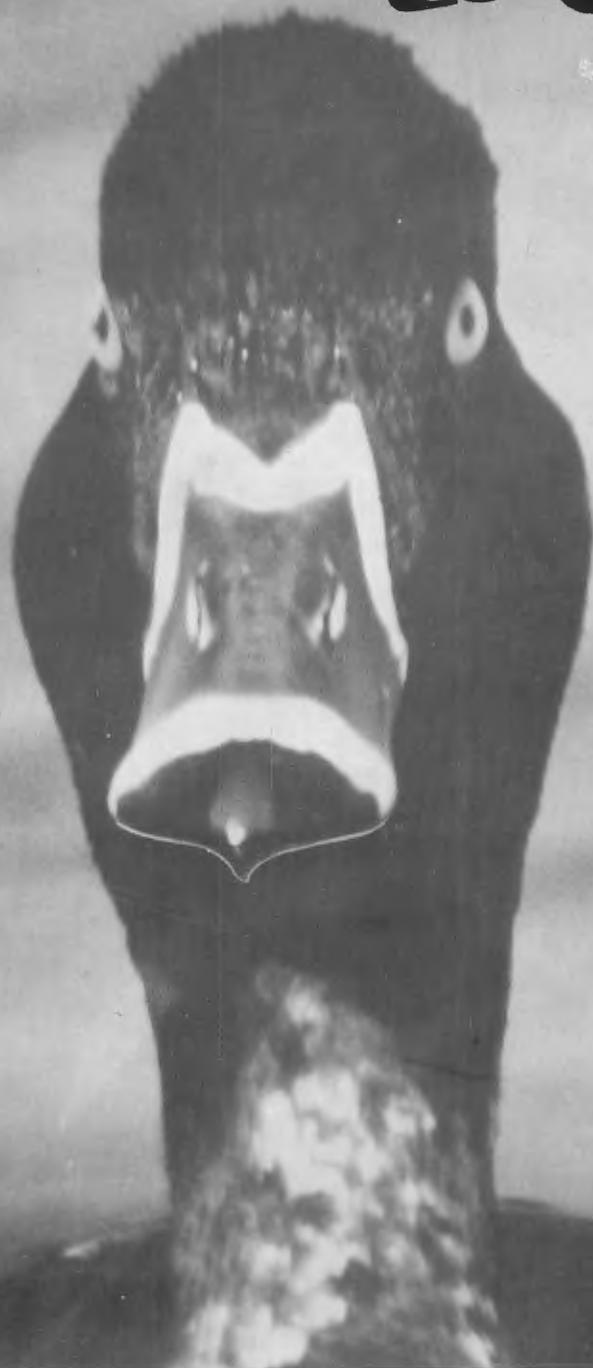


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The LOON



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

MEMBERSHIPS AND SUBSCRIPTIONS: Mrs. Elizabeth Campbell, 5267 W. Bald Eagle Blvd., Saint Paul, Mn. 55110. To join the MOU and receive both MOU publications, send Mrs. Campbell \$4 for a regular yearly subscription. Or other classes of membership that you may choose are: Family \$5 yearly; Sustaining \$25 yearly. Life \$100. Also available from Mrs. Campbell: back issues of **The Loon** (\$1 each ppd.) and MOU checklists of Minnesota birds (30 for \$1 ppd.). Gifts, bequests, and contributions to the MOU Endowment Fund should also be sent to Mrs. Campbell.

EDITOR OF THE LOON: Robert E. Turner, Box 66, Shafer, Mn. 55074. (phone 257-7871.). The editor solicits articles, short notes, and black/white illustrations about birds and nature. See back cover for details.

"The Season" section of **The Loon** publishes reports of bird sightings throughout Minnesota. We particularly desire 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 forms from the **EDITOR OF "THE SEASON,"** Mrs. Janet Green, 9773 North Shore Drive, Duluth, Mn. 55804. (area 218, phone 525-5654).

EDITOR OF THE MOU NEWSLETTER: Robert Jefferson, 10315 Thomas Ave. S., Bloomington, Mn. 55431 (phone 881-8925). Publishes announcements and reports about activities of the MOU and its affiliated clubs. (Club officers should keep both MOU editors informed.)

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The President writes...

MOU members have a wonderful diversity of interests and activities that build around our central theme of birding. Among our members are bird banders, photographers, researchers, back yard hobbyists, record builders, data keepers, article writers, artists, song and nest specialists and so on and on.

Many members look forward to our social gatherings for interchanges of information. Others may have contact only through reports and our publications.

As a state-wide organization, we are by nature somewhat loosely knit. However, our communications and activities of common interest tend to draw us together. With this in mind, MOU officers and committee chairmen are anxious to keep in touch with the pulse of all members and to get their ideas and suggestions.

Naturally we expect to continue with the popular traditional activities that have helped build each year's program. But possibly some new ideas should be considered.

You'll note a few new additions in committee chairmanship. The University Coordination Chairmanship will help keep us in close contact with the University staff and also with research project activities. The National Audubon Coordination Chairmanship will bring us an added channel of communication with a large number of our member organizations. The Publicity Chairmanship will help focus attention on our club and special activities to help boost attendance and attract interested people.

We hope our channels of communication can be strengthened in the months ahead. After our May meeting, and as a preliminary step to our fall programs, we plan to have a late summer rap session for your MOU Board. It will be a coordination and get-better-acquainted meeting for MOU representatives, club presidents, officers and committee chairmen. So we hope you have some special thoughts or ideas that you'd like to get up front. Just pass them on to your representative or directly to an officer or committee chairman for discussion and follow-up. We will be trying to do a good job for you.

MARV BORELL

The Western Grebe in Minnesota

by Joanna Burger

PHOTOS BY THE AUTHOR

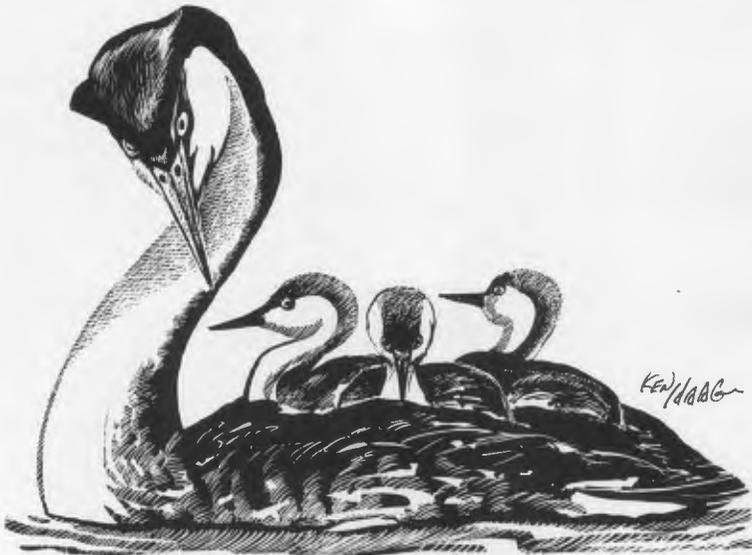
The western Grebe (*Aechmophorus occidentalis*) is one of six species of *Podicipediformes* that breeds in the freshwaters of North America. Although all these species except the Least Grebe breed in Minnesota, the Western Grebe is the least common in this state (Roberts, 1932).

Grebes are foot-propelled diving birds that feed mainly on aquatic animals. They are dark above and silvery below, some having plumes on the head during the breeding season. The males average larger than the females (Palmer, 1962). They have elaborate "water dances" and "race" displays during the courtship season. All species build floating or loosely attached nests, primarily of

water-soaked, decayed vegetation (Roberts, 1932). The nests are often covered with decayed material when not being incubated. Both sexes build the nests, incubate, and care for the young (Palmer, 1962). The young are boldly striped (except for the Western Grebe) and have a triangular bare patch on the top of the head. The young leave the nest immediately and often ride on their parents' backs.

The Western Grebe is the largest North American Grebe, averaging about 4 pounds (22-29 inches). This large white-and-black grebe has a long, slender neck that is often carried slightly curved, thus accounting for its other common name: Swan Grebe. The bill is longer than the head, and this species can always be identified this way. It is a western species that breeds in large colonies in extensive areas of open water bounded by rushes or tules.

Joanna Burger is a graduate student, J. F. Bell Museum of Natural History, University of Minnesota, Minneapolis.



Minnesota Range

The A.O.U. Checklist (1957) gives the easternmost breeding record at Heron Lake, Minnesota. According to Roberts (1932) The Western Grebe is a rare summer resident along the western boundary of the state. Breeding records reported since that period will be discussed below.

Migration

The species appears to be increasing, to judge by sightings. Few Western Grebes reported prior to 1960, but there has been a definite increase since that time. All records are from the *Loon* and *Flicker* for that reporting period unless otherwise stated.

Roberts reported the early *spring dates* in the southern part of the state as 29 April 1923 (Minneapolis). A review of the *Loon* and *Flicker* since then indicates three earlier dates:

4-16-67 Big Stone County - 1 bird

4-16-63 Stevens County - 1 bird

4-20-63 Lake Traverse, Traverse County - 9 birds.

Although Roberts' early spring date for northern Minnesota is 26 May 1917 (Fergus Falls), I have observed a group of 13 at Agassiz National Wildlife Refuge on 29 April 1970.

Roberts' late *fall date* was 14 October 1916. The following are late dates since that time:

11-15-63 Howard Lake, Wright County
1 bird

11-15-64 Frog Lake, Stevens County
1 bird

11-17-68 Lake Harriet, Hennepin County
1 bird

Breeding Season

Roberts reported only two breeding records, both from Heron Lake in Jackson County (8 June 1894 & 9 July 1899). He states that Western Grebes were observed on Heron Lake until 1923. Since then they have been recorded breeding on the following lakes:

Lake Traverse,

Traverse County - 1935

Swan Lake,

Nicollet County - 1961

Frog Lake,

Stevens County - 1962

Agassiz National Wildlife Refuge,

Marshall County - 1969

Sunburg Lake,

Kandiyohi County - 1970

Lake Traverse: The 1935 nesting report of the Western Grebe found by the T.S. Roberts Ornithological Club was reported as the "prize find" of the season. It was the first Minnesota breeding record since 1899. The following year Robert Upson found 9 nests on 23 May. The nests contained 2 eggs (1 nest), 1 egg (5 nests) and no eggs (3 nests) (*Flicker* 8 (3) 26).

M. D. Thompson (1946) reported breeding birds on Lake Traverse stating that "the only species that appeared less abundant (than in previous years) was the Western Grebe". He observed "50 adults each caring for 1 young."

The most recent published breeding record for Traverse Lake was in 1962 when an adult was observed feeding a young.

Swan Lake: This site was located in 1961 by R.I. Huber. It represents the easternmost breeding record of the Western Grebe for Minnesota (and probably the U.S.). This location is 60 miles NE of Heron Lake, the previous easternmost record.

