
Peder Svingen PS  
Gary Swanson GS  
Pat Telfer PT  
Tom Tustison TT  
Ken Vail KV  
Dan & Pam Versaw DPV  
John Wallner JW  
Kristine & Kyle Wicklund KKW  
Terry Wiens TW  
Steve Wilson & Mary Shedd SW/MS  
Evelyn Wold EW  
Ben Yokel BY  
Steve Zehner SZ  
Dave Zumeta DZ  
many observers mob

Winter 1993

# Yellow Rails Recorded from Unusual Locations in Minnesota

Kim Risen

In Minnesota, the breeding distribution of Yellow Rail (*Coturnicops noveboracensis*) is acknowledged to be widespread but poorly defined (Janssen, 1987), with no breeding season (June–July) records listed for Northeastern (St. Louis, Lake and Cook Counties) or East Central (Carlton, Pine, Kanabec, Isanti or Chisago Counties) Minnesota. During 1993, Yellow Rails were found at five locations, with no fewer than 17 individuals recorded in these regions of Minnesota. Documenting their appearance has been quite an adventure.

During a Minnesota Birding Weekend trip to Northeastern Minnesota led by Kim Eckert, Mike Hendrickson and me, Yellow Rails were discovered in a small, grassy marsh approximately 3 1/2 miles northeast of Grand Marais, Cook County along County Road 60, 1/2 mile east of County Road 58. On the evening of 29 May 1993, while checking this marsh for some potentially interesting Cook County species, we were startled by the presence of at least two calling Yellow Rails. The rails began calling at dusk while there was still sufficient light to see a pair of American Bitterns in flight at more than 100 yards. Other interesting species present included Sora and Sedge Wren. Since the group was not prepared to get wet, and the landowner was unknown, it was not possible to attempt to see these rails at this time.

The next day, after obtaining the landowner's name from Ken and Molly Hoffman, permission was granted for an attempt to see these individuals. That night our group, along with the Hoffmans and Walter Popp, heard the rails begin to call,

tentatively at first, at approximately the same time as the previous evening. They did not begin to call consistently until it was fully dark. The most consistently calling individual was too far out in the marsh for us to make an attempt to see with the group. After I tapped a pair of quarters together to imitate the call of the Yellow Rail, a bird only 20–40 yards away began to call. It was this bird that those individuals who wished to make the attempt were able to see. By slowly approaching the calling bird, stopping your movements when the rail stopped calling and making as few sudden moves as possible (difficult at best when walking in a hummocky marsh in the dark) it is possible to approach within flashlight distance. There was no need to encircle the bird, which often results in the bird flushing, and we were able to observe the bird walking through the hummocks and thick grasses as Kim maneuvered his light to keep the bird illuminated. The rail called continuously as our group left the marsh.

The rails at this location were not heard after 5 June, and an argument may be made that these individuals represented late migrants instead of potential breeders. However, although much about Yellow Rails is unknown, there are a few things that suggest these birds may not have been migrants. Yellow Rails are very early migrants (Bent, 1926), with early migration dates for northern Minnesota listed as 26 and 28 April (Janssen, 1987). They can be found nearly every year on territory at the McGregor Marsh in Aitkin County by 10 May (I've heard them as early as 2 May). The few nests that have been found in Min-

nesota indicate that by early June egg laying is well underway: 10 June 1917 Lake Wilson, Murray County, clutch of eight eggs present (Roberts, 1932); 5 June 1952 in Sherburne County, clutch of ten eggs (Janssen, 1987); and, more recently, 4 June 1990, McGregor Marsh, Aitkin County, clutch of seven eggs present with the full clutch proving to be eight (Nelson, 1991).

The Cook County Yellow Rails could have proved to be nothing more than an interesting record if not for what happened in St. Louis County over the next few weeks. On 15 June 1993, I received a call from Terence Shiefer and Marion Huttow of Mississippi who were looking for information on some of the bird specialties of northeastern Minnesota. During our conversation they told me of an interesting experience they had the previous day at the Sax-Zim Bog, St. Louis County. While looking for Great Gray Owls, they had heard what they believed to be Yellow Rails (three individuals) calling in mid-afternoon, but, never having heard them, they were uncertain. Their description of the call was accurate (when I imitated the call with quarters they agreed that it was similar to what they had heard), and their description of the habitat was encouraging. I was aware that a record of Yellow Rail from St. Louis County would be unusual, if not unprecedented. As it was a wet year with Yellow Rails having showed up in one unusual location (Cook County), and having heard good numbers of Yellow Rails in Aitkin County and Kidder County, North Dakota, I was excited by the possibilities. An preliminary search for Yellow Rails was done that very evening.

The location in which the suspected Yellow Rails had been heard was on the south side of St. Louis County Road 319 approximately 1.75 miles east of Saint Louis County Road 7. I arrived at the site about 45 minutes before sunset so that I could get a good look at what the area looked like, as well as to identify other areas in the vicinity that might warrant further investigation. The area was rather large, generally extending one mile east to west and more than one mile south. Much of the habitat contained fallen or dead tamarack, scrubby willows

and other brushy areas. However, large expanses of grassy areas were present and consisted of a variety of grasses and contained a well developed litter layer of grasses from the previous year. Most of the rails present were found where water depths ranged from two to ten inches. Although I was not able to identify the grasses, this appeared to be comparable to those habitats described by Stalheim (1974) and Stenzel (1983). Birds present included Common Snipe, American Woodcock, Sora, American Bittern, Black-billed Cuckoo, Sedge Wren, Yellow Warbler, Common Yellowthroat, Swamp Sparrow and a surprising number of LeConte's Sparrows.

The first Yellow Rail began to call intermittently at approximately 9:00 P.M., consistently at 9:30. By 10:00 P.M. it was possible to discern no fewer than four calling Yellow Rails from this vantage point. Initially I had not intended to walk into the marsh so I was not prepared with waterproof boots, but, as we instruct the bird groups that we show Yellow Rails to do, I entered the marsh with my tennis shoes and hoped for the best. I walked slowly toward the nearest calling rail, located about 150 yards from the road, and as I drew close, knelt down and imitated his call with a pair of quarters. This proved to be an aggressive bird as it immediately flew directly toward me, landing in close proximity just to my left. As it approached you could hear it walking through the thick layer of grass. It eventually advanced to within a few feet. No matter how many times I've repeated this, it is still exciting to see these birds walking around at your feet ignoring you completely.

From this point in the marsh (about 150-200 yards from the road) I was able to discern at least 3 other calling rails further out in the marsh, and was able to pinpoint a total of seven calling Yellow Rails. I'm sure that the euphoria associated with the discovery of these rails was responsible for my desire to find out just how many I could find. I returned to my car, locked the doors and picked up a spare flashlight. I was fortunate to have a plentiful supply of insect repellent in the car. The mosquitoes were horrendous, but, interestingly, by 11:30 they

had completely disappeared. With little wind, and no mosquitoes to irritate you, the late night foray into the marsh proved to be a near spiritual experience. Few things can compare to standing in a marsh at midnight, with the northern Minnesota sky overhead (Montana does not have a monopoly on "Big Sky"), as Common Snipe, LeConte's and Swamp Sparrows (with a few assorted frogs and birds) provide a symphonic accompaniment.

Over the next two hours I walked south to within 150 yards of the tree line and then westward following the general outline of the marsh back to the road. I was able to confirm the presence of at least nine Yellow Rails (I was able to see four!). I plotted the location of each calling bird on a note pad as I walked through the marsh in order to prevent any potential duplications. Actually, I had counted 11 birds, but as the call of Yellow Rails carries a deceptive distance (if conditions are good it is possible to hear them at distances of 3/4 mile) I could not be 100% certain that there was no overlap in two instances. While in the southern third of the largest expanse of grassy marsh, I also heard a single singing Sharp-tailed Sparrow. The Sharp-tailed Sparrow is, similarly to Yellow Rail, an almost unknown species in northeastern Minnesota due to its habitat requirements. Most of the records, of which I am aware, are of fall migrants, and I know of no summer records at all.

A few other areas within the Sax-Zim bog that I had identified earlier in the day were checked that evening for Yellow Rails. Rails were found at two locations: on the east side of County Road 7, 1.1 miles north of County Road 52 (two birds present), and on the north side of County 133, 1.6 miles west of Highway 53 (one bird present). I returned to these locations the next evening with Steve and Patti Geerts. We checked a number of additional areas, but found rails in only two locations: the County Road 319 area (seven birds located without walking into the more remote areas) and the location where two birds were heard along County Road 7 the night before (at least three birds present this time). Rails were to be found at only one other location in the Sax-Zim area.