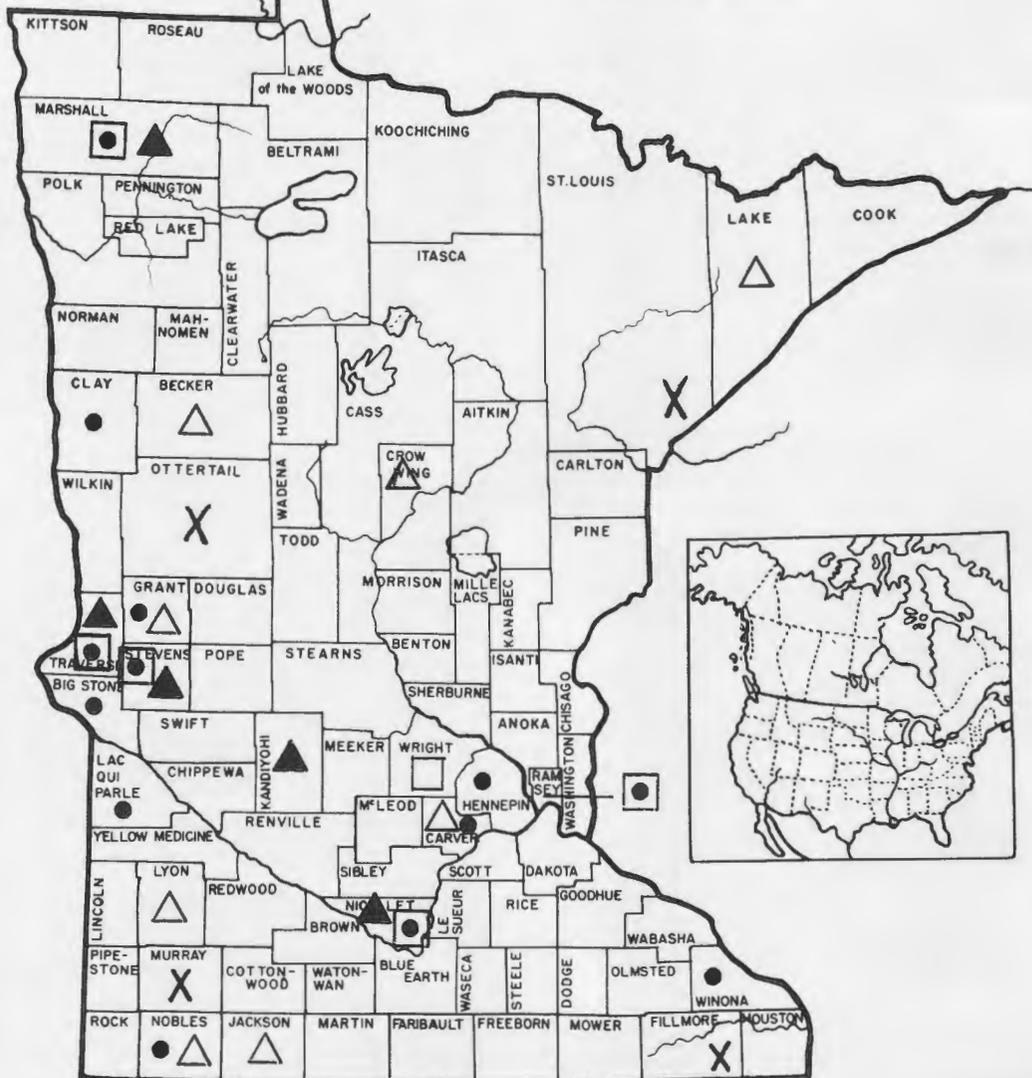
Two nests were located, composed of brown woven bulrush stems. The eggs were covered with wet, matted vegetation. One nest contained four eggs, the other 1 egg. Five adults were seen in the vicinity.

Huber additionally reported finding nests of Red-necked Grebes (*Podiceps grisegena*), Eared Grebes (*Podiceps caspicus*) and Piedbilled Grebes (*Podilymbus podiceps*) on Swan Lake.

Frog Lake: In 1961 only six Western Grebes were observed here, and in the following year an adult was observed feeding young, by Haag (1964). One year later he observed 100 but saw only one adult with three young. Haag observed four birds in downy plumage on 6 November 1965. He had observed the "penguin dance" in late July and postulated that "these birds could likely mate in late summer after unsuccessful nesting attempts" (Haag, 1965).

Sunburg Lake: Hitman (1970)

LOCATION (by County) OF SIGHTINGS
of WESTERN GREBS



KEY

- Spring Sightings
- △ Summer Sightings
- ▲ Breeding Birds
- Fall Sightings
- X Sightings prior to 1960



WESTERN GREBE CHICK SEVERAL DAYS OLD
CAPTURED FOR THE PURPOSES OF PHOTOGRAPHY

reported the location of the most recent site. One pair of adults with three downy young were located on 22 August 1970. Two young rode on the back of one adult and one young rode on the back of the other parent.

Agassiz National Wildlife Refuge: In 1947 Barret listed the birds seen at the Refuge and did not include the Western Grebe (*Flicker* 19(4)96). Carlson (1955) cited four records for the species from May and June 1954. The U.S. Fish & Wildlife Service Checklist for Agassiz National Wildlife Refuge lists the Western Grebe as common.

I have spent the past two summers on a co-operative project with the U.S. Fish & Wildlife Service studying the breeding behavior of the Franklin's Gull at Agassiz. The refuge contains 61,000 acres of wildlife habitat in northwestern Minnesota. It is managed primarily for the production of waterfowl.

I first observed Western Grebes on 5 May 1969 and 29 April 1970. Groups of up to 27 were observed during May and June. On any boat trip out into Agassiz Pool (5,000 acres) several adults could be seen from a distance. From my gull blind I could frequently hear loud shrill calls of Western Grebes across the open water. In early May 1970 groups of up to 15 were frequently observed displaying on a small inlet sheltered from the wind.

Three nests were located on 14 June 1969 in a bulrush (*Scirpus* sp.) inlet on an island (15.6 acres) in the middle of Lake Agassiz. The nests were primarily of wet

and matted dead cattails. Although the nests appeared to be floating, they were impossible to dislodge without cutting the reeds. The nest structure was quite substantial and extended 16 inches below the surface of the water. One nest contained three eggs and the other had four eggs. The eggs were cream white with brown discoloration (no doubt due to the wet vegetation of the nest). One egg was collected and is in the collection at the Refuge Headquarters.

Subsequently two other colonies were located on the same island, although both were in cattails. The second colony contained twelve nests, and its nucleus also seemed to be an inlet. Nine of the nests contained four eggs and the other three each had three eggs. The nests in this colony were composed of reeds and cattails.

The 28 nests in the third colony were counted on 2 July 1969 by Joseph Kotok (refuge manager) and me. The colony was centered around an inlet, and no nest was more than 27 feet from the waters edge. This colony was entirely in cattails, and the nests were composed of dead cattails, although a few contained pieces of new growth. The closest two nests were 6.2 feet apart. Most nests contained four eggs (six with three eggs, one with two eggs).

As we approached, the birds would dive, then surface far out in the lake. Usually the nests were uncovered. In only nine instances the eggs were partially covered with vegetation. Twice I succeeded in coming around the edge of the cattails and observing adults slipping off the nest and into the water. Seconds later they surfaced out in the lake.

The nests on this island were particularly interesting because the island contained a Franklin's Gull colony (350 nests) and a Black-crowned Night Heron Colony. The Franklin's Gull and Western Grebe colonies overlapped, the closest two nests were 9 and 12 feet apart. The Western Grebes would have been building their nests while the nearby gulls were incubating. One Horned Grebe was located in the Western Grebe colony, and the adult was observed leaving the nest. The Horned Grebe always covered its eggs.

Five nests were located on the nearby Cormorant Island (8 July 1969) in a reed

inlet. This area was studied extensively by Cline and Dornfeld (1968), and no Western Grebes nests were found.

I think Western Grebes nested in several other cattail inlets on Agassiz Pool because concentrations of adults were always present.

An adult with three young on its back was observed by Dwain Warner and me (and his ornithology class from the Lake Itasca Biological Station) on 24 June 1969. This adult was observed with young when none of the eggs in the aforementioned colonics had hatched so it must be assumed that they nested elsewhere on Agassiz Pool.

Additional young were sighted periodically until I left in mid-August.

Water levels fluctuated greatly in 1970, and only 5 nests were located (25 June) where the 28-nest colony had been the previous year. However, many adults were present and displaying, and I think that more nests might have been built later in the summer. The nests that were present were partially destroyed (by wind and water) and one nest contained a

broken egg. Two of the nests contained an inordinate amount of live cattail material.

The first young was not spotted in 1970 until 26 July.

Although only 48 nests were located in 1969, I would estimate that the total breeding population was at least 300 birds. All five species of Grebes nest at Agassiz. Pied-billed and Eared Grebes are very common, Red-necked Grebes are less common, and Horned Grebes are uncommon.

Summary

It seems evident that the breeding range of the Western Grebe is extending into the available habitat in Minnesota. Migration records indicate that the bird is appearing in many places where it has not yet been recorded to be breeding. I believe that it may be breeding in some of these areas. The species needs extensive areas of open water bordered by reed and cattail areas. It has been my experience that the birds seek out inlets with sparser



ONE OF 28 WESTERN GREBE NESTS IN A COLONY IN CATTAILS AT AGASSIZ

vegetation. Field observers should make a special effort to investigate some of the marshes where the species has been observed during the summer.

Acknowledgments

These observations were made while studying the breeding behavior of the Franklin's Gull. This study was partially funded by The Society of Sigma Xi and the Frank M. Chapman Memorial Fund. I am much indebted to Josephine Herz for the summer Fellowships which made my research possible.

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Glorious weather, beautiful country, cooperative birds, and charming hosts made the MOU Spring Field Trip a great success in 1971. Led by members of the Southwestern Minnesota Nature Club, our auto caravans visited some interesting and productive bird areas, including a colony of Black-crowned Night Herons, which were nesting in a grove adjacent to a farmyard. There near the grove we found a sign bearing the following message.

ATTENTION, BIRD WATCHERS!

Welcome to our farmyard. We're deeply concerned as the Minnesota Highway Department has scheduled to build a new four-lane expressway immediately north of this grove. Such a change would take 40 acres of our land and would surely leave these herons without their home.

We feel this new road unnecessary, for Interstate 90 will run only 20 miles south of here and will relieve the heavy traffic from Highway 60. We propose a good, safe two-lane road on the existing roadbed, which would save much good farmland and preserve much of our wildlife which will be unable to exist in a cemented Minnesota.

LET'S KEEP MINNESOTA GREEN!

We're concerned. Are you? Write to your governor, congressmen, and Highway Department before it is too late.

THANK YOU!

Clarence and Vivian Blomgren
Kent, Kurt, Kyle and Cory

THE 1970 FALL SEASON

Kim R. Eckert and Paul Egeland

A surprising total of 260 species (well above the 245 reported in 1965 but well below the 267 last year) were recorded by an equally surprising total of 42 observers. That is the lowest number of observers we have had for a fall season in at least 6 years. In fact it is the lowest number for any season except for last summer. We complained enough in the spring season summary about the decline in the number of contributors to these reports in recent years.

But look at the effect in his report. Note how few peaks, and note how few counties are listed for residents such as the Screech and Great Horned Owls. Also note how many times we had to use the phrase "only report(s)" instead of listing latest or earliest dates. A closer look at this report will reveal that very often the latest dates for migrants appear in the north rather than the south. There is also a slight tendency for this to happen with many species in fall migration, but we think that the extent of this phenomenon this fall was due to the acute lack of reports that gave an inaccurate and incomplete account of representative departure dates.

Most surprising is the number of species that were not reported at all: Greater Prairie Chicken, Gray Partridge, Marbled Godwit, Whip-poor-will, Mockingbird, Wood Thrush, Gray-cheeked Thrush, Loggerhead Shrike, Blue-winged Warbler, White-winged Crossbill, Grasshopper Sparrow. We could go on to list even commoner species that were reported only a few times.

Still, 260 species were recorded. The number is that high because of the large number of species recorded that are not often seen in the state. It would be hard to draw any safe conclusions, but it is safe to say that the commoner species were overlooked and that the rarer ones were found. A number of highlights still emerged: two Cattle Egret reports, one an unusual peak of eight, the other an unusual late October date; three Harlequin Ducks, including one inland record; a Common

Scoter in southwest Minn.; a Gyrfalcon shot in southern Minnesota; one report of the now rare Bobwhite, formerly more common; a peak of 5000 Sandhill Cranes; one possible Yellow Rail; one possible Purple Gallinule, which would be the third state record; the large number of Buff-breasted Sandpiper reports; the first Minnesota Pomarine Jaeger in Duluth; very late Forster's and Common Tern reports; a possible Ivory Gull sighting; the fourth Least Tern for the state; another Red-shafted Flicker sighting; very late Tree and Barn Swallow records; a possible Bewick's Wren in Minneapolis; the late dates for many of the vireos and warblers; an amazing concentration of Common Grackles; and an equally unusual flock of 16 Smith's Longspurs. It is interesting to note the extreme rarity of most of these highlights, and that four of these reports have to be listed as doubtful based on the details received.

We would like to thank Marygail Gilly who helped in typing this report.

WEATHER. — Temperatures in the state from August through November were normal, both Fargo and Minneapolis reporting around a degree above average or less for each of the four months.

Precipitation, on the other hand, was well above normal throughout the state. August was dry, both Fargo and Minneapolis reporting about an inch below average in rainfall. September was a bit above normal, October and November much wetter than usual. Minneapolis received almost 6 inches more precipitation than usual during these last two months; a total of about 9 inches, which is about three times the normal precipitation!

Other areas such as Fargo were not quite as wet with reports as low as 1½ times the average, but it was a very wet fall overall in the state. Total snowfall for the period ranged from about 6 inches in the Twin Cities, to around 15 inches in the southwest, to as much as 24 inches in the north. The

first killing frosts were on September 13 in the north and not until October 9 in the south.

STYLE. — Our style in this report is similar to that used in the spring migration report. As a general rule for migrants we have tried to list the latest two departure dates north, the latest three dates south, and

where applicable the two earliest migrants. But it is interesting to note the large number of migrants in this report that are not listed as completely as described above due to the lack of contributors. We have omitted the commoner permanent residents and listed only counties for the less common residents. We have also listed significant concentrations, but again note how few peaks were reported.

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Common Loon: late south 11-13 Houston FL; 11-14 Hennepin FN; 11-15 Wright ES; late north 11-10 Cass MMC; 11-12 Duluth JG; peak 9-30 Mille Lacs (18) KE, RR.

Red-necked Grebe: 6 reports: 8-12 Wright BH; 8-20 (17) and 9-24 Marshall AR; 9-4, 10-18, 10-25 Duluth MMC, JG.

Horned Grebe: late south 11-8 Houston FL; 11-14 Hennepin (21) ES; late north 11-7 Duluth BL; 11-8 Lake PH; 11-14 Duluth JG; peak 1028 Hennepin (38) VL.

Eared Grebe: 9-5 Lyon (3) PE; only report.

Western Grebe: 8-22, 9-4, 9-26, 10-17 Kandiyohi (11) BH; 9-16 (127) and 10-1 (3) Marshall AR; only reports.

Pied-billed Grebe: late south 10-31 Washington WL; 11-3 Carver KH; 12-2 Winona TV; late north 10-29 Marshall AR and Lake JG; peak 8-22 Pope (60) BH.

White Pelican: 6 reports: 8-28 Nicollet (400) BL, RG; 9-4 (337) and 10-1 (110) Marshall AR; 9-26 to 9-28 Cottonwood (1000) LF; 10-25 and 26 Ramsey, Tom Nicholls; 11-10 Pope WH.

Double-crested Cormorant: late south 10-23 Winona TV; 10-29 Carver KH; 11-8 Houston FL;

late north 10-29 Marshall AR; peak 10-8 Marshall (82) AR.

Great Blue Heron: late south 11-7 Houston FL; 11-8 Wabasha TV; 11-10 Pope WH; late north 10-31 Pine KS; 11-5 and 8 Duluth, fide JG.

Green Heron: late south 9-26 Lyon PE; 9-28 Washington WL; 10-10 Winona TV; late north 8-29 Mille Lacs MI and Crow Wing JB; 9-1 Marshall AR; peak 8-23 Houston (20) FL.

CATTLE EGRET: 2 unusual reports: 8-21 *Grant* (8) Mr. and Mrs. Louis Moos; 10-26 and 27 Wabasha (2) WDM.

Common Egret: late 9-26 Pope BH; 10-8 Carver KH; 10-25 Houston (125) FL; only report north 8-8 and 9-29 Marshall AR.

Black-crowned Night Heron: late south 9-27 Lyon PE; 10-1 Stearns KE, RR; 10-12 Hennepin VL; late north 10-24 Marshall JG; 11-17 Marshall AR.

Yellow-crowned Night Heron: 2 reports: 8-23 Houston (3 imm.) FL; 9-18 Houston (1) FMV.

Least Bittern: 3 reports: 8-6 and 31 Wright ES; 8-16 Carver KH; 9-5 Nicollet DB.

American Bittern: late south 10-21 Winona TV and Carver KH; 11-7 Hennepin PE; late north 10-19 Marshall AR.

Whistling Swan: early 10-17 Wabasha TV; 10-22 Wabasha WDM; late south 11-20 Wabasha (720) TV; 10-29 Dakota VL; late north 11-16 Carlton (95) JH; 11-16 Pine KS; 11-21 Morrison LR.

Canada Goose: peak 10-8 Marshall (6847) AR.

White-fronted Goose: 10-11 Kittson (35) MMC; only report.

Snow/Blue Goose: early 9-22 Marshall AR; 9-23 Chisago VL; late south 11-13 Watonwan LF; 11-16 Hennepin CH; 11-20 Hennepin VL; late north 11-14 Duluth PH; 11-19 Marshall AR; peak 11-10 Itasca (700), R. Kohlbray.

Mallard: peak 11-29 Dakota (5000) VL.

Black Duck: early south 8-29 Hennepin CH; late north 10-29 and 11-2 Duluth (100) JG; 11-12 Marshall AR.

Gadwall: late south 11-8 Hennepin ES; 11-17 Scott VL; 11-26 Carver KH; late north 10-24 Marshall JG; 11-12 Marshall AR; peak 10-15 Marshall (921) AR.

Pintail: late south 11-6 Carver KH; 11-8 Hennepin ES; 11-10 Winona TV; late north 11-7 Cook BL and Duluth JH; 11-20 Cook JG; peak 10-1 Marshall (360) AR.

Green-winged Teal: late south 11-14 Hennepin CH; 11-15 Lyon PE; 11-17 Hennepin VL; late north 10-24 Marshall JG; 11-5 Marshall AR; peak 10-1 Marshall (728) AR.

Blue-winged Teal: late south 10-17 Kandiyohi BH; 10-20 Sherburne VL; 10-22 Carver KH; late north 11-7 Duluth JH; 11-19 Marshall AR; peak 9-4 Marshall (686) AR.

American Widgeon: late south 11-8 Winona TV; 11-14 Hennepin CH, ES; 11-17 Wabasha WDM; late north 10-24 Marshall JG; 11-5 Marshall AR; peak 9-17 Marshall (612) AR.

Shoveler: late south 11-3 Carver KH; 11-8 Hennepin ES; 11-18 Hennepin VL; late north 10-24 Marshall JG; 11-5 Marshall AR.

Wood Duck: late south 11-22 Ramsey EC; 11-29 Hennepin CH, VL, ES, and Washington WL; only 1 report north: 9-4 and 10-8 Marshall AR.

Redhead: late south 11-15 Wright ES and Lyon PE; 11-30 Winona TV; late north 11-12 Marshall AR; 11-20 Cook JG; peak 10-24 Beltrami (500) JG.

Ring-necked Duck: late south 11-7 Meeker DBC; 11-15 Lyon PE and Wright ES; late north 11-12 Marshall AR; 11-14 Duluth JG.

Canvasback: late south 11-15 Wright ES and Lyon PE; 11-18 Hennepin VL; 11-21 Wabasha WDM; late north 11-12 Marshall AR; 11-14 Duluth JG; peak 11-8 Winona (250) TV.

Greater Scaup: only 1 report: 10-25 Aitkin (20) JB.

Lesser Scaup: late south 11-15 Wright ES and Lyon PE; 11-30 Winona TV; late north 11-20 Cook JG; 11-28 Lake MMC; peak 10-28 Duluth (3000) JG.

Common Goldeneye: early south 10-10 Hennepin FN; 10-16 Carver KH; 10-28 Hennepin VL.

Bufflehead: early 9-27 Lyon PE; 10-1 Marshall AR and Stearns KE, RR; late south 11-17 Hennepin VL; 11-22 Ramsey EC; 11-29 Hennepin DB; late north 11-23 Duluth JG; 11-28 Lake MMC.

Oldsquaw: 11-8 and 28 Lake MMC, PH; 10-26, 11-8, 11-20 Duluth MMC, JG; 3 unusual inland reports: 10-31 Crow Wing EC; 11-3 and 4 Marshall AR; November, Itasca, fide JG.

HARLEQUIN DUCK: 11-1 Duluth (1 imm.) JG; 11-3 Duluth MMC; also 1 unusual inland report: 1 adult male shot in November, Lake Winnibigoshish, *Itasca Co.*, fide JG.

White-winged Scoter: 3 reports: 10-26 Duluth (15) MMC; 11-11 Duluth (8) JG; 11-20 Cook (1) JG.

Common Scoter: 11-7 and 8 Duluth (3) BL, JG; 1 unusual inland report: 11-14 *Lyon* (1 female) PE.

Ruddy Duck: late south 11-7 Wright PF and Meeker DBC; 11-8 Houston FL; 11-14 Hennepin CH; late north 11-5 Marshall AR and St. Louis JH; peak 10-1 Marshall (391) AR.

Hooded Merganser: late south 10-6 Carver (75) KH; 11-8 Houston FL; 11-10 Carver MM; late north 11-8 Crow Wing JB; 11-10 Duluth JG; peak 11-15 Lyon (85) PE.

Common Merganser: peak 11-27 Wabasha (4000) TV; no early dates south reported.

Red-breasted Merganser: early 10-20 Sherburne VL, ES; late south 11-22 Wabasha WDM and Ramsey EC; 11-29 Hennepin CH; late north 11-4 Duluth MMC.

Turkey Vulture: only report south 9-18 TV; late north 10-5 Cook JP; 10-6 Duluth MMC; peak 9-26 Duluth (142) PH.

Goshawk: 7 reports: 9-14 and 21 Marshall AR; 9-22 (4), 9-27, 10-5, 10-28, 11-5 Duluth MMC, JG, PH.

Sharp-shinned Hawk: late south 10-21 Wright ES; 10-25 Carver KH; 11-19 Wabasha WDM; late north 11-4 Duluth JG; peak 9-22 Duluth (1510) PH.

Cooper's Hawk: late south 10-14 Washington WL and Hennepin VL; 11-13 Wabasha WDM; late north 9-29 Duluth PH; 10-10 Crow Wing JB.

Red-tailed Hawk: late north 11-13 Duluth MMC.

Red-shouldered Hawk: reported from Winona, Wabasha, McLeod, Cottonwood, Anoka, Stearns; 1 northerly report 9-19 Duluth PH.

Broad-winged Hawk: late south 9-26 Carver KH and Hennepin PF and Wabasha WDM; 9-27

Hennepin MM; late north 10-10 Crow Wing JB; 10-28 Duluth PH, MMC, JG; peak 9-22 (24300) and 9-26 (15300) Duluth PH.

Swainson's Hawk: 4 reports: 9-22 Marshall AR; 9-30 Duluth (1 dark phase) KE, RR, JG, MMC; 10-4 Watonwan (2) LF; 10-5 Cottonwood Lf.

Rough-legged Hawk: early south 10-17 Hennepin RG; 10-20 Sherburne VL, ES; 10-22 Wabasha WDM; early north 9-23 Mille Lacs MI; 9-27 Duluth PH; late north 11-18 Cook JP; 11-22 Duluth JG, MMC.

Golden Eagle: 4 reports: 9-16 to 9-27 Duluth (6) PH; 10-8 Marshall (1) AR; 10-14 Winona (2) MM; 10-24 Itasca (1) JG.

Bald Eagle: reported from Marshall (1), Crow Wing (12), Mille Lacs (4), Sherburne (1), Itasca (12), Lake (1), Becker (2), Duluth (47), Wright (1), Isanti (1), Houston (7), Aitkin (1), Ramsey (2), Wabasha (12), and Morrison (1); more reports and more counties than usual.

Marsh Hawk: late south 11-5 Washington EC; 11-6 Carver KH; 11-15 Wright ES; late north 11-12 Marshall AR; 11-13 Crow Wing EC; peak 9-22 Duluth (99) PH.

Osprey: late south 10-2 Freeborn MM; 10-29 Carver KH; 11-10 Winona TV; peak 9-22 Duluth (14) PH, from 9-10 to 9-29 63 in Duluth migration; also reported from Nicollet, Carver, Freeborn, Winona, Sibley, Washington, Houston, Le Seuer, Mille Lacs (2).

GYRFALCON: 1 gray phase female shot in Sherburne Refuge, found injured 11-5, died 11-12.

Peregrine Falcon: 9-11 to 9-27 Duluth (8) MMC, PH; only other report 9-26 Crow Wing JB.