This location was on the west side of County Road 7, 2.6 miles north of County Road 52 and only one bird was present. Many birders were able to see and hear Yellow Rails at the 319 location through late June, and I made periodic trips here through mid-July and heard rails each time. The latest date, of which I am aware, that rails were seen or heard was 8 August, at the 319 location.

Returning to Minneapolis on 8 July 1993, as I drove past a fairly large expanse of grassy marsh just north of Pine City, I got the idea to check areas in Pine and Kanabec County for Yellow Rails. Although Yellow Rails have never been reported from these two counties (I had failed to report a Yellow Rail record from Pine County from about five years ago), their close proximity to a breeding population at Crex Meadows, Burnett County, Wisconsin, made their presence in appropriate habitat seem probable. Even more so considering the unusual locations that they were turning up this summer. Although I would identify and check more than 25 areas in Pine and Kanabec Counties, I was able to find Yellow Rails in only one location. This area (the same location where I had found them about five years previous), on the south side of Minnesota Highway 70 two miles west of the Wisconsin border, was a locale that I had checked in other years with no success. At this time I was using a parabolic microphone to allow better coverage of the larger areas without having to walk into the wetlands. It proved to be very useful, but it does have a few drawbacks: traffic noise becomes much more of a problem; windy nights make its use almost impossible and determining if two calls along the same line are different birds or one bird and an echo can be impossible. Three or four calling Yellow Rails were located during my initial check, and only one bird was present ten days later. But, by this time it may have been too late in the season to locate Yellow Rails by call.

The presence of Yellow Rails during the breeding season at this many unprecedented locations is certainly intriguing, and there are still many questions to be answered. What is the true breeding range of Yellow

Rail in Minnesota? Was the presence of Yellow Rails in these new areas a one-year-only occurrence? Do Yellow Rails take advantage of suddenly appearing wetlands to breed opportunistically? Would they breed as late as August? Searching for answers to these and other questions will give me a good excuse to spend more late nights in the middle of a marsh.

Yellow Rails have always held a special fascination for me, and, in the words of Terry Savaloja, "One of my most pleasant birding memories shall always be of sloshing towards the highway after a long and successful night of rail watching with only the thousands of fireflies lighting the way."

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IOWA BIRDLIFE by Gladys Black, University of Iowa Press, 176 pages, color and black & white photo illustrations, softcover, \$15.95.

When I was asked to review *Iowa Birdlife*, I expected to find, because of its title, detailed information on the nesting, ranges, and possibly habits of all the birds regularly found in the state of Iowa. This seemed reasonable, since the official quarterly publication of the Iowa Ornithologists' Union is *Iowa Bird Life*.

But that is not the case with *Iowa Birdlife*. It is, instead, a collection of about a hundred "Species Accounts" written by 84 year-old Iowa native and birdwatcher Gladys Black. These short essays originally appeared as a series of columns in the *Des Moines Register* and the *Marion County*

*News* from 1969 to 1992. They are stories of her memories and experiences with birds that, for one reason or another, have appeared in Iowa — either as residents or as visitors.

It is difficult to determine who the audience for this book might be. It starts out informative, even technical. The opening on habitat descriptions has a scholarly tone: "Savanna communities typically occur on level to rolling uplands of sandy outwash, end moraines, or other areas of irregular, dissected terrain."

But the text that makes up the bulk of the book is entirely different: "Did you ever search for a very small bird in a very big timber accompanied by four little sisters aged four to ten — two blondes and two brunettes named Janee, Tonja, Christi, and

Marci? Try it sometime, you'll like it!" Not exactly ornithological writing, but then, I'm sure it was not intended to be. The book does occasionally describe a bird's nesting or feeding habits, but this is sporadic and irregular. Some of the species accounts are devoted almost entirely to this type of information while others have very little of it.

Here's what you'll find in *Iowa Birdlife*. It begins with a short foreword by Dean Roosa of the Nature Conservancy. This is followed by a shorter introduction and a two page explanation of the Nature Conservancy. Then there are some ten pages of habitat descriptions, familiarizing the reader with the different types of local habitats mentioned in the rest of the book.

After Black's transcribed columns, there is a checklist of the birds of Iowa which also lists each bird's status in the state. And finally there is an index to each species account. There is no bibliography, though the author makes several references to other authors and works, such as A. C. Bent, Thomas S. Roberts and *Iowa Bird Life*.

Most experienced birders have already accumulated much of the general avian information contained in *Iowa Birdlife*. Some of it they found in other books, and some was acquired from their own observations or from other birders. I cannot say specifically, for example, when or where I learned that the American Robin is a thrush. I just picked that up somewhere along the way. It is mostly that kind of stuff that is found in *Iowa Birdlife*. Common knowledge, but not necessarily trivial, (though it does, occasionally, seem to state the obvious). For this reason, *Iowa Birdlife* is probably not for the advanced birder — at least not in the sense of a reference work.

Be aware that this is not a book about ALL the birds found in Iowa, as the name first suggested to me. This is not even a book about the common birds of the state. Of the 384 birds on the Iowa checklist (289 Regular), only 99 are mentioned. A book that discusses just a fourth of the birds found in Iowa is not really, in my opinion, a book about the birds of the state. Of the 38 species of warblers on the state list, for example, only five are given an account.

Some species that are Accidental in Iowa, such as Magnificent Frigatebird and Clark's Nutcracker, are given extensive write-ups, while other entire families are omitted, (rails, cranes, and doves are some examples).

Also, many species are not listed with their proper names. The author shortens them to nicknames — "Catbird" instead of "Gray Catbird," or "Screech Owl" rather than "Eastern Screech-Owl." It is never mentioned that Marsh Hawk is now called Northern Harrier. There are contradictions, too. The account on Ruby-throated Hummingbirds states that there are 320 species of hummingbird in the Western Hemisphere. The account that immediately follows, that of the Rufous Hummingbird, says there are 319. These complaints may sound minor, but if one purpose of this book is to educate, accuracy is important.

Gladys Black is an institution in the Iowa birding community, and I should point out that I believe most of the book's problems are the fault of the editor and publisher. It appears they were oblivious to the completely different styles of writing they put into the pages of *Iowa Birdlife*. They did not consider the author's original intended audience. I was left with the impression that their primary purpose was to raise money for the Nature Conservancy, and all else was secondary. Indeed, the profits of the book do go directly to the Nature Conservancy. And while I support what the Nature Conservancy is trying to do, I believe a disservice was done to Gladys Black by making her book, as a whole, difficult to categorize, and therefore difficult to recommend to anyone in particular.

Despite this, *Iowa Birdlife* can find an audience. Gladys Black's writing is entertaining and the book reads easily. It is good late-night reading. *Iowa Birdlife* would be fine for those birders who are just starting out, or for anyone who wants to read something to their children that is both informative and easy to understand. I can certainly recommend reading *Iowa Birdlife* to your child at bedtime — a chapter a night.

Anthony Hertz 2509 Talmage Ave.  
SE, Minneapolis MN 55414

# 1993 M.O.U. County Big Day

Jerry Bonkoski

From Common Moorhens and Northern Bobwhite in Houston County, to Piping Plover in Lake of the Woods County, the state of Minnesota was well covered by Big Day counts in 1993.

Thirty-three teams or individuals sent in counts from 20 different counties. Seven counties were added to the growing list of counties that have had Big Days done in them. The new counties added in 1993 were Yellow Medicine, Nicollet, Lake of the Woods, Kandiyohi, Ramsey, Clearwater, and Kanabec. In addition to these new counties, five other counties established a new record high count for species in 1993.

In the past seven years there have been Big Day counts reported from 44 of Minnesota's 87 counties.

The overall composite lists for species of birds seen during this year's Big Day was 245 species. This is seventeen more species than last year and the same number as was reported during the 1991 Big Day season. There were no non-regular species reported other than House Finch, which was reported on most county lists.

Warren Nelson, conducting a Big Day in Aitkin county by himself, had the most species reported when he recorded 151 species on May 15, 1993. Following close behind in second place was the team of Parker Backstrom, Anthony Hertzell, and Kim Risen who recorded 148 species in St. Louis County. The record species count for a County Big Day is 159 species in St. Louis County. Will someone be able to break that record in 1994?