Pigeon Hawk: 8-19 to 10-10 Duluth (20) PH; only other reports 9-26 Crow Wing JB; 10-3 Lyon PE.

Sparrow Hawk: late north 10-17 St. Louis JG; peak 9-19 Duluth (172) PH.

Spruce Grouse: 8-2 and 12 Duluth (1) JH; only report.

Ruffed Grouse: reported from Winona, Wabasha, Mille Lacs, Clearwater, Lake of the Woods, St. Louis, Lake, and Cook; fewer reports than usual.

SHARP-TAILED GROUSE: 10-25 Beltrami (3) JG, only report.

BOBWHITE: only report 9-7 Wabasha (1) WDM; this species has become scarce in the state in recent years.

Ring-necked Pheasant: reported from Carver, Winona, Dakota, Hennepin, Wabasha, Lyon, Cottonwood, Nobles, Mille Lacs, and Duluth.

Gray Partridge: no reports of this or Prairie Chicken.

Sandhill Crane: 6 reports: 9-7 St. Louis (4) BH;

9-22 Marshall (75) 10-4 Cass (5) MMC; 10-18 Borup, Norman Co. 5000) LW; 11-14 Marshall (8) AR; 11-20 Washington (1) WL; more reports than usual.

Virginia Rail: late south 9-10 Hennepin, Marv. Borell; 9-13 Hennepin VL; 9-26 Lyon PE; only report north 9-1 Crow Wing JB.

Sora: late south 9-18 Hennepin VL and Wabasha WDM; 10-24 Carver KH; late north 9-17 Mille Lacs MI; 10-4 Crow Wing JB; peak 9-1 Crow Wing (50) JB.

YELLOW RAIL: 10-16 Agassiz Refuge, Marshall Co. (1) MMC; details do not preclude immature Sora.

PURPLE GALLINULE: 9-5 Nicollet (1 imm.) DB; see details in September issue; if correct, only third state record.

American Coot: late south 11-23 Hennepin PF; 11-29 Hennepin DB, CH; 11-30 Hennepin ES, VL; late north 11-5 Marshall AR; 11-20 Cook JG; peak 9-30 Lake Onamia, Mille Lacs Co. (20,000) KE, RR.

Semipalmated Plover: early 8-5 Duluth RL; 8-8 Duluth KE, PE, CH; late south 9-6 Lyon PE; late north 9-18 Marshall AR; 9-29 Duluth KE, RR.

Piping Plover: 8-8 and 9 Duluth (6) KE, PE, CH, RL; only reports.

Killdeer: late south 10-21 Wright ES; 10-22 Washington WL; 11-18 Pope WH; late north 10-10 Cook JP; 10-11 Duluth JG; 10-22 Marshall AR.

American Golden Plover: early 9-10 Duluth DB; late north 10-24 Itasca JG; 11-4 Duluth MMC; only report south 11-14 Lyon PE; peak and early 8-23 Clay (400) LW.

Black-bellied Plover: early 8-8 Duluth KE, PE; 8-14 Mille Lacs MI; late north 10-16 Clay LW; 11-4 Duluth MMC; peak 10-11 Duluth (95) JG; no reports south.

Ruddy Turnstone: early 8-14 Mille Lacs MI; 8-27 Duluth RL; late north 11-2 Duluth JG; no reports south.

American Woodcock: late north 10-13 Duluth JH; 11-5 Mille Lacs MI; only reports south 8-2 and 9-9 Wright ES.

Common Snipe: late south 11-3 Carver KH; 11-5 Watonwan DB; 11-10 Winona TV; late north 11-5 Marshall AR; 11-19 Morrison LR; peak 9-10 Marshall (83) AR.

Upland Plover: 2 very late reports: 9-11 Hennepin, W. Jiracek; 10-4 Wright BH; no details on either report.

Spotted Sandpiper: late south 9-20 Wright ES, BH; 9-24 Hennepin VL; 9-27 Lyon PE; late north 9-11 Mille Lacs MI; 9-29 Duluth KE, RR.

Solitary Sandpiper: early 7-25 Anoka CH; 7-27 Mille Lacs MI; 8-1 Pope BH; late south 9-20

Wright BH; 10-4 Lyon PE; 10-6 Hennepin VL; late north 9-18 Lake JG and Marshall AR.

Willet: 2 reports: 8-10 Wright ((8) ES; 8-12 Mille Lacs (1) MI.

Greater Yellowlegs: early 7-26 Le Sueur DB; 8-4 Wright ES; late south 10-31 Lyon PE; late north 10-29 Duluth JG; 11-5 Marshall AR.

Lesser Yellowlegs: early 7-19 Mille Lacs MI; 7-26 Le Sueur DB; late south 10-11 Carver VL; 10-14 Washington EC; 10-25 Houston FL; late north 10-22 Marshall AR.

Knot: 2 reports: 7-19 Duluth (1) KE; 8-22 Duluth (1) BL, RG.

Pectoral Sandpiper: early 7-26 Le Sueur DB and Mille Lacs MI; late south 9-21 Carver KH; 10-1 Stearns KE, RR; 10-4 Lyon PE; late north 10-16 Clay LW; 10-28 Duluth JG; peak 8-30 Ramsey (100) EC.

White-rumped Sandpiper: 2 reports: 9-1 Wright ES, FN; 9-6 Hennepin MM.

Baird's Sandpiper: early 7-16 Mille Lacs MI; 7-29 Duluth DB; late south 10-31 Lyon PE; late north 9-19 Duluth CH; 10-16 Clay LW.

Least Sandpiper: early 7-25 Mille Lacs MI; 7-26 Le Sueur DB; late south 9-12 Wright ES; 9-27 Lyon PE; late north 10-4 Clay WL; 10-15 Marshall AR.

Dunlin: 4 Duluth reports: 10-11 (60), 10-27 (50), 10-28 (62), 11-2 (29) JG, MMC.

Short-billed Dowitcher: 8-28 Nicollet (2) RG; only report with call note data.

Long-billed Dowitcher: 10-4 Lyon (3) PE; 10-10 and 12 Duluth (2) JG; only reports with call note data.

Dowitcher, sp.: 9 reports with no call note data from 8-9 to 10-4 in Cottonwood, Nicollet, Wright, Pope, Mille Lacs, and Marshall; peak 10-1 Marshall (62) AR.

Stilt Sandpiper: early 7-26 Mille Lacs MI; 8-13 Hennepin RG; late south 9-6 Lyon PE; 9-7 Nicollet (10) RG; late north 9-25 Clay LW.

Semipalmated Sandpiper: early 7-10 Mille Lacs MI; 7-18 Duluth KE; late south 10-4 Lyon PE; late north 9-26 Clay LW; 10-11 Duluth JG.

BUFF-BREASTED SANDPIPER: an exceptional number of reports: from Duluth: 9-12 (24) MMC, JG; 8-22 (5) BL, RG; 9-19 (2) BL; 8-31 (18) MMC; 8-27 (1) VL; 8-29 (2) DB; 9-17 (5) FN; 1 other report, 10-7 Fairhaven, Stearns Co. (2) KE, RR, very late date, unusual inland locality; number of reports compares with similar concentration along Lake Michigan.

Sanderling: early 7-18 Duluth (40) KE; 8-4 Wright ES; late north 10-15 Marshall AR; 10-11 Duluth JG; late south 9-12 Hennepin DB.

Wilson's Phalarope: late south 9-5 Lyon PE; late north 8-21 Pine KE; peak 9-24 Marshall (200) AR.

Northern Phalarope: early 8-28 Nicollet RG, BL; 8-30 Ramsey EC; late 9-29 Clay LW; 10-8 Marshall AR; peak 9-5 Lyon (75) PE.

POMARINE JAEGER: 10-11 Duluth (1 imm.) JG; first Minnesota record; see details in forthcoming *Loon*.

Parasitic Jaeger: 9-19 New Brighton, Ramsey Co., RG; also jaeger, sp. reported 9-11 Duluth, fide JG was probably this species.

Glaucous Gull: 11-19 Duluth (7 imm.) JG; only report.

Herring Gull: late 11-7 Wright PF; 11-15 Wright ES; 11-30 Hennepin ES; peak 11-7 Duluth (3000) JG.

Ring-billed Gull: late north 11-15 Duluth JG; 11-5 Marshall AR; late south 11-29 Wright BH and Hennepin DB, CH; 12-7 Wabasha WDM; peak 8-19 Mille Lacs (500) ME; 10-1 Wright (500) KE, RR.

Franklin's Gull: late north 10-11 Polk MMC and Duluth JG; late south 10-16 Stearns MC; 10-22 Cottonwood FL; 11-9 to 11-25 Nobles HH; 8-22 Pope (1000) BH; 10-1 Wright (1000) KE, RR.

Bonaparte's Gull: late north 10-31 Duluth JG; 11-8 Mille Lacs JB; late south 10-25 Houston FL; 11-15 Hennepin ES; peak 9-19 Marshall (1750) AR.

IVORY GULL: one possibly seen 10-28 Cook by Margaret and Matilda Wallblom; small size, all white body, black legs noted indicating adult plumage.

Forster's Tern: late north 9-30 Mille Lacs KE, RR; 10-24 Itasca JG; only report south 8-9 Pope BH.

Common Tern: late north 9-19 Duluth JG; 9-30 Mille Lacs KE, RR; late south 9-7 Benton MC; 11-7 Wabasha WDM (no details).

LEAST TERN: 9-26 Cottonwood, Lyon Co. (1 imm.) PE; second state record; see "Notes of Interest".

Caspian Tern: late north 9-20 Duluth CH; 9-26 Crow Wing JB; late south 9-21 Wright ES; 10-6 Carver KH; 10-11 Hennepin CH; peak 9-11 Houston (30) FL.

Black Tern: late north 10-1 Marshall AR; late south 9-5 Wright BH; 9-7 Lyon PE and Nicollet RG.

Mourning Dove: late north 11-10 Duluth JG, MMC; 11-20 Duluth JH; peak 9-16 Pope (100) WH.

Yellow-billed Cuckoo: 8-8 Winona TV; 8-16 and 29 Carver KH; only reports.

Black-billed Cuckoo: 9-17 Morrison LR; 9-29 Crow Wing JB; only reports north; late south 9-4 Pope BH; 9-12 Cottonwood LF; 9-14 Winona TV.

Screech Owl: reported only from Winona, Pope, and Carver.

Great Horned Owl: reported only from Mille Lacs, Wright, Carver, and Wabasha.

Snowy Owl: 4 reports: no date, Washington WL; 10-19 St. Louis, D. Chapinski; 11-7 Lake, Milt Johnson; 12-15 Hennepin, Tom Nicholls.

Barred Owl: reported from Carlton, Crow Wing, Morrison, Anoka, Carver, Washington, Ramsey, and Winona.

Long-eared Owl: 3 reports: 10-9 Duluth JH; 10-15 Ramsey, Tom Nicholls; 10-31 Hennepin VL.

Short-eared Owl: many reports; latest 10-29 Marshall AR; also reported from Duluth (3), Clearwater, Beltrami, and Itasca from 10-9 to 10-25.

Saw-whet Owl: 3 reports: 9-17 Carlton, D. Warner; 9-28 Duluth MMC; 10-4 Duluth JH (found dead on highway).

Common Nighthawk: late north 8-22 Marshall AR; 9-4 Duluth MMC; late south 9-20 Hennepin VL, CH and Carver FN and McLeod FN; 9-24 Hennepin WKE; 9-30 Ramsey BH.

Chimney Swift: late north 9-12 Duluth JG; 9-21 Duluth MMC; late south 9-17 Washington WL and Wabasha WDM; 9-19 Hennepin VL.

Ruby-throated Hummingbird: late north 9-21 Crow Wing JB and Mille Lacs MI; 10-9 Duluth KS; late south 9-23 Hennepin ES; 9-26 Wabasha WDM; 9-27 Lyon PE.

Belted Kingfisher: late north 10-25 Beltrami JG; 10-29 Marshall AR; late south 11-29 Wright ES, BH and Hennepin CH; 11-30 Carver KH.

Yellow shafted Flicker: late north 11-6 Duluth, A. K. Arndt; 11-20 Cook JG.