As you can see on the attached table of current list of counties with Big Day results, almost all of the counts have been done in May. There are only two county records that were established on dates outside the month

of May. On 4 June 1991, Ken & Molly Hoffman did a Big Day in Cook County and saw 104 species. Peder Svingen & Doug Johnson did a Roseau County Big Day on 14 August, 1992. They still hold the record for that county with 134 species.

Would it be possible to see as many species during the Fall migration as have been reported during Spring migration?

It is quite easy to do a Big Day count. All you need to do is see how many species you can find within one county on any one calendar day. You can go out by yourself, form a team with a couple of friends, or plan a club activity to day a Big Day. It is also fun to form several teams and have a contest to see who can find the most birds in the selected county.

If you would like an entry form and checklists for your Big Day, send a self addressed stamped envelope (business size) to the address shown below. When you have completed your Big Day, send a checklist of the birds seen, the date you did your Big Day, which county was birded, and the members of your team if more than just yourself. Please include a checklist of the birds seen so that I can develop a complete composite species list for the year. Send this information, no later than 1 November, 1994 to:

Jerry Bonkoski  
9022 Southridge St. SW  
Byron, MN 55920

Thanks to all who have participated over the past years. I hope you have enjoyed doing the Big Day. Remember there are still 43 counties that have not had a Big Day count sent in for them. 9022 Southridge St. SW Byron, MN 55920

## The current list of Counties with Big Day Results:

County	1993		Record		Record Holding Individual or team
	Count	Date	Count	Date	
St. Louis	148	5/22/93	159	5/20/89	Mike Hendrickson & Kim Risen
Polk			156	5/19/90	Dave & Sharon Lambeth & Peder Svingen
Aitkin	151	5/15/93	151	5/15/93	Warren Nelson
Ottertail			144	5/15/91	Steve & Diane Millard
Lyon			142	5/14/88	Henry Kyllingstad & Paul Egeland
Yellow Medicine	141	5/08/93	141	5/08/93	Karl Bardon, Peder Svingen & Parker Backstrom
Nicollet	139	5/15/93	139	5/15/93	Anthony & Paul Hertzal
Carver	127	5/15/93	138	5/16/92	Dennis Martin, Bill Marengo, Mike Mulligan & Jim Williams
Lake of the Woods	136	5/29/93	136	5/29/93	Peder Svingen
Steele	130	5/15/93	134	5/16/92	Ken & Amanda Vail, Gary Johnson, Nels Thompson, Leanne Alt, Terry Dorsey and Darryl Hill
Roseau			134	8/14/92	Peder Svingen & Doug Johnson
Le Sueur			131	5/20/92	Peder Svingen
Olmsted	128	5/13/93	130	5/09/91	Jerry Bonkoski, Bob Ekblad, Tony Casucci, Jerry Pruet & Dave Squillace
Kandiyohi	123	5/15/93	123	5/15/93	Ron Erpelding & Randy Frederickson
Lincoln			122	5/14/88	Ray Glassel, Bob Janssen and John Schladweiler
Cottonwood	101	5/08/93	118	5/13/89	Henry Schmidt, Walter Harder & Ed Duerksen
Marshall			114	5/18/91	Shelly Steva, Darlene Kelley, Randi Hodny & Linda Welk
Ramsey	114	5/08/93	114	5/08/93	Robert Holtz & John Wallner
Beltrami			113	5/19/90	Doug Johnson & Tim Dawson
Wright			112	5/16/92	Mark Stensaas & John Hockema
Houston	111	5/11/93	111	5/11/93	Jerry Bonkoski, Tony Casucci, Bob Ekblad, Jerry Pruet & Dave Squillace
Clearwater	107	5/29/93	107	5/29/93	Doug Johnson
Cook	103	5/30/93	104	6/04/91	Ken & Molly Hoffman
Carlton			104	5/21/88	Fran & Larry Weber
Freeborn			104	5/23/90	Anne Marie Plunkett
Lake	103	5/30/93	103	5/30/93	Anthony Hertzal & Ann Vogel
Rice			100	5/30/92	Rice County Bird Club
Dodge			100	5/14/88	Bob & Steve Ekblad & Jerry Bonkoski
Murray			99	5/15/92	Nelvina De Kam & Johanna Pals
Dakota	99	5/08/93	99	5/08/93	Drew Smith & Becky Roe-Smith
Fillmore			97	5/13/89	Fillmore County Birders Club
Washington	97	5/15/93	97	5/15/93	Robert Holtz & seven students
Hubbard			96	5/11/91	Ralph & Jean Leckner and Cory & Terry Olson
Kanabec	96	5/08/93	96	5/08/93	Craig Menze
Wadena			94	5/21/88	Jerome & Karol Gresser
Nobles			91	5/21/90	Nelvina De Kam
Clay			90	5/18/91	Terry & Cory Olson & Jean Leckner
Rock			87	5/12/92	Nelvina De Kam
Pipestone			77	5/14/88	Johanna Pals & Nelvina De Kam
Goodhue			76	5/15/92	Harlan Hostager
Douglas	71	5/22/93	75	5/16/92	Kristi Stamer & Kyle Wickland
Sherburne			68	5/23/90	Barb Kull & Alice Schroeder
Isanti	50	5/26/93	50	5/26/93	Daphne & Meyers Peterson

# The 1993 M.O.U. 300 Club and 1993 M.O.U. 200 County Club

Compiled by Anthony Hertzell

The following tables list the compilations for both the M.O.U. 300 Club and the M.O.U. 200 County Club. They contain the names and totals of all M.O.U. members who submitted their counts for inclusion in this year's summary.

385 Raymond Glassel	342 Bob Ekblad, Dave Sovereign
384	341
383 Robert B. Janssen	340 Jerry Bonkoski
382	339 Elaine McKenzie
381	338 Bonnie Mulligan
380	337 Mary Enley
379	336 Jim Williams
378 Kim Eckert	335
377	334 Steve Ekblad, Dennis Martin
376 Dick Ruhme	333 Ruth Andberg
375 Don Bolduc	332
374 Jo Blanich	331 Bruce Baer, Doug Johnson
373	330 Barbara Martin
372	329 Tammy Field
371	328
370 Bill Litkey	327 Phyllis Basford
369	326
368	325 Peter Neubeck, Bill Stjern
367	324 Ken LaFond
366	323 Jay Hamernick, Helen Tucker
365	322
364 Warren Nelson	321 Karl Bardon, Ilene Haner, Henry Kyllingstad
363	320 Alice Hennessey, William Marengo
362 Liz Campbell	319 Bill Penning, Don Wanschura
361	318 Mark Stensaas
360 Al Bolduc, Karol Gresser, Steve Millard, Bill Pieper	317 Tom Tustison
359	316 Bill George, Roger Field
358	315
357 Ann McKenzie, Jon Peterson	314 Dave Benson
356 Parker Backstrom	313
355	312 Nestor Hiemenz
354 Jerry Gresser, Oscar Johnson	311 Joan Fowler
353	310 J.S. Futcher, Fred Leshar
352 Don Kienholz	309 Kathy Heidel, Dick Rengstorf
351 Peder Svingen, Gloria Wachtler	308
350 Dick Wachtler	307
349 Mike Mulligan	306 Edwin Lins
348 Anthony Hertzell	305 Carol Schumacher
347	304 Jude Hughes-Williams, Gary Simonson
346	303 Louis Claeson, Burnett Hojnacki
345 Anne Marie Plunkett	302
344	301
343 Dick Sandve	300 Arnold Knutson

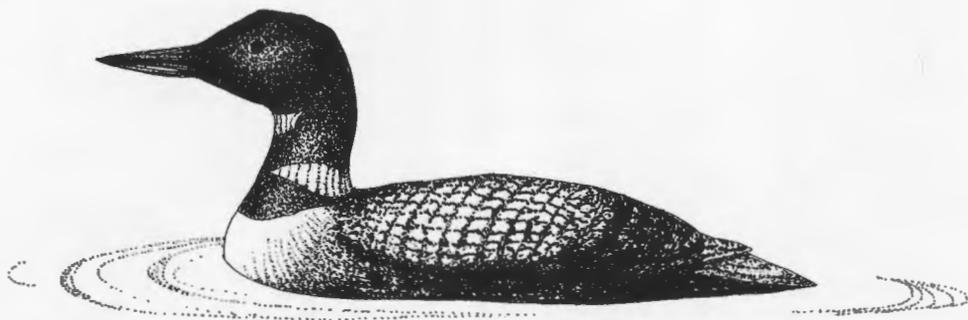
# The 1993 M.O.U. 200 County Club

(The numbers in parentheses indicate the total number of species seen in the county.)

<b>Aitkin (295)</b>	<b>Chisago (258)</b>	216 Raymond Glassel	<b>Itasca (256)</b>
269 Warren Nelson	236 Raymond Glassel	211 Robert B. Janssen	210 Raymond Glassel
264 Jo Blinich	226 Ken LaFond	200 Ken LaFond	207 Al Bolduc
241 Raymond Glassel	214 Robert B. Janssen	<b>Fillmore (259)</b>	207 Ken LaFond
231 Robert B. Janssen	<b>Clay (297)</b>	241 Anne Marie Plunkett	204 Robert B. Janssen
229 Ken LaFond	232 Raymond Glassel	222 Raymond Glassel	<b>Jackson (270)</b>
<b>Anoka (299)</b>	225 Mark Otnes	208 Robert B. Janssen	224 Raymond Glassel
285 Ken LaFond	220 Robert B. Janssen	205 Ken LaFond	220 Robert B. Janssen
252 Raymond Glassel	212 Ken LaFond	<b>Freeborn (264)</b>	200 Ken LaFond
245 Steve Carlson	<b>Clearwater (271)</b>	233 Raymond Glassel	<b>Kanabec (242)</b>
238 Robert B. Janssen	248 Al Bolduc	224 Scott Mehus	227 Ken LaFond
232 Ruth Andberg	223 Raymond Glassel	214 Robert B. Janssen	225 Raymond Glassel
228 Karl Bardon	213 Ken LaFond	202 Ken LaFond	208 Robert B. Janssen
214 Dick Rengstorf	211 Robert B. Janssen	202 Anne Marie Plunkett	<b>Kandiyohi (261)</b>
<b>Becker (277)</b>	207 Monte Mason	<b>Goodhue (291)</b>	229 Raymond Glassel
239 Betsy Beneke	<b>Cook (298)</b>	257 Raymond Glassel	214 Robert B. Janssen
227 Raymond Glassel	273 Ken Hoffman	256 Bill Litkey	212 Ken LaFond
221 Robert B. Janssen	273 Molly Hoffman	243 Robert B. Janssen	207 Randy Frederickson
221 Mark Otnes	241 Kim Eckert	231 Anne Marie Plunkett	206 Ronald Erpelding
208 Ken LaFond	229 Raymond Glassel	215 Al Bolduc	<b>Kittson (262)</b>
<b>Beltrami (275)</b>	226 Robert B. Janssen	201 Bill Stjern	219 Raymond Glassel
226 Raymond Glassel	222 Walter Popp	200 Ken LaFond	213 Ken LaFond
225 Ken LaFond	218 Peder Svingen	<b>Grant (261)</b>	210 Robert B. Janssen
225 Doug Johnson	209 Helen Tucker	224 Raymond Glassel	202 Karl Bardon
213 Robert B. Janssen	205 Jim Williams	219 Kim Eckert	<b>Koochiching (238)</b>
210 Al Bolduc	202 Ken LaFond	219 Robert B. Janssen	228 Ken LaFond
<b>Benton (246)</b>	<b>Cottonwood (269)</b>	202 Ken LaFond	205 Raymond Glassel
219 Raymond Glassel	226 Raymond Glassel	<b>Hennepin (333)</b>	200 Robert B. Janssen
219 Ken LaFond	217 Robert B. Janssen	306 Oscar Johnson	<b>Lac Qui Parle (302)</b>
214 Robert B. Janssen	214 Jerry Bonkoski	301 Robert B. Janssen	236 Raymond Glassel
<b>Big Stone (264)</b>	203 Ken LaFond	301 Raymond Glassel	233 Robert B. Janssen
227 Raymond Glassel	<b>Crow Wing (275)</b>	297 Steve Carlson	230 John Schladweiler
212 Robert B. Janssen	245 Jo Blinich	283 Al Bolduc	229 Bill Litkey
203 Ken LaFond	227 Raymond Glassel	251 Karol Gresser	224 Al Bolduc
<b>Blue Earth (275)</b>	227 Ken LaFond	250 Tom Tustison	212 Ken LaFond
229 Raymond Glassel	221 Warren Nelson	236 Kathy Heidel	205 Henry Kyllingstad
212 Robert B. Janssen	217 Robert B. Janssen	233 Bill Litkey	<b>Lake (282)</b>
202 Ken LaFond	<b>Dakota (301)</b>	232 Karl Bardon	231 Steve Wilson
<b>Brown (259)</b>	279 Raymond Glassel	230 Dick Rengstorf	221 Mary Shedd
234 Raymond Glassel	261 Tom Tustison	229 Ken LaFond	220 Raymond Glassel
218 Robert B. Janssen	257 Karol Gresser	224 Peder Svingen	210 Ken LaFond
201 Ken LaFond	255 Robert B. Janssen	220 Warren Woessner	206 Robert B. Janssen
<b>Carlton (253)</b>	237 Al Bolduc	217 Parker Backstrom	<b>Lake of the Woods (261)</b>
231 Ken LaFond	230 Anne Marie Plunkett	214 Dennis Martin	216 Raymond Glassel
212 Raymond Glassel	227 Bruce Baer	213 Ruth Andberg	212 Robert B. Janssen
208 Robert B. Janssen	226 Bill Litkey	212 William Marengo	210 Kim Eckert
<b>Carver (273)</b>	225 Ken LaFond	212 Gary Simonson	205 Ken LaFond
246 Kathy Heidel	220 Dick Rengstorf	203 Jim Williams	205 Shelley Steva
243 Raymond Glassel	203 Karl Bardon	202 Elaine McKenzie	<b>Le Sueur (266)</b>
233 Dennis Martin	203 Elaine McKenzie	<b>Houston (266)</b>	246 Raymond Glassel
225 Robert B. Janssen	<b>Dodge (247)</b>	232 Raymond Glassel	221 Robert B. Janssen
220 Mike Mulligan	228 Anne Marie Plunkett	224 Anne Marie Plunkett	205 Ken LaFond
204 Ken LaFond	224 Raymond Glassel	216 Robert B. Janssen	202 Peder Svingen
201 Jim Williams	210 Jerry Bonkoski	210 Ken LaFond	<b>Lincoln (247)</b>
<b>Cass (268)</b>	211 Robert B. Janssen	<b>Hubbard (263)</b>	217 Raymond Glassel
217 Raymond Glassel	201 Bob Ekblad	223 Raymond Glassel	209 Robert B. Janssen
209 Ken LaFond	200 Ken LaFond	208 Ken LaFond	201 Ken LaFond
200 Robert B. Janssen	<b>Douglas (244)</b>	207 Robert B. Janssen	<b>Lyon (282)</b>
<b>Chippewa (249)</b>	221 Raymond Glassel	<b>Isanti (255)</b>	263 Henry Kyllingstad
221 Raymond Glassel	216 Robert B. Janssen	231 Ken LaFond	228 Raymond Glassel
215 Robert B. Janssen	206 Ken LaFond	205 Robert B. Janssen	220 Robert B. Janssen
205 Ken LaFond	<b>Faribault (242)</b>	224 Raymond Glassel	200 Ken LaFond