RED-SHAFTED FLICKER: 9-12 Nobles HH; red wing-linings and whisker marks noted, but face and nape colors not mentioned; there have been over 30 sight reports of this species in the state, but all could have been hybrids; no state specimen.

Pileated Woodpecker: reported from Mille Lacs, St. Louis, Cook, Hennepin, Wright, Anoka, Carver, Wabasha, Washington, and Dakota.

Red-bellied Woodpecker: one report north: 11-21 Morrison LR.

Red-headed Woodpecker: late north and west: 9-23 Cook JP; 10-1 Mille Lacs MI; 10-6 Cottonwood LF.

Yellow-bellied Sapsucker: late north 10-8 Duluth KS; 10-16 Cook JP; late south 9-30 Hennepin VL; 10-9 Hennepin EJ; 10-13 Carver KH.

Black-backed three-toed Woodpecker: 6 reports from Duluth (4) and Cook (2), from 9-6 to 11-29; more reports than usual.

Eastern Kingbird: late north 9-22 Duluth JG; late south 9-9 Stearns MC; 9-11 Hennepin VL and Wabasha WDM.

Western Kingbird: 3 reports: 8-1 Pope BH; 8-3 Wabasha WDM; 8-30 Cottonwood LF.

Great Crested Flycatcher: late north 9-3 Morrison LR; 9-25 Duluth KS; late south 9-11 Carver KH; 9-20 McLeod FN; 9-27 Hennepin VL.

Eastern Phoebe: late north 9-11 Duluth MMC; 9-23 Morrison LR; late south 10-5 Washington WL; 10-11 Hennepin CH; 10-27 Hennepin VL.

Yellow-bellied Flycatcher: 4 reports: 8-27 and 9-10 Morrison LR; 9-4 Duluth KS; 8-30 Wright ES; 8-30, 9-3 and 9 Hennepin VL.

Trail's Flycatcher: 2 reports: 8-22 and 9-3 Wright ES; 9-10 Morrison LR.

Least Flycatcher: late north 9-20 Duluth DB; 9-24 Morrison LR; late south 9-18 Hennepin VL; 9-25 Winona TV; 9-29 Washington WL.

Eastern Wood Pewee: late north 8-27 Duluth RL; 9-27 Duluth WKE; late south 9-20 Hennepin VL and Wright ES; 9-23 Cottonwood LF.

Olive-sided Flycatcher: late north 9-13 Cook LR; 9-17 Duluth FN; late south 9-5 Anoka CH; 9-6 Wright BH; 9-10 Hennepin VL.

Horned Lark: late north 11-8 Duluth JG; 11-21 Crow Wing JB.

Tree Swallow: late north 9-13 Duluth JG; 11-6 Duluth MMC (good details); late south 10-10 Carver MM; 10-13 Hennepin PE; 10-15 Wabasha WDM; peak 9-12 Nicollet (700) DB.

Bank Swallow: only report north 8-5 Duluth RL; late south 9-2 Wabasha WDM and Washington WL; 9-9 Stearns MC; 9-25 Hennepin VL.

Rough-winged Swallow: only report north 9-10 Duluth JG; late south 9-12 Stearns MC; 9-25 Winona TV; 9-29 Hennepin VL; peak 9-10 McLeod (100) FN; also on 10-4 LF reported a flock of 2000 swallows in Brown Co. which she identified as Rough-winged; this would be an unusual date and concentration; JG feels that they were immature Purple Martins; we think they were immature Tree Swallows: LF said: "They all looked more or less alike, muddy brown breasts and sides with brown backs."

Barn Swallow: late north 9-6 Duluth MMC; 9-15 Duluth JG; late south 10-13 Hennepin PE; 10-18 Hennepin PF; 11-7 Lyon PE (good details).

Cliff Swallow: only 3 reports: 8-13 Wabasha WDM; 8-18 Carver KH; 9-12 Duluth JG.

Purple Martin: late north 9-17 Crow Wing JB; 9-20 Mille Lacs MI; late south 9-17 Washington WL; 9-18 Hennepin PF; 9-20 Hennepin VL.

Gray Jay: reported from Itasca, Lake, Lake of the Woods, Clearwater, Beltrami, and St. Louis.

Black-billed Magpie: 7 reports: of 15 individuals: 10-11 Marshall (1) MMC; 10-16 and 25 Beltrami (10) JG, MMC; 10-24 Clearwater (1) JG and Duluth (1), M. Kohlbry; 11-4 Pope (1) WH; 11-6 Cass (1) JB.

Common Raven: reported from Duluth, Itasca, Clearwater, Beltrami, Koochiching, Marshall, Cook, and Pine (9-6 Hinckley WKE).

Common Crow: late north 10-29 Marshall AR; 11-8 Lake PH; 11-16 Mille Lacs MI; peak 10-14 Cook (350) JP.

Boreal Chickadee: reported from Duluth from 10-1 to 11-21 by JG, PH, KS; also one report from Lake Co.

Tufted Titmouse: 2 reports: 8-3 Washington (3) EC; 11-1 Ramsey (2) EC.

Red-breasted Nuthatch: early south 8-19 Washington WL; 8-24 Hennepin VL; also 22 reports across the state throughout the period, but few wintered in the state.

Brown Creeper: late north 10-29 Cook MA and Morrison LR; early south 9-28 Washington WL; 9-29 Hennepin VL and Carver MM.

House Wren: late north 9-24 Morrison LR; late south 10-2 Winona TV and Hennepin VL; 10-20 Hennepin PF.

Winter Wren: late north 9-27 Duluth JG; 9-29 Morrison LR; late south 10-14 Ramsey EC; 10-16 Wabasha DB; 10-27 Hennepin PF.

BEWICK'S WREN: one possibly seen 10-3 Minneapolis, Hennepin Co. by EJ: "bird was brown, had a very long tail with white marks at the corners, dull white eye-line and dull white underneath"; inconclusive details; if correct, first record for state in many years.

Long-billed Marsh Wren: late north 9-20 and 10-5 Crow Wing JB; 9-29 Duluth JG; late south 9-20 Wright ES; 9-26 Kandiyohi BH; 10-4 Lyon (15) PE.

Short-billed Marsh Wren: only 3 reports: 8-1 and 10-14 Carver KH; 9-17 Morrison LR.

Catbird: late north 9-24 Morrison LR; 9-28 Cook JP; late south 10-13 Winona TV; 10-20 Olmsted DB; 10-22 Hennepin PF.

Brown Thrasher: late north 10-10 Aitken JB; late south 10-4 Hennepin WKE; 10-8 Hennepin PF, VL; 11-30 to 12-10 Carver KH.

Robin: late north 11-11 Cook JP; 11-17 Duluth JG; late south 11-22 Hennepin VL; 11-27 Cottonwood LF; 11-30 Winona TV.

Wood Thrush: no reports!

Hermit Thrush: late north 10-18 Duluth KS; 10-27 Duluth, J.K. Bronoel; late south 10-26 Hennepin ES; 10-27 Hennepin VL; 11-4 Hennepin WKE.

Swainson's Thrush: late north 9-18 Cook MA; 10-3 Duluth JG; late south 9-21 Hennepin VL; 11-13 Ramsey, Maury Goldberg.

Gray-cheeked Thrush: no reports!

Veery: only 4 reports: 8-29 Duluth MMC; 9-3 Morrison LR; 9-28 Cook MA; 9-29 Washington WL.

Eastern Bluebird: late north 10-25 Beltrami JG; 10-26 Duluth PH; late south 11-1 Nobles HH; 11-3 Winona TV and Carver KH.

Blue-gray Gnatcatcher: 9-1 Wright ES; only report.

Golden-crowned Kinglet: late north 10-29 Morrison LR; 11-1 Crow Wing JB; early south 9-27 Hennepin VL; 9-29 Washington WL.

Ruby-crowned Kinglet: late north 10-29 Morrison LR and Cook JP; early south 9-17 Carver MM; 9-23 Cottonwood LF; late south 10-26 Wabasha WDM; 11-2 Hennepin VL; 11-18 Hennepin CH.

Water Pipit: more reports than usual: 9-13 Cook LR; 9-27, 9-29 (25), 10-17, and 10-29 Duluth JG, KE, RR; 9-29, 10-4, and 10-16 (25-40) Clay LW; 10-11 St. Louis DBC.

Bohemian Waxwing: 11-7 Tofte, Cook Co. (4) BL; only report.

Cedar Waxwing: reported by 17 observers from 12 counties throughout the state.

Northern Shrike: early north 10-24 Itasca JG; 10-27 Duluth MMC; early south 10-20 Sherburne ES; 10-28 Carver KH.

Loggerhead Shrike: no reports!

Yellow-throated Vireo: only report north 8-31 and 9-13 Crow Wing JB; late south 9-15 Wabasha WDM; 9-21 Hennepin VL.

Solitary Vireo: late north 9-23 Duluth JG, MMC; 9-29 Morrison LR; early south 9-5 Wright BH; 9-10 Hennepin VL; late south 9-30 Hennepin VL; 10-27 Washington, Nancy Jackson.

Red-eyed Vireo: late north 9-23 Morrison LR; 9-27 Duluth JG; late south 9-5 Winona TV; 9-8 Hennepin VL; 9-29 Washington WL.

Philadelphia Vireo: late north 9-19 Duluth JG; early south 8-31 Wright ES; late south 9-30 Hennepin VL; 10-29 Washington, Jane Olyphant (banded).

Warbling Vireo: late north 8-28 Duluth RL; 9-8 PH; late south 9-8 Hennepin VL; 9-13 Hennepin CH; 9-16 Cottonwood LF.

Black and White Warbler: late north 9-23 Duluth MMC; 9-24 Morrison LR; early south 8-24 Cottonwood LF; 8-25 Wright ES; late south 9-21 Hennepin VL; 10-10 Ramsey EC; 10-29 Washington, Jane Olyphant (banded).

Golden-winged Warbler: 4 reports: 8-3 Washington

EC; 8-31 Washington WL; 9-2 Wright ES; 9-3 Morrison LR.

Tennessee Warbler: late north 9-29 Morrison LR; 10-19 Duluth KS; early south 8-25 Wright ES; 8-26 Carver KH; late south 10-21 Hennepin WKE; 10-24 Winona, Fran and Marge Voelkerr; 10-26 Hennepin VL.

Orange-crowned Warbler: early 8-25 Hennepin WKE; 8-26 Crow Wing JB; late north 10-6 Morrison LR; late south 10-11 Ramsey EC; 10-12 Hennepin ES; 11-5 Hennepin VL (good details); peak 9-24 Morrison (17) LR.

Nashville Warbler: late north 10-11 Mille Lacs MI; 10-17 Duluth JG; early south 8-21 Hennepin WKE; 8-27 Wright ES; late south 10-15 Ramsey EC; 10-16 Hennepin VL; 10-23 Carver KH.

Parula Warbler: only 3 reports: 9-13 Duluth MMC; 9-17 Duluth FN; 9-23 Morrison LR.

Yellow Warbler: late north 9-13 Duluth JG; 9-23 Morrison LR; late south 9-20 Stearns MC; 9-25 Wabasha WDM.

Magnolia Warbler: late north 9-7 Morrison LR; 9-20 Crow Wing JB; early south 8-30 Wright ES; 8-31 Washington WL; late south 9-10 Hennepin VL; 9-27 Wright BH; 10-3 Winona TV.

Cape May Warbler: 6 reports: 8-29 Duluth DB; 9-13 to 15 Wabasha WDM; 9-14 Winona TV; 9-22 Cook MA; 9-27 and 10-26 Duluth JG.

Black-throated Blue Warbler: 9-20 and 21 Hennepin (2) VL; only report.

Myrtle Warbler: late north 10-20 Cook MA; 10-23 Duluth MMC; early south 9-1 Carver KH; 9-17 Wabasha WDM; late south 10-27 Lyon HK and Hennepin VL; 10-31 Washington WL; 11-1 Hennepin DB.

Black-throated Green Warbler: late north 9-23 Duluth JG; early south 8-30 Wabasha WDM; 9-1 Wright ES; late south 9-22 Hennepin VL; 9-24 Washington EC; 10-22 Ramsey, Maury Goldberg.