- Mahnomen (249)**  
216 Raymond Gassel  
217 Robert B. Janssen  
201 Ken LaFond
- Marshall (298)**  
238 Shelley Steva  
231 Raymond Gassel  
220 Robert B. Janssen  
219 Kim Eckert  
216 Karl Bardon  
202 Ken LaFond
- Martin (268)**  
220 Raymond Gassel  
207 Robert B. Janssen  
201 Ken LaFond
- McLeod (257)**  
226 Raymond Gassel  
211 Robert B. Janssen  
203 Ken LaFond
- Meeker (251)**  
226 Raymond Gassel  
215 Robert B. Janssen  
210 Ken LaFond
- Millie Lacs (270)**  
233 Ken LaFond  
226 Raymond Gassel  
216 Robert B. Janssen
- Morrison (261)**  
226 Ken LaFond  
224 Raymond Gassel  
209 Robert B. Janssen
- Mower (267)**  
247 Ronald Kneeskern  
245 Rose Kneeskern  
232 John Morrison  
222 Raymond Gassel  
217 Anne Marie Plunkett  
208 Robert B. Janssen  
201 Ken LaFond
- Murray (257)**  
229 Nelvina De Kam  
220 Raymond Gassel  
210 Robert B. Janssen  
200 Ken LaFond
- Nicollet (270)**  
245 Raymond Gassel  
229 Robert B. Janssen  
204 Ken LaFond
- Nobles (243)**  
215 Raymond Gassel  
208 Robert B. Janssen  
202 Nelvina De Kam  
200 Ken LaFond
- Norman (248)**  
217 Raymond Gassel  
211 Robert B. Janssen  
201 Ken LaFond  
201 Mark Otnes
- Olmsted (290)**  
277 Anne Marie Plunkett  
273 Jerry Bonkoski  
266 Bob Ekblad  
255 Steve Ekblad  
247 Joan Fowler  
236 Raymond Gassel  
223 Helen Tucker  
217 Robert B. Janssen  
205 Ken LaFond
- Ottertail (299)**  
272 Steve Millard  
250 Mark Otnes  
223 Raymond Gassel  
218 Robert B. Janssen  
215 Ken LaFond
- Pennington (259)**  
243 Shelley Steva  
219 Raymond Gassel  
211 Robert B. Janssen  
200 Ken LaFond
- Pine (265)**  
226 Ken LaFond  
232 Raymond Gassel  
217 Robert B. Janssen
- Pipestone (260)**  
216 Raymond Gassel  
208 Johanna Pals  
204 Robert B. Janssen  
203 Kim Eckert  
203 Ken LaFond  
202 Nelvina De Kam
- Polk (280)**  
231 Shelley Steva  
229 Al Bolduc  
228 Raymond Gassel  
227 Robert B. Janssen  
222 Peder Svingen  
205 Ken LaFond
- Pope (249)**  
223 Raymond Gassel  
220 Robert B. Janssen  
202 Ken LaFond
- Ramsey (297)**  
270 Raymond Gassel  
264 Bill Litkey  
249 Karl Bardon  
248 Robert B. Janssen  
231 Dick Rengstorf  
229 Ken LaFond  
229 Elaine McKenzie  
222 Robert Holtz  
209 Al Bolduc
- Red Lake (231)**  
211 Robert B. Janssen  
210 Raymond Gassel  
202 Ken LaFond
- Redwood (246)**  
225 Raymond Gassel  
219 Robert B. Janssen  
200 Ken LaFond
- Renville (254)**  
232 Raymond Gassel  
219 Robert B. Janssen  
208 Ken LaFond
- Rice (296)**  
255 Orwin Rustad  
251 Raymond Gassel  
248 Tom Boevers  
234 Forest Strnad  
221 Robert B. Janssen  
212 Anne Marie Plunkett  
205 Ken LaFond
- Rock (260)**  
243 Kim Eckert  
223 Raymond Gassel  
213 Nelvina De Kam  
207 Robert B. Janssen
- 202 Ken LaFond
- Roseau (279)**  
242 Peder Svingen  
233 Karl Bardon  
231 Raymond Gassel  
222 Robert B. Janssen  
207 Ken LaFond  
202 Mark Otnes  
202 Shelley Steva
- Saint Louis (350)**  
317 Kim Eckert  
284 Burnett Hojnacki  
279 Robert B. Janssen  
278 Parker Backstrom  
276 Raymond Gassel  
276 Doug Johnson  
276 Don Kienholz  
275 Dave Benson  
268 Bill Penning  
264 Peder Svingen  
262 Bill Litkey  
258 Mark Stensaas  
253 Ken LaFond  
241 Al Bolduc  
239 Arnold Knutson  
237 Dennis Martin  
235 Steven Schon  
234 Mary Enley  
219 Bob Ekblad  
219 Dick Sandve  
218 Steve Ekblad  
218 William Marengo  
218 Anne Marie Plunkett  
214 Jim Williams  
212 Henry Kyllingstad  
211 Scott Mehus  
210 Karl Bardon  
210 Steve Wilson  
209 Oscar Johnson  
201 Jerry Bonkoski
- Scott (273)**  
255 Raymond Gassel  
232 Robert B. Janssen  
213 Karol Gresser  
208 Ken LaFond  
206 Al Bolduc  
202 Kathy Heidel
- Sherburne (282)**  
241 Raymond Gassel  
234 Ken LaFond  
232 Robert B. Janssen  
223 Jay Hamernick
- Sibley (252)**  
241 Raymond Gassel  
229 Robert B. Janssen  
200 Ken LaFond
- Stearns (292)**  
274 Nestor M. Hiemenz  
239 Kim Eckert  
236 Raymond Gassel  
226 Ken LaFond  
220 Robert B. Janssen
- Steele (258)**  
240 Raymond Gassel  
216 Robert B. Janssen  
209 Anne Marie Plunkett  
200 Ken LaFond
- Stevens (251)**  
222 Raymond Gassel  
210 Robert B. Janssen  
202 Ken LaFond
- Swift (257)**  
222 Raymond Gassel  
214 Robert B. Janssen  
200 Ken LaFond
- Todd (258)**  
236 Ken LaFond  
223 Raymond Gassel  
207 Robert B. Janssen
- Traverse (252)**  
227 Raymond Gassel  
215 Robert B. Janssen  
201 Ken LaFond
- Wabasha (275)**  
247 Raymond Gassel  
244 Don Mahle  
239 Helen Tucker  
228 Anne Marie Plunkett  
225 Robert B. Janssen  
218 Bill Litkey  
210 Ken LaFond
- Wadena (257)**  
214 Raymond Gassel  
205 Ken LaFond  
206 Robert B. Janssen  
200 Al Bolduc
- Waseca (245)**  
230 Raymond Gassel  
215 Robert B. Janssen  
200 Ken LaFond
- Washington (298)**  
275 Raymond Gassel  
267 Bill Litkey  
246 Dick Rengstorf  
243 Dave Sovereign  
242 Robert B. Janssen  
228 Ken LaFond  
227 Tom Bell  
202 Bill Penning
- Watsonwan (241)**  
221 Raymond Gassel  
218 Robert B. Janssen  
200 Ken LaFond
- Wilkin (259)**  
226 Raymond Gassel  
219 Robert B. Janssen  
206 Mark Otnes  
203 Ken LaFond
- Winona (280)**  
247 Anne Marie Plunkett  
246 Raymond Gassel  
239 Carol Schumacher  
221 A. Steven Midthune  
220 Robert B. Janssen  
202 Ken LaFond
- Wright (270)**  
246 Raymond Gassel  
226 Ken LaFond  
224 Robert B. Janssen  
202 Al Bolduc
- Yellow Medicine (266)**  
233 Raymond Gassel  
218 Robert B. Janssen  
203 Ken LaFond

*All numbers are as of 31 December 1993*



## NOTES OF INTEREST

**MINNESOTA'S SECOND TOWNSEND'S WARBLER** — At about 11:00 A.M. on 27

August 1993, while birding at Lakewood Cemetery, Tom Tustison and I came upon an unusual-appearing warbler amongst the many Blackburnians, Tennessees, Bay-breasteds, and others. At about this point, Tom had joked about "where the Townsend's Warbler is," that we hoped would turn up sooner or later among the throngs of warbler that appear in the cemetery each fall. The unusual warbler appeared only briefly and Tom initially passed it off as a Black-throated Green. Seeing the same bird, I thought it was a Blackburnian, only it didn't look quite right. We discussed this while continuing to bird, and five to ten minutes later, the same bird reappeared. It was at this point that Tom began speculating that maybe indeed we were looking at a Townsend's. Tom is quite familiar with them, having lived in Colorado for a time, and I have had some experience with them in Alaska. We observed the bird for the next hour or so from eye level to tree-top, and from as close as about 20 feet. At one point, it jostled with other warblers for water in a little depression atop one of the gravestones. It otherwise foraged at all levels, mainly in the numerous old oaks, but also in basswood, ash, and spruce. The wind was light and from the north, the temperature cooler and less humid than previous muggy days. Skies were clear, light conditions nearly ideal. Birds were observed through 10x42 Bausch & Lomb Elites. A description is as follows: Dark olive crown fading into lighter olive on unstreaked back. Dark, distinct ear-patch on otherwise bright yellow face. This yellow was brighter and more clearly yellow than the washed-out or more orangish-yellow of the many Blackburnians present. Had yellow crescent under eye and surrounded by darkness of ear-patch. Breast was this same yellow, streaked on sides with distinct heavy dark markings. This streaking was limited to the sides and did not extend over breast. Remainder of underparts white and undertail coverts white. Wings dark with two white wingbars; tail dark with no noticeable white. Call note was high-pitched and softly buzzy. This was heard several times. Bird was last seen by writer at 12:55 P.M. **Don Wanschura, 2511 Girard Ave. S., #3, Minneapolis, MN 55405.**

When you consider the pattern of vagrancy for the Townsend's Warbler, it becomes apparent that a midwestern record is somewhat predictable. While not researching the exact

numbers, many sightings of this species have occurred on the east coast in the Hudson-Delaware region northward to the Canadian Maritime Provinces. For example, New Jersey alone had accumulated six records by 1987. Since the species breeds primarily in the western Canadian coastal region, a certain segment of the population undoubtedly moves in a west-to-east direction to arrive on the east coast in the fall. It is logical that the midwest, including Minnesota, must lie in the general pathway of a very small portion of migrating fall Townsend's Warblers. Surely, the numbers are not great, but it could also be easily overlooked as another species such as the Black-throated Green Warbler. That's almost exactly what happened at Lakewood Cemetery on 27 August 1993. Birding with Don Wanschura, we both noted an absence of Black-throated Green Warblers on that particular day; so when a plausible Black-throated Green did appear, it was pursued for a better observation. Upon closer inspection, the plumage was not quite right for that species. Tracking the bird through the oaks, we were able to get close enough to positively identify the bird as a Townsend's. We observed it at varying distances and angles for over 45 minutes. While I consider this observation to involve a great deal of luck, awareness plus many hours of observing warblers increased the probability of such a sighting. Witness the 1991 sighting of another western vagrant, Black-throated Gray Warbler, at this exact location (this species has a similar west-to-east vagrancy pattern) almost precisely two years earlier. In conclusion, I would anticipate more midwestern sightings of this species as birders learn more of the vagrancy patterns of the Townsend's Warbler. **Tom Tustison, 4214 Wentworth Ave. S., Minneapolis, MN 55409.**

#### **LESSER BLACK-BACKED GULL RETURNS TO ANOKA COUNTY —** On 11



September 1993, a third-year Lesser Black-backed Gull was seen feeding in a plowed field with numerous Ring-billed Gulls in Oak Grove Township near Lake George, Anoka County. This individual is most likely the same third-year individual that was present in the same area on 2–3 May 1993. Although the Ring-billed, Lesser Black-backed, and other gulls disappeared from this location after early May when the fields were in crop, thousands returned in early September, including the Lesser Black-backed

Gull, when some of the fields were disked over, and the recycled waste which the gulls feed on was again spread out in the fields. The Lesser Black-backed Gull was conspicuous among the Ring-billed Gulls present because of its distinctly darker mantle. I was able to get a good view of the gull at distances of only 100–200 feet before it flushed with the other gulls, which all resettled much farther out on the field, where I could not pick it out again. The bird had no streaking on the head or breast, indicating that it was still in summer plumage. The bright yellow bill had a distinct red spot at the gonys, but lacked the blackish ring around the bill that had been present in early May. The legs were bright yellow, and the eyes were pale yellow, similar to second-winter Ring-billed Gulls. The bill was larger than the Ring-billed Gulls, but lacked the pronounced hook of larger gulls such as Herring and Great Black-backed Gulls. The dark mantle color contrasted slightly with the black on the folded primaries. There were distinct white spots at the tips of the outermost three or four primary feathers, visible when the wing was folded. Some of the tail feathers had blackish tips, forming a broken tail band. The coverts and secondaries were a dark brown, but had areas that appeared very pale and worn, contrasting sharply with the rest of the wing, and forming wingbars in flight. These faded coverts were the only plumage difference noted compared to the observation four months previous. Although I assumed this gull would be seen with this concentration of gulls throughout the fall, it could not be relocated by birders on subsequent days, or by myself when making regular checks of this area's gull concentrations. As many as 10,000–15,000 Ring-billed Gulls were feeding in the area and roosting on Lake George at the time the Lesser Black-backed Gull was discovered, so it could easily be lost among them. It certainly was intriguing to relocate what was more than

likely the same individual on its return migration, and one wonders where it had spent the summer. **Karl Bardon, 1430 – 100th Ave. NW, #212, Coon Rapids, MN 55433.**

**RED PHALAROPE IN HENNEPIN COUNTY** — A Red Phalarope in basic plumage



was observed at Diamond Lake near Rogers in northern Hennepin County on 20–21 September 1993. On the evening of 20 September, Jeff Dains and I were observing the gulls which roost on Diamond Lake when we noticed a phalarope swimming near shore. Unfortunately, it was already too dark for accurate observation, and we were forced to leave the bird as unidentified. Our initial reaction to the bird was mixed; although it appeared to have the thicker bill of a possible Red Phalarope, it appeared to

have striping on the back indicative of a Red-necked Phalarope. We saw a distinct wing-stripe when the bird flew a short distance away from us, and thus easily eliminated Wilson's Phalarope. I returned alone at dawn on 21 September to try to relocate the



**Sketch of Red Phalarope by Parker Backstrom.**

phalarope. After an hour's search, it appeared out in the center of the lake, where I watched it for the next three hours, waiting for it to come near enough to be positively identified. The bird often flew off suddenly, sometimes traveling across the entire lake before relanding; I was able to keep my eye on the bird by driving along the road on the south side of the lake. The phalarope did finally come within several hundred feet of me when I was observing from the boat landing on the southeast shore, and I was able to confirm it as the suspected and hoped-for Red Phalarope. Following is a description of the bird from field notes made during and shortly after the observation. The bill was slightly less than the length of the head, and appeared all black, with no visible paler color at the base (but the resolution on my scope at this distance could have overlooked such a detail). The bill never appeared thin and needle-like, as on a Red-necked Phalarope. There was a distinct eye patch extending from slightly in front of the eye backward and downward in a roughly teardrop shape. The dark crown patch began above and behind the eye and extended down the back of the neck, where it became thinner and lighter in color, but then this stripe became thicker and darker again just before it met the back. This darker color on the base of the hindneck contrasted nicely with the light gray color on the mantle. I spent a considerable amount of time scrutinizing the mantle; it was a pale gray without the dark color and strong striping characteristic of Red-necked Phalarope, but it was slightly mottled in appearance with faintly paler feather edgings. There was a short dark line on the scapular region, which extended at an angle upward toward the hindneck. (According to Parker Backstrom's field notes, this line was present on one side only; the opposite side having only two dark flecks on the scapulars. See the sketch below.) The wings were darker than the mantle, forming a dark stripe along the sides of the bird, extending from the sides of the breast, along the

flanks, and out into the primaries. Additional gray smudging extended along the flanks below the blackish line of the wings. The entire underparts were white, but a slight buff color extending from the throat down to the breast could be seen when the phalarope was close. The wingtips extended slightly past the tip of the tail when the bird was perched. This phalarope was observed feeding by making quick jabs at the surface as it swam and spun on the still water. It swam with a quick bobbing motion of the head. The pointed wings carried this bird's relatively stocky body swiftly, but the flight was not especially erratic and darting. Once I confirmed the bird as a Red Phalarope, I notified Parker Backstrom, who runs the Minnesota Bird Report. He in turn alerted many birders, but unfortunately Parker and Jeff Dains were the only ones able to relocate the bird that same afternoon. It was found behind a cattail island on the north end of the lake, where it apparently had spent the entire afternoon, and thus could not be seen from the road along the south shore of the lake where I had directed observers to look. Although the bird was searched for again on the following day, I am unaware of any subsequent sightings. This observation represents the seventh Minnesota record. Interestingly, this record and the one found by Ray Glassel at the Claremont sewage ponds in Dodge County on 26–29 September 1991 (*The Loon* 64:67–68) are the only two records in southern Minnesota, and both are significantly earlier than the previous records in northern Minnesota (with previous dates ranging from 15 October to 19 November). **Karl Bardon, 1430 – 100th Ave. NW, #212, Coon Rapids, MN 55433.**