Blackburnian Warbler: late north 8-26 and 29 Crow Wing JB; early south 9-3 Wright ES and Washington WL; late south 9-20 Hennepin VL and Carver MM; 9-23 Cottonwood LF; only reports.

Chestnut-sided Warbler: late north 8-27 Duluth RL; 9-7 Morrison LR; early south 8-24 Hennepin WKE; 8-25 Wright ES and Washington WL; late south 9-16 Goodhue VL; 9-23 Cottonwood LF; 10-3 Winona TV.

Bay-breasted Warbler: only 6 reports: 8-27 Morrison LR; 9-7 and 9-17 Duluth JG, FN; 9-2 Wright ES; 9-3 Washington WL; 9-10 and 12 Hennepin VL.

Blackpoll Warbler: 8-7 Duluth MMC; 8-29 Duluth DB; only reports!

Pine Warbler: 5 reports: 9-8 Duluth MMC; 9-12 Hennepin WKE; 9-20 Hennepin VL; 9-29 Cook MA; 10-4 Crow Wing JB.

Palm Warbler: late north 10-6 Duluth PH and Morrison LR; 10-17 Duluth JG; early south 9-14 Wabasha WDM and Hennepin VL; late south 9-29 Washington WL; 10-3 Winona TV; peak 9-27 Duluth (100's) JG.

Ovenbird: late north 9-8 Duluth JG, MMC; 9-10 Morrison LR; late south 9-13 Hennepin WKE; 9-29 Hennepin CH; 10-1 Hennepin VL.

Northern Waterthrush: late north 8-31 Crow Wing JB; 9-17 Duluth FN; early south 8-21 Hennepin DB; 8-24 Hennepin VL and Wright ES; late south 9-20 Hennepin VL.

Louisiana Waterthrush: one report: 8-27 Houston FL.

Connecticut Warbler: 4 reports: 8-25 Wright ES; 8-30 Hennepin FN; 9-13 and 19 Cook (3) MA.

Mourning Warbler: late north 9-10 Morrison LR; 9-20 Crow Wing JB; early south 8-25 Wright ES; 8-3 Washington EC; no late south reports.

Yellowthroat: late north 9-24 Morrison LR; 9-27 Duluth JG; late south 9-26 Hennepin PF; 9-29 Carver BH.

Wilson's Warbler: late north 9-17 Duluth MMC and Morrison LR; 9-18 Duluth JG; late south 10-1 Hennepin VL; 10-10 Hennepin FN; 10-18 Hennepin WKE; early 8-7 Duluth MMC; 8-20 Morrison LR.

Canada Warbler: late north 9-6 Duluth MMC; 9-7 Morrison LR; early south 8-15 Cottonwood LF; 8-25 Wright ES; late south 9-8 Washington WL.

American Redstart: late north 9-23 Morrison LR and Duluth MMC; 9-27 Duluth JG; late south 9-21 Hennepin VL, FN.

Bobolink: late north 8-29 to 9-1 Mille Lacs MI; 9-29 Duluth (2) JG, KE, RR; only report south 9-7 Nicollet (50) RG.

Eastern Meadowlark: late north 10-5 Duluth MMC; 10-16 Duluth JH; late south 10-11 Wright BH; 10-20 Washington WL.

Western Meadowlark: only report north 10-25 Crow Wing JB; late south 11-7 Hennepin VL; 11-22 Winona TV; 11-25 Nobles HH.

Yellow-headed Blackbird: only report north 8-23 Mille Lacs MI; late south 9-13 Hennepin RL. 9-27 Lyon PE; 10-4 Nicollet LF.

Redwinged Blackbird: late north 10-30 Mille Lacs MI; 11-12 Marshall AR; late south 11-25 Winona TV; 11-26 Wabasha WDM; 11-30 Washington WL.

Baltimore Oriole: one very late date north 11-9 Douglas, Mrs. Frank Blanchard; late south 9-6 Wabasha WDM; 9-9 Hennepin VL; 9-10 Hennepin WKE.

Rusty Blackbird: late north 10-24 Marshall JG; 11-4 Duluth JG; early south 8-31 Wright ES; 9-7 Stearns MC; late south 10-31 Pope WH; 11-25 Washington WL; peak 11-9 Washington (3000) WL.

Brewer's Blackbird: only 3 reports: 8-3 to 8-19 Duluth RL; 9-27 Duluth JG; 10-7 Carver KH.

Common Grackle: late north 10-25 Beltrami JG; 11-26 Duluth KS; late south 11-23 Cottonwood LF; 11-30 Lyon PE and Winona TV; peak: BH reported 2 huge concentrations: 20,000 in Pope, Swift, Stearns, and Wright Cos. on 10-17 and 18, and 500,000 on 10-20 in Brooklyn Park, Hennepin Co.

Brown-headed Cowbird: only 5 reports. Only report after August was 10-11 Winona TV.

Scarlet Tanager: late north 9-17 Duluth KS; 9-20 Crow Wing JB; late south 9-18 Carver KH; 9-27 Hennepin VL, CH; 9-30 Hennepin DB.

Cardinal: reports north: 10-26 to 11-21 Duluth KS, JG, PH; 11-1 Morrison LR; 11-24 Lake, H. Decker.

Rose-breasted Grosbeak: late north 9-17 Morrison LR; 11-3 Duluth, A.K. Arndt; late south 9-21 Hennepin WKE; 9-25 Ramsey EC; 10-10 Hennepin BL.

Indigo Bunting: only report north 9-7 Morrison LR; late south 9-17 Winona TV; 9-24 Hennepin VL and Wright ES.

Dickcissel: 4 reports: 8-1 and 15 Cottonwood FL; 8-2 Anoka EC; 8-13 Winona TV.

Evening Grosbeak: reported from Duluth, Cook, Crow Wing, Clearwater, and Morrison; and only report south 11-24 Wabasha WDM.

Purple Finch: reported from Stearns, Duluth, Cook, Morrison, Hennepin, Washington, Swift, Ramsey, Carver, Cottonwood, and Wabasha.

Pine Grosbeak: 11-4 (6) and 11-6 (1) Duluth JG; only report.

Common Redpoll: only 3 reports, all from Duluth: 11-8 JG; 11-1 KS; 10-30, Frances Hames.

Pine Siskin: only 2 reports south: 11-16 Hennepin VL and Carver MM.

American Goldfinch: late north 11-26 Cook JP; 11-27 Duluth JG.

Red Crossbill: only one report: 8-15 and 16 Clearwater (2) RL.

Rufous-sided Towhee: 5 reports: 8-12 Winona TV; 9-24 Morrison LR; 9-29 Hennepin DB; 10-6 Carver KH; 10-7 and 11 Hennepin FN.

Savannah Sparrow: late north 10-5 Mille Lacs MI; 10-10 Duluth JG; late south 10-14 Hennepin VL; 10-17 Hennepin FN; 10-20 Olmsted DB.

LeCointe's Sparrow: 4 reports: 8-23 Cottonwood (10) LF; 9-27 St. Louis (1) JG; 10-3 Duluth (2) MMC; 10-4 Lyon (3) PE.

Vesper Sparrow: only report north 10-5 Mille Lacs MI; late south 10-10 Cottonwood LF; 10-12

Washington WL; 10-14 Hennepin VL.

Lark Sparrow: 9-4 Anoka (20) BL; only report.

Slate-colored Junco: late north 11-30 Duluth MMC and Morrison LR; early south 9-12 Stearns MC; 9-16 Wabasha DM; 9-17 Carver MM.

Oregon Junco: reported from Hennepin, Winona, Carver, Crow Wing, and Duluth.

Tree Sparrow: early 10-1 Stearns MC; 10-2 Duluth MMC; late north 11-14 Duluth MMC; 11-23 Duluth JG.

Chipping Sparrow: late north 10-26 Duluth JG; 10-29 Duluth KS; late south 10-13 Stearns MC; 10-21 Hennepin VL; 11-22 to 11-27 Wabasha WDM (no details).

Clay-colored Sparrow: late north 9-23 Morrison LR; 10-4 Mille Lacs MI; late south 10-4 Wright BH; 10-20 Olmsted DB.

Field Sparrow: late north 9-27 Crow Wing JB; 9-27 and 10-2 Cook JP; late south 10-14 Hennepin VL; 10-16 Wabasha DB; 11-75 Cottonwood LF.

Harris' Sparrow: late north 10-15 Duluth JG; 11-1 Crow Wing JB; late south 10-31 Nicollet DB; 11-3 Nobles HH; 11-5 Winona TV.

White-crowned Sparrow: early 9-13 Duluth JG; 9-17 Cook MA and Duluth MMC; late north 10-23 Morrison LR; 10-27 Duluth MMC; 11-12 to 12-5 Duluth JG; late south 10-8 Winona TV; 10-13 Hennepin VL; 10-18 Wright BH.

White-throated Sparrow: late north 11-2 Crow Wing JB and Duluth, A. K. Arndt; late south 11-2 Hennepin PF; 11-5 Hennepin WKE; 12-2 Hennepin ES.

Fox Sparrow: early 8-26 Duluth MMC; 9-19 Houston FL; late north 11-1 Cook MA; 11-3 Duluth MMC; late south 10-30 Hennepin VL; 11-2 Hennepin, Mrs. E. W. Jaul; 11-10 Carver KH.

Lincoln's Sparrow: early 8-8 Duluth KS; 9-8 Duluth MMC; late north 10-17 Duluth JG; 10-26 Cook MA; late south 10-4 Wright BH; 10-8 Winona TV; 11-7 Hennepin VL.

Swamp Sparrow: late north 10-17 Duluth MMC; 10-24 Itasca JG; late south 10-20 Washington WL; 10-22 Wright ES; 11-17 Hennepin VL.

Song Sparrow: late north 11-1 Morrison LR and Crow Wing JB; 11-2 Cook JP; late south 11-11 Winona TV; 11-14 Lyon PE; 11-28 Hennepin VL.

Lapland Longspur: early 9-13 Cook LR; 9-27 Cook JP; 10-2 Houston FL; late north 11-5 Duluth MMC; JG; peak 10-5 Lake (1000) JG.

SMITH'S LONGSPUR: 10-24 Ghent, Lyon Co. (16) HK; good details, an unusual concentration; see details in June issue.

Snow Bunting: early 9-26 Lyon PE; 9-28 Cook JP; 10-5 Duluth MMC.

notes of interest

ARCTIC LOON ON LAKE SUPERIOR. — For a number of years several bird watchers have been puzzled by occasional small loons on Lake Superior in fall. Privately we wondered if some might be Arctic Loons, but we had seen none of the loons well enough to come to any reliable conclusion.

On November 22, 1969, I saw a small loon in Lake Superior in St. Louis County between Stoney Point and the Lake County line. I was able to be reasonably sure that it was an Arctic Loon rather than a small Common Loon or a Red-throated Loon. However, this is a sight record of a species difficult to identify in winter plumage, and only one other experienced birder saw it — my husband, John C. Green, who concurred that it was a small loon with a thin, straight bill. Therefore, this species should be considered as hypothetical on the Minnesota state list, but should be watched for on Lake Superior.

The loon was first seen in the morning about 300 yards off shore, where it was back-lit by the hazy sun. I watched it for about 5 minutes with the zoom-lens spotting scope as it rested and preened. Because of the back light, I could not see the pattern of the plumage well but could easily tell it was in winter plumage.

I was struck immediately by the thinness of the bill, which I could see well in silhouette. It reminded me more of a grebe's bill than a loon's, although the bird was obviously a loon. I thought at first it must be a Red-throated Loon, since I had never seen a Common Loon with a bill like that; but the neck seemed too chunky, and the bill was definitely straight.

In the afternoon I returned with John, and we saw the loon well in good light. The sun was now behind us; the bird was 200 yards off shore. We both observed it through the spotting scope about 5 minutes before it moved farther away and began to dive. We did not have time to study its plumage minutely, but we did get a good look at the head and particularly noticed that the hind neck and top of head were a lighter gray-brown than the dark back. This in connection with the thin, straight bill convinced us that it was an Arctic Loon.

There were no other birds around in the water to compare it with for size, although it was my impression that it was not as large as a normal Common Loon. It was definitely not a Red-throated Loon, both because of the straight bill and because the bird was an adult that had not completely molted into winter plumage, and some spots on the back arranged in transverse bars were quite noticeable.