#### CROSS-SPECIES FOSTERING OF A CANADA GOOSE GOSLING BY A WILD MALLARD HEN —



On 13 June 1993, I returned to Winona to teach an elder hostel on birds of the upper Mississippi River Valley at Winona State University. While there, I visited Lake Winona and was startled to see a Mallard hen with a large ugly duckling. The gosling was a young Giant Canada Goose, about three weeks old, as judged by size and coloring. Having raised goslings of this species as part of my dissertation work, and followed the growth of 30–40 others incidental to my study, there was

no doubt of the age or species in question. The normal behavior of Canada Goose goslings involves exchanges of goslings between families as part of “gang brood formation,” where one set of parents often ends up with many nonrelated goslings in tow, and many pairs of geese lose all their young to other geese. This generally occurs during the first one to four weeks of life for the goslings and is thought to improve survival and access to resources. Konrad Lorenz hypothesized that there was an “open period” for imprinting which followed the initial imprinting of goslings on the parents. He felt this would permit goslings to switch groups or to join other goose families if lost. I returned to the lake daily from 13 June to 19 June and always found the gosling and the Mallard family in the same area of the lake, and always as a unit. The gosling swam right among the Mallard ducklings, fed with them, and behaved as though it were a part of the duck family. Reliable resources among local birders assured me that no geese had nested on Lake Winona, though they do nest on a small marsh one-half mile away. I circled the whole of both lakes several times, looking from the bike path for evidence of other geese or goslings, and saw none. I can only speculate that the gosling became separated from its family and joined the Mallard family before the Mallard brought her young to Lake Winona. The ducklings were quite small and judged to be no more than one to two weeks old, implying that the gosling had joined them while still easily distinguishable from the ducklings. The hen seemed to accept her “ugly duckling” fully and was even seen with it next to her while she brooded her young ducklings on the shore. Such cross-fostering of one species of young by another is a relatively rare sight, except in captive animals where confinement forces them together in unusual density of population. **Dr. Philip C. Whitford, Biology Department, Capital University, Columbus, OH 43209.**

**SABINE'S GULL IN PIPESTONE COUNTY** — On 4 September 1993, Ray Glassel and



I were birding in southwestern Minnesota. In mid-afternoon, we were in Pipestone when we decided to go northeast on Highway 23 and have a look at the Ruthton sewage ponds, which are in the far northeast corner of Pipestone County. We arrived at 3:30 P.M. and immediately noted a number of Ring-billed Gulls feeding over one of the three small ponds. I noticed a smaller gull in with the Ring-billeds and was most surprised to recognize the unique and very striking back pattern of a juvenile Sabine's

Gull. We watched the bird over the next hour in various positions of flying, sitting on the water, and sitting in the grassy areas between the ponds. The gull was a small, rather dainty bird for a gull; between the size of a Bonaparte's and Franklin's Gull. The black, white, and gray triangles on the upper wing, so distinctive of an immature Sabine's Gull, were well-observed as we watched the bird fly. The crown, nape, and back were a soft, suede-like gray. The cheeks and face were a lighter, mottled gray. The throat, breast, belly, and undertail were pure white. The tail was mostly white with an approximately 3/4" terminal black band. The tail was slightly notched. The small bill was black, lighter at the base; the eyes appeared dark. The bird fed over the ponds by dipping into the water and picking what appeared to be insects off the surface of the water. The Sabine's Gull often rested on the grassy areas around the ponds, sitting among the Ring-billed Gulls. Because of its small size, it was almost hidden in the grass. The bird was seen by other observers on 5 and 6 September. These are the same sewage ponds where a Laughing Gull was seen from 28 June to 2 July 1992 (*The Loon* 64:178-179). Robert B. Janssen, 10521 S. Cedar Lake Road, #212, Minnetonka, MN 55305.

**SABINE'S GULL AT WATERVILLE** — On 20 September 1993, I drove out to the fish



hatchery ponds, about two miles west of Waterville, LeSueur County. I had noticed when we drove by the day before that they were starting to draw down one of the larger ponds. It was about 12:30 P.M. and it was cloudy, misty, and cool. I drove past the smaller ponds on the east side of the road and was almost past the larger, round pond on the same side when I noticed three gulls sitting on the water in the northwest corner of this pond. I stopped to look at them, but didn't really need my binoculars

because they were only about 20-25 feet from me. I saw one was an adult and two were juveniles and were small. The adult had a dark head with a white nape and gray body. I took my 10x50 binoculars and looked at the adult. That's when I noticed the dark bill with the yellow tip and the black wing tips with four white spots. I opened my Peterson Field Guide to the Birds to the page that said "Small Hooded Gulls (adults)." This past winter I had put checks by the birds I was most likely to see in our area and an X by the rare or local species. There were two checks, one by the Franklin's Gull and one by the Bonaparte's Gull, and an X by the Little Gull. I looked through my binoculars again to check the bill of the adult to make sure I really saw the yellow tip; neither the Franklin's nor the Bonaparte's had a yellow tip. I looked in the book again and it only showed the Sabine's Gull with a yellow tip, but I disregarded it because it wasn't supposed to be anywhere near here. I looked again and noticed the hood wasn't black but dark gray, with a small black band at the base of the dark gray. There was no eye ring, like the Franklin's and Bonaparte's, but the Little Gull didn't have an eye ring. Still, the Little Gull didn't have the yellow tip on its beak. I looked at the Sabine's picture again and everything matched. That still couldn't be right because it wasn't supposed to be here. I tossed the books down and started up the engine to drive over to the other pond. I was out here to look for shorebirds, not gulls. I glanced once more at the three gulls still sitting there and thought what better time to learn gulls. They hadn't moved, they weren't flying around with a bunch of other birds to confuse me. I shut off the engine and picked up my binoculars again. I had already



**Adult Sabine's Gull, 20 September 1993, Waterville Fish Hatchery, Le Sueur County.  
Photo by Anthony Hertzell.**



**Juvenile Sabine's Gull, 6 September 1993, Ruthton Sewage ponds, Pipestone County.  
Photo by Peder Svingen.**

broken the rule of good birders by just noting some of the field marks and then paging through a book, so this time I noted all of the field marks I could. The dark gray hood with the small black band at the base of the gray, the white nape and gray body, the black wing tips with four white spots, the dark beak with the yellow tip, and no eye ring. I got Peterson's book out again, went to the same page, and it came up Sabine's again. I got out my National Geographic book and looked at the Sabine's Gull in there; it sure looked like it. I looked at the range map and the little arrows did NOT come over Minnesota. I looked at the Peterson field guide again and finally read the description. It said, "Our only gull with a well-forked tail. Note the black outer primaries and the triangular wing patch, black bill with yellow tip, black feet, slatey hood in summer." That didn't help too much because I couldn't see the feet or the forked tail or the triangular wing patch. Then I read the description in the National Geographic and it said the same basic thing, but also mentioned the juvenile plumage. "Wing pattern is like adult but muted, bill shows little or no yellow, forked tail with a dark band." I looked up and one of the juveniles was flying. It had the triangular wing patches and the notched or forked tail and a dark band on it. While I was watching the one juvenile flying, the adult and the other juvenile took off. The adult had everything — the forked tail, the black feet, the triangular wing patches, the yellow-tipped bill, the dark gray hood with the black ring at its base! That was it! A Sabine's Gull. I watched them flying for awhile. They flew around the shore of the pond and every once in awhile, one would swoop down and catch a minnow, then would land in the middle of the pond and swallow it. I drove back to Waterville and tried to find Wally Swanson, the only other birder I know in Waterville. I couldn't find him, so I went home and called Orwin Rustad in Faribault and told him I thought there were three Sabine's Gulls on a fish hatchery pond. I described the adult bird to him over the phone and he said it sure sounded like it, but if it really was, it would be pretty rare. He said he would try to phone Forest Strnad and would try to come over to check it out. They came and verified it for me and called the hotline. I finally got in touch with Wally and he came out after a time and also verified it. The gulls stayed on the same pond until 7:00 P.M. and then flew off towards Lake Tetonka. The next morning and every day until 24 September, all three were on the same pond during the day and every evening flew off to spend the night on Lake Tetonka. On the morning of the 24th, one of the juveniles was gone. On the 25th, the other juvenile was gone. The adult stayed until the 27th; the last I saw of it was 4:30 P.M. that day. **Cindy Krienke, 511 - 3rd St. So., Waterville, MN 56096.**

**DIPPER SEEN AT THE TEMPERANCE RIVER** — I observed an American Dipper along the west side of the Temperance River along the north shore of Lake Superior, Cook County, on 10 June 1993. The bird was identified by its characteristic "bobbing" behavior and by the fact that it was dipping its head under the water to look for food. It was walking near and/or in the fast-moving water, going from rock to rock, bobbing up and down all the time. It was charcoal gray in color, with a short tail that bobbed up and down. I live in California where dippers are fairly common. Several years ago, I did a rafting/camping trip on the Klamath River in northern California and saw several dippers each day of the trip. There is no other bird that looks or behaves like a dipper. **Suzanne Sawyer, 128-A 5th St., Pacific Grove, CA 93950.**



*Editor's Note:* The range of the American Dipper extends from Alaska to Panama in western North America. This range includes the western part of the United States, with an outlying population in the Black Hills of South Dakota. In 1970, there were multiple observations of a dipper or dippers on several streams along the north shore of Lake Superior (*The Loon* 42:136-137). In the later 1960s and early 1970s, there were reports of dippers in Lake and Cook counties (*The Loon* 44:118-119 and 50:213). In the 1980s, there were unconfirmed reports of dippers along the Little Fork River near the town of Little

Fork in Koochiching County. Since 1971, there have been no acceptable reports of American Dippers in Minnesota until Suzanne Sawyer's report, printed above. This record possibly indicates a population of this species exists permanently along the Temperance or other rivers in Lake or Cook County. This species should be watched for on all streams along the north shore of Lake Superior and other streams in north central Minnesota.

**IMMATURE PEREGRINE FALCON PREYS ON SHARP-SHINNED HAWK** — At



2:00 P.M. on 29 September 1993, my young daughter and I noticed what at first appeared to be a Ruffed Grouse sitting in the road that runs up a heavily wooded hillside above our house. I told her to go see what it was. To my surprise, the bird turned out to be a large falcon which flushed from its kill to a garage roof 7m away. I examined the kill, an adult female Sharp-shinned Hawk (red iris, pale brown breast scallops, retrices later measured 160mm), still warm, with a broken neck and tarsus. The falcon sat tamely on the roof. I guessed it to be an immature Prairie Falcon or Peregrine, about



**Immature Peregrine Falcon eating Sharp-shinned Hawk, 29 September, 1993, Beltrami County. Photo by Stephen Maxson.**

40cm total length, with heavily streaked breast. I ran home and returned with the National Geographic Society Birds of North America. By this time, the falcon had returned to its kill. As I approached, it flew back to the garage roof and watched me. The falcon matched

the picture of an immature *anatum* Peregrine. I checked for leg bands and dark axillars, but saw none. I tossed the Sharp-shinned's body into the air several times to attract the falcon's attention. The falcon flew down to the ground and seized its kill. It then struggled to lift the carcass, managed to carry it 25m to a woodpile, and commenced plucking the breast feathers. The falcon ate, in sequence, the breast, wings, internal organs, and legs. I called my husband Steve Maxson, who took the accompanying photo. Bryce Anderson and Diane Morris also viewed the falcon. The bird was remarkably tame, and completely ignored our presence as we watched from a distance of 4 to 5m. at 4:20 P.M., the falcon finished eating the Sharp-shinned, looked carefully for scraps, then flew across the driveway to a garage roof, where it tucked up its right leg and roosted. The falcon was gone by sunset. Only the wings, legs, and backbone of the Sharp-shinned remained; all had been picked clean. We speculate that the falcon was a juvenile reared in a remote area and unfamiliar with humans. Apparently Peregrines can outwit accipiters, since Brown and Amadon (*Eagles, Hawks and Falcons of the World*, McGraw-Hill, 1968, p.141) cite Rudebeck in a European study, "Peregrines on migration occasionally kill Kestrels and Sparrowhawks". Also of interest, a female Sharp-shinned Hawk weighing an average 179g (op cit. p.484) satisfies the daily food intake of an average Peregrine in winter (104g, op cit. p.76). **George-Ann Maxson, 4235 Carver Rd. NE, Bemidji, MN 56601.**

**SCISSOR-TAILED FLYCATCHER RECORD FOR HUBBARD COUNTY** — About



9:30 A.M. Sunday, 25 July 1993, while traveling down Hubbard County Road #6 approximately one and three-fourths miles south of the town of Hubbard, I noticed a gray, robin-sized bird sitting on a top fence wire on the west side of the road. I initially assumed it to be a Western Kingbird, but it seemed too gray and too different as I sped away. The possibility of a Scissor-tailed Flycatcher crossed my mind, so I returned and relocated the bird. Its identity was immediately obvious, with its pale grayish color on the back of the head and breast, and the distinct long, dark tail, which is about the same length as the body. As I focused my binoculars on the bird, I saw other details like a light tinge of pink on the lower belly and undertail coverts, and a small spot of bright pink just above the apex of the folded wing. As the bird flew low out over the grass to catch insects, it spread its elegant tail in the manner for which it is named. The longest and outermost feathers were actually white with black tips, although at rest the long tail appeared dark, as did the upper wing surface. On the spread tail, the central feathers were the shortest. In sharp contrast, the underwing coverts were all pale pinkish color and the axillaries were a bright pink. The bill, eye, and feet were dark. The bird moved farther south along the fence as I watched and photographed it for a 20-minute period. Ray Glassel was able to relocate the bird on 26 July 1993 at the same location. **Alison Bolduc, 4400 Oakland Ave. S., Minneapolis, MN 55407.**

**AN UNUSUAL MERLIN DIET** — The date was 18 September 1993, a beautiful sunny



Saturday in Duluth. Winds were steady from the northwest, and the temperature was up in the 60s. This was fabulous weather for hawks at Hawk Ridge. Around 1:00 P.M., after a couple of hours of hawk-watching at the Ridge, my dad Bob and I decided to go check out the shorebirds at the 40th Ave. West pond, hoping to find the Buff-breasted Sandpipers which had been seen there in previous days. After parking at the gate and walking part of the way out onto the left (north) dike, I spotted a Merlin fly in and perch near the top of a dead deciduous tree. This tree was situated straight across the channel from us on the north side of the dike (opposite the pond). I set up our 22 power Bushnell scope and found the bird. The Merlin was facing us, and it allowed us a nice, long look. As my dad was watching through the scope, the bird took off

from its perch and proceeded to fly directly toward us across the channel, which I would estimate to be about 20 yards wide. When it was about halfway across, it swooped down, thrust its talons into the water, and pulled up a live three to four inch-long fish of unknown species. The bird flew back to its very same perch and proceeded to apply its razor-sharp beak to the unusual meal it held in its talons. When I looked at it in the scope again, I could see the little fish flopping up and down within the grasp of the perched Merlin. We were quite surprised by this observation, because Merlins usually eat small birds and small rodents, not fish. Steve Ekblad, Bob Ekblad, 5737 Sherri Dr. NW, Byron, MN 55920.

**BLUE-WINGED WARBLER FOUND AT TAMARAC REFUGE** — Peder Svingen stopped by the Headquarters of the Tamarac National Wildlife Refuge, Becker County, on the afternoon of Wednesday, 16 June 1993, after having been out looking for Clay-colored Sparrows. What he found instead was a male Blue-winged Warbler! I went along with Peder back out to the area where he saw the bird and we were both able to get good views of it. I visited the site several more times over the next two weeks and observed both the blue-winged male and a female Golden-winged Warbler carrying food to the same spot. After we were able to get some good photographic documentation of



**Blue-winged Warbler, June 1993, Tamarac National Wildlife Refuge, Becker County. Photo by Bill Wyatt.**

the bird, I instituted a nest search, but came up empty on three different occasions. On-refuge sightings of both Brewster's and Lawrence's hybrids have been reported during the 1992 and 1993 summer seasons. Betsy Beneke, Tamarac National Wildlife Refuge, Rochert, MN 56578.

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The Minnesota Ornithologists' Union is an organization of both professionals and amateurs interested in birds. We foster the study of birds; we aim to create and increase public interest in birds; and to promote the preservation of birdlife and its natural habitat.

We carry out these aims: through the publishing of a magazine, *The Loon*; sponsoring and encouraging the preservation of natural areas; conducting field



trips; and holding seminars where research reports, unusual observations and conservation discussions are presented. We are supported by dues from individual members and affiliated clubs and by special gifts. The MOU officers wish to point out to those interested in bird conservation that any or all phases of the MOU program could be expanded significantly with gifts, memorials or bequests willed to the organization.

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