After the bird swam away I wrote:

Head (above and in back of eye), back of neck — greyish brown, uniform and smooth (not mottled) in color except for lower neck at edge of throat which was a richer brown; the brown of the crown and neck contrasted with the back which was darker; the brown on the head also looked reddish brown in the slanting rays of the late afternoon sun. Side of face below eye, chin, throat — white, contrasting strongly and sharply with the greyish brown hind-neck; the darker parts of the neck came forward on the throat just above the breast to form two dark patches when the bird looked at you head on; these patches were separated by the white throat however.

Underparts — white except flanks which were brownish; could see underparts when bird preened and also when saw it in flight.

Upperparts — back appeared dark brown with faint whitish (not the pure white of throat) spots arranged in transverse bars above wing — scapular area; amount of spotting of rest of bird was not determined except that flanks appeared mottled and there was some small spotting forward of the transverse bars. Color of back was not determined as well as that of head but it was definitely darker than neck.

Later in the afternoon I went back and located the bird, but it was quite a way off shore. I saw it flap its wings several times, make two short flights, then dive. I was unable to find it again that afternoon or on subsequent days. *Janet C. Green, 9773 N. Shore Dr., Duluth, Minn. 55804.*

BUFF-BREASTED SANDPIPERS, STEARNS CO. — On October 1, 1970 Bob Russell and I were birding our way from Duluth to the Twin Cities. We were going south on county road 7 in Stearns County south of St. Cloud near Fairhaven when we went by a pothole that had several shorebirds. We were able to locate Killdeer, snips, yellowlegs, and a few "peep". But closest to us about 100 feet away were three birds that we could not immediately identify. One was a bit smaller than the other two and appeared to be a peep, and after a second or two we began to recognize the other two as Buff-breasted Sandpipers from their size and shape. We had both recently become quite familiar with the species when several appeared in the Chicago area during August and September.

We were even more sure of our identification as the birds took off and revealed no hint of a wing or tail pattern; that is characteristic of this species. The birds also flew in the erratic, snipe-like fashion characteristic of the buff-breasted. Although we were looking toward the sun and thus didn't have the best look at the birds, our recent experience with the species in Chicago made identification no problem.

This observation is significant for several reasons. First, this is one of the very few buff-breasted records away from Duluth, where this species appears somewhat regularly in fall, most of the inland Minnesota records coming in spring. Also, this sighting compares nicely with the relatively large numbers of buff-breasted that showed up earlier this fall in Chicago and Duluth (at least 10 at each place). And perhaps most significant is the late date of October 1, which is perhaps the latest ever for Minnesota. October 1 is the latest record for the Chicago area. *Kim R. Eckert, 1004 Ashland Ave., Wilmette, Illinois.*

UNUSUAL CANADIAN GOOSE BEHAVIOR — My parents observed what I thought was interesting behavior in Canadian Geese at their home on Lake Pulaski near Buffalo, Minn. About 6:30 p.m. on October 13, 1970, they saw six large Canada Geese flying overhead in V-formation; at the head of the flock was a bird half the size of the others. Would a smaller race of the Canada Goose (possibly Hutchin's) lead a flock of Common Canadian Geese? My parents didn't have binoculars with which to look closer at them, but they were certain that they were Canadian Geese. *Bruce A. Hitman, 7483 Brklyn. Blvd. No. 4, Mpls., Minn. 55429*

MOUNTAIN BLUEBIRD DURING MOU WINTER TRIP. — On January 24, 1971, the Minnesota River Valley Audubon Club stopped its chartered bus at Lutsen Resort so that the birders aboard could look for the Bluebird which had been reported the previous evening at the MOU meeting in Grand Marais. As the bus passed the front of the Lodge a bluebird was seen. I did not see that bird immediately but noticed a light-colored bird at the top of a small tree planted on the lower level. The bird appeared so very white and did not look like an Eastern Bluebird because it sat so straight up.

At this point I mentioned to Kathy Heidel that it looked almost like a Mountain Bluebird, and I got off the bus because the tinted glass could distort color so much. Outside the bird looked even lighter. It stayed in the tree, but as it turned now and then we noticed a brownish gray cast on the chest, breast, and sides. When the bird did fly, however, the blue of its back, wings, and tail were very different from the blue of an Eastern Bluebird that was also perched in the same tree and that flew into the woods, back again, and then disappeared.

The bird, that I believe to have been a Mountain Bluebird stayed for 10 to 15 minutes. It flew down to the railing, to the Lodge, and down onto the ground near the bus. I noticed two spots of blue in the chest where the lighter feathers were displaced. The eye and bill were black. The head appeared grayer than the wings and back. My husband noted a slim white eye ring.

The bird did not hover but flew to a spot in the sun. We used both the Peterson Field Guide and the Robbins book. My binoculars are 8 x 40. The sun was out at intervals. The time was about 12:30 p.m. I have seen this species only twice before and would be interested in hearing from anyone else who may have seen this bird. *Karol P. Gresser, 8850 Goodrich Ave. So., Apt 303, Bloomington, Minnesota 55431.*

RED SHAFTED OR HYBRID FLICKER, AGASSIZ REFUGE. — On May 23, 1970, Paul Egeland and I were birding at Agassiz refuge in Marshall County. Earlier this same day we had found Baird's Sparrows, Chestnut-collared Longspurs, and Sprague's Pipits, but we weren't quite through for the day. As we drove eastbound on county road 7 in the refuge I saw a flicker fly from a grove about 100 feet away. I clearly saw distinct reddish wings as the bird flew.

Several times before I had seen Yellow-shafted Flickers appear reddish in certain strong sunlight, but this day was solidly overcast. The bird landed a few hundred feet away in a poplar, too far away to make out a face pattern. By this time the car was stopped, and we got out in time to watch the flicker fly back toward us to within 100 feet or so before disappearing behind some trees.

Both of us again clearly saw the reddish wings and agreed that the light conditions could not be fooling us, so our bird was either a Red-shafted or hybrid Flicker. There are several sight records of "Red-shafted Flickers" in Minnesota, but most of them, like ours, could have been hybrids. And the bird is still not on our state list until a photograph or specimen is taken. *Kim R. Eckert, 1004 Ashland Ave., Wilmette, Illinois.*

MOURNING WARBLER AND PROTHONOTARY WARBLER. — On May 23, 1970, while conducting an ornithology field trip to the Norseland Boy Scout Camp just north of Norseland, Nicollet County, Minnesota, I observed a male Mourning Warbler. Its song had qualities similar to the song of the western MacGillivray's Warbler.

The bird was in the open in low underbrush 15 to 20 feet away, easy to observe with binoculars. I had observed the Mourning Warbler in Minnesota at Whitewater State Park south of Elba, Minnesota, on May 13, 1967, but this was my first observation of one in south-central Minnesota since my coming here in September, 1966.

Also at the Norseland Boy Scout Camp the ornithology class and I observed a Prothonotary Warbler on May 17, 1969. Again, I had observed this species at Whitewater State Park, but never this far west.

I would appreciate hearing from anyone having sightings of these two species from the south-central and southwestern part of Minnesota. *Merrill J. Frydendall, Department of Biology, Mankato State College, Mankato, Minnesota.*

PROBABLE OLDSQUAWS NEAR MILLE LACS. — Saturday, October 31, 1970, was one of those miserable fall days. Light snow, drizzle, and very brief periods of half sunlight, combined with near-freezing temperature, constituted the day's weather. Alone in a duck blind in southern Crow Wing County, I was finding it difficult to keep partly dry and warm. The lake, Rock Lake, is about a mile long and a half mile wide, with primarily rocky or sandy beaches. The couple of small bays have a rather scant wild rice growth. Approximately 8 or 10 miles to the east is the west shore of Mille Lacs Lake.

About noon the rain and snow stopped and the sky began to brighten. The slight haze over the water started to disappear, and then I spotted two medium-sized ducks swimming about 100 to 150 yards in front of me. Because of the large amount of white showing, I figured them for Buffleheads. Digging out my 8x20 Bushnell pocket binoculars, I was then able to make out the birds more clearly. They were not Buffleheads; in fact, one had a long pheasant-like tail. I refocused my glasses and took a good long look in an effort to memorize each marking. Unfortunately, my bird guide was back home at White Bear.

The two ducks were obviously not Pintails; the only alternative was Oldsquaws. I noted carefully the white on the neck and head, cheek patches, dark breast with white flanks, and the long tail. Although the light was poor, the white and dark markings were distinct.

The two ducks appeared to be resting, with no apparent feeding activity. After about 5 minutes, they took off in typical diver fashion to disappear over the north end of the lake. There was no calling that I could hear. Having seen White-winged and Common Scoters on Mille Lacs lake I would not have been amazed to find Oldsquaws there. It did seem surprising to find them on a small lake such as Rock Lake. *T. R. Campbell, 5267 West Bald Eagle Blvd., White Bear Lake, Minn. 55110*

TOWNSEND'S SOLITAIRE AT WIRTH PARK, MINNEAPOLIS. — By 2 p.m. on January 1st it was a warm 35 degrees as we went for a walk through Theodore Wirth Park. Returning down the hill toward the parking lot about 3:15 p.m. I stopped to enjoy the small group of Chickadees calling to each other in the pines. As I stood there I heard the loveliest soft Robin-like call in a Bluebird quality of tone. This continued at least 5 minutes, allowing time for George to come over and listen with me as we tried to locate the singer. The final song ended with several rough or coarse calls similar to the Chickadee 'dee', only harsher in tone. Then from out of the topmost pine a lilting flight of a long-tailed bird toward the opposite grove of trees caught my eye. As we hurried after the moving bird, I saw it fly off toward the pines along the park road. That was the last sight of it, because the sky was overcast and twilight was upon us. The song was unforgettable, the phrasing of the notes slurred up on the musical scale, then the descending pattern.

We decided to return the following day, at about 10:30 a.m. January 2 we again arrived at the park and enjoyed sight of the Rufous-sided Towhee in excellent light. Above us a Great-horned Owl alighted in a point of an evergreen tree. As we were counting our luck I heard the new and unknown rough call from among the Chickadees above us on the hill. I knew it immediately as the same call of the afternoon before, and hurried after the sound. Above the fenced area among the pine trees I located the call. Again I could not see the bird and frantically motioned George to hurry and look with me.

He arrived, looked in the direction I pointed, and found the bird in a deciduous tree by the pines. He described it as a plain gray bird with a long tail. Before I could find the bird, he lost sight of it. As he was telling me what it looked like, I sighted a gray-breasted bird under the evergreen boughs, moving about on the ground. While I was watching, it flew away from my view into a low bush. My last sight of it was of a long, dark gray tail with white outer tail feathers. Checking my books later, I found this was an identification mark of the Solitaire. My distance from bird January 1 was about 30 feet; January 2, 35 to 40 feet. Binoculars used: 7 x 35 wide-angle. *Evelyn T. Stanley.*

BUTEO HAWKS WITH UNUSUAL PLUMAGES. — On Saturday, April 3, 1971, Ray Glassel, Alison Bolduc, and I went birding on the Sioux Trail from New Ulm to Morton, Minn. We saw many odd-plumaged Redtailed Hawks. Two were different enough to merit special mention.

The first was a buteo that took off from a tree by the bank near the river. As it flew toward the river we saw white spots and patches of white on the brown back. The upper surfaces of the wings appeared brown. The upper surface of the tail was all white, except for a narrow band of black perhaps 1/2 or 3/4 of an inch wide from one side of the tail to the other. The under sides of the wings and body were almost completely white. A few black spots or stripes were evident on the sides of the belly. It was not noticed if the black primary tips were barred or not.

The second bird also flew from the bank to a perch on a tree in the river. The upper surface of the wings and back were dark chocolate brown to black. The upper surface of the tail was dark chocolate brown at the distal portion, fading to a dark reddish brown at the basal portion. The under side of the wing linings appeared black, the under side of the primaries and secondaries were dark chocolate brown. The under side of the tail was light gray. The head was dark brown to black.

Both birds were viewed when the sky was clear at 10 to 11 a.m. Binoculars used were: 8 x 50, 7 x 50 W.A., and 8 x 36. In addition the one that appeared darker than a typical B.J. calurus was viewed with a 25 x spotting scope. *Don Bolduc, Minneapolis.*

VARIED THRUSH AT WORTHINGTON. — On January 5, 1971, Mrs. O. H. Griffith of Worthington called me to say that she had a strange bird at her feeder. However, by the very good description which she gave me, I thought it must be an "Oregon Robin", many of which I had seen on a winter visit to Oregon several years ago. The fact that this bird has been seen in Minnesota quite often the past few years also helped in determining what it could be.

Mrs. Griffith again called me on the morning of January 9, 1971, saying the bird was

there and had been staying for rather long periods. I finally was able to get over to see "the bird" on Saturday afternoon. Carrie Schafer and Orpha Barnes accompanied me. Through the kitchen window under the bird feeder was a handsome male Varied Thrush. His breast band was clearly defined, as was the eye stripe. His rusty breast and grayish under back feathers made him look exactly like the picture in 'Birds of North America'. We had also found a picture in the National Geographic's bird book.

According to Mrs. Griffith, the bird had been coming about three times a day and always feeding on the ground. Mrs. Griffith states that he flies each time he leaves to an evergreen tree in an adjoining yard. He does not seem to startle easily — chases sparrows occasionally from the feed and fed calmly as we watched through the window. The Griffiths live on a rather busy street in Worthington, but have a protected back yard with bushes, trees, and some fruit trees. Altogether the Varied Thrush stayed in the Griffith's yard from December 23, 1970 through February 10, 1971. *Helen S. Hatlelid.*

WILLETS ON SUGAR LAKE, WRIGHT COUNTY. — August 10, 1970, was a warm, humid, windless day at Sugar Lake. About 2 p.m. I sighted a long horizontal line of large white birds with black wing tips flying wing-to-wing about 3 feet above the water. I ran down to our dock just in time to see them disappear around the north point of our peninsula. As I explained to Mark the rare sight I had just witnessed, we immediately pursued the birds by water, Mark handling the boat.

Certain they must be shorebirds, we watched the far shores and sighted the flock flying north along the east shore. We beached the boat and searched the northeast marsh, but found nothing. Returning to the boat, we started to follow the north shoreline in the same direction the flock had been flying. Searching in vain, we had finally turned the boat south toward home, away from shore, when I saw birds flying along the shoreline we had searched.

I shouted to Mark to stop, and as he did, the birds turned and flew toward us. I had my binoculars on them and could hardly believe our luck. As the wings came into focus, the markings were the black and white pattern of the Willet. Their flight was swift. We counted them as they flew off before us - too quickly for our boat to pursue. There were eight Willets plus one Greater Yellowlegs. Mark estimated they flew within 50 feet of our boat at a speed well over 25 miles an hour. As we made our way home we watched the flock disappear into the sky over the south end of Sugar Lake where the water is shallow and full of high reeds.

Later that same afternoon I heard unusual bird calls and again sighted a flock of seven birds flying higher over the water in a northerly direction. I assumed these were the same Willets, less two who had stayed in the south end of the lake; however, it is possible this could have been another flock. The Willets must have been calling when they first flew past us on the lake. During the excitement the sound did not catch my attention, but I did recognize the call when the second flock flew over. *Evelyn T. Stanley, 4317 Toledo N., Minneapolis, Minn. 55422.*

MOURNING WARBLER AND PROTHONOTARY WARBLER. — On May 23, 1970, while conducting an ornithology field trip to the Norseland Boy Scout Camp just north of Norseland, Nicollet County, Minnesota, I observed a male Mourning Warbler. Its song had qualities similar to the song of the western MacGillivray's Warbler.

The bird was in the open in low underbrush 15 to 20 feet away, easy to observe with binoculars. I had observed the Mourning Warbler in Minnesota at Whitewater State Park south of Elba, Minnesota, on May 13, 1967, but this was my first observation of one in south-central Minnesota since my coming here in September, 1966.

Also at the Norseland Boy Scout Camp the ornithology class and I observed a Prothonotary Warbler on May 17, 1969. Again, I had observed this species at Whitewater State Park, but never this far west.

I would appreciate hearing from anyone having sightings of these two species from the south-central and southwestern part of Minnesota. *Merrill J. Frydendall, Department of Biology, Mankato State College, Mankato, Minnesota.*

POSSIBLE WOLVERINE SIGHTING. — During the first week of December, 1958, between State Line and Wrenshall, Carlton County, a strange mammal was seen by Harold Dahl and Raymond Fanasell while they were conducting drainage surveys along the Northern Pacific Railway tracks, about 800 feet west of Milepost 19. Mr. Dahl gave me an excellent description of the animal, but the reader can draw his own conclusions as to its identity: very large, skunk-like, very broad across the back, dark chocolate color with yellowish dorsal striping. The animal was loping slowly along a rabbit runway in the snow, no more than 50 yards from the observers when first seen, and even less than that when they approached for a better look. However, the animal looked back over its shoulder and growled menacingly when pursued for a short distance, so the chase was abandoned. *Ronald L. Huber, 3205 Century Ave. North, St. Paul, Mn. 55110.*

RED-SHAFTED FLICKER, NOBLES COUNTY. — On 12 September, 1970, while driving in northern Nobles County near Fulda, I sighted two flickers near the road. The contrast in their colors was very great: one appeared red under the wings and the other was a clear yellow. The birds perched close by, so the red whiskers on the Red-shafted Flicker were apparent. Its face appeared red in observing it without binoculars. The birds — one apparently a Yellow-shafted and the other apparently a Red-shafted Flicker — flew off together into the cornfield. Identification in the field was made with both Peterson and Robbins, Bruun, Zim, and Singer. I have seen what I have thought to be Red-shafted Flickers before but never had such a close look. *Helen S. Hatlelid, Box 173, Worthington, Minn. 56187.*

POSSIBLE WINTER MOCKINGBIRD, ST. PAUL. — On Thursday, January 28, about 11:30 a.m., two Cardinals were eating at our feeding station. There is nothing notable about this because we have had them many times, but then a long, slender bird with a long, black bill landed in the tree near the feeding station. It was dark gray above with some white on the wings and a little lighter gray below with a white spot under its chin. It was about 8 or 9 inches long and very slender compared with the Cardinals feeding nearby.

Because our feeder is only about 5 feet from our kitchen window I did not need binoculars to view it. The slender bird stayed only a short while before it left, and it has never come back. It seems to fit the description of the Mockingbird, although I have never known that species to winter in this part of Minnesota before. *James A. Baumhofer, 1884 Berkeley Ave., St. Paul 55105.*

EDITOR'S NOTE: James Baumhofer, who is 14 years old, answered my request for more information on this bird, and according to his notes it seems likely that this winter St. Paul bird was indeed a Mockingbird. James got at least as far as this regional Science Fair competition this year with his paper on winter birds of Minnesota. R.E.T.

POSSIBLE SUMMER MOCKINGBIRD, WASHINGTON CO. — On July 10, 1970, while I was driving on Highway 95 just north of Stillwater, a bird flew out of the trees and sat on the phone wire beside the road. My first impression, based on the bird's configuration and size, was that it was a Brown Thrasher. But the colors were not correct: the underside appeared white, and the top side light gray. Having lived in California where Mockingbirds are common, I thought this to be indeed a Mockingbird. Because of heavy traffic there was no chance to stop or return for a better look. *Mrs. John L. Willand, 53 Melbourne S.E., Minneapolis, Minn. 55414.*

WESTERN GREBE IN SOUTHEASTERN MINNESOTA. — On Saturday afternoon, April 17, on Circle Lake (near Faribault) I saw a Western Grebe. With the light to my back, and several minutes observation through a 20X tripod-mounted spotting scope, there is no doubt that this was the species. It dived and floated in the company of a number of ducks, chiefly scaups. Occasionally it opened its beak wide to give its two-note call, which was clearly audible. I could see well enough to easily discern its red eye. Through my 7 x 35 binoculars it was still obviously a Western grebe, with its long, straight neck and black-and-white pattern. *Dean G. Schneider, Northfield, Mn. 55057.*

UNUSUAL HAWK MIGRATION. — On Saturday, September 26, I got up to go hunting but gave up because of all the foliage still off the trees. On the way home, I spotted an immature Bald Eagle being bothered by a pair of Broad-Winged Hawks. Because there was a west wind of approximately 20 miles per hour, they quickly glided out of view. Before I got home, I observed 12 Broad-Wings, 2 Red-Tails, 1 immature Bald Eagle, several Crows, and many large flocks of Blue Jays and Grackles. This activity seemed to point to an exceptional day in migration, so I contacted my birdwatching friend, Terry Savaloja. We went down to the Savaloja dock on Serpent Lake and began counting hawks. Soon it became apparent that the hawks were flying over the mine dump piles rather than the lake.

There are many mine dump piles in our area, most of which are tall and have steep sides. Winds striking the sides of these mine dumps create strong updrafts letting the hawks glide through our area with very little effort.

We made our way to the top of the nearest mine dump shortly before 9 a.m. Within 2½ hours we observed 1 Turkey Vulture, 2 Cooper's Hawks, 3 Sharp-Shinned, 3 Marsh Hawks, 15 Red-Tails, 39 Broad-Wings, 3 immature Bald Eagles, 1 Peregrine Falcon, 1 Pigeon Hawk, 3 Sparrow Hawks, 18 unidentified Buteos, and 4 unidentified large Falcons (one of which was very white). Other birds observed were; Crows, Flickers, 7 Caspian Terns, 1 Common Snipe, 1 Palm Warbler, and a Downey Woodpecker. Total number of Hawks observed: 71 identified and 22 unidentified. *Mark Carlson, Box 6, Deerwood, Mn. 56444.*

BLACK-CAPPED CHICKADEE NESTING BEHAVIOR — May 2, 1970, we found a pair of Chickadees nesting in our wren house, which has a hinged top. Seven eggs were laid and seven young fledged. Then a House Wren built a nest on top of the old Chickadee nest and brought off a brood.

1971 - When we left in December we put sawdust in the box for roosting during the winter. When we returned home April 4, we found the box absolutely clean. Put in about 2 inches of sawdust for nest material, hoping the Chickadees would use it again. Next day both male and female were carrying out sawdust in mouthfuls. We helped by cleaning out the sawdust. April 11 - Box still clean. April 12 - Chickadees carrying in moss. April 13 - Round cup of moss only. April 16 - Riber had been added, apparently insulation material. April 17 - Hair, fiber and feathers. April 18 - Pair copulating near box. April 19 - Gray squirrel fur had been added. April 29 - Eight eggs in the box. May 6 - Bird sat tight when lid was lifted and 13 human visitors filed by. May 14 - At least seven young. May 19 - Eight young counted. May 21 - Both parents feeding suet to young for several days. May 26 - Noted that one of the chicks was a runt, only about half the size of the others. May 29 - Runt on top of heap, demanding food. Appeared vigorous. May 31 - Runt not visible. Seven chicks nearly full grown. June 1 - Nest empty. No birds in sight.

The runt did not appear to be developed sufficiently to fly. It seems unlikely that the parents would be strong enough to remove him from the nest if he had died. What happened to him? And what happened to the brood, which left home on a cold rainy morning? *Whitney & Karen Eastman, 7000 Valey View Road, Edina.*

POSSIBLE IMMATURE LEAST TERN IN LYONS COUNTY. — At about 3 p.m., September 26, 1970, light conditions were excellent. I was using 10 x 50 binoculars on the west shore of a small pond adjacent to Sham Lake, which is 1/2 mile Northeast of Cottonwood.

A bird approached from the north from Sham Lake, came across a road dividing Sham Lake from the pond where I was standing. As the bird approached I first thought it was a rather late Black Tern. As it came abreast of me about 40 yards away, I first realized I might be viewing some other species. The following field marks became apparent: the fore areas of the wings were very dark; the back part of each wing had a wedge-shaped area of white pointing to the elbow of the wing; the tail was white and matched but not deeply forked; the bill was dark; the area behind the eye and the nape was dark, very similar to the fall plumage on the head of a Black Tern; this became lighter and blended

into a light-gray back; the belly was white. This was a small tern, no larger than a Black Tern.

I viewed this bird for 2 or 3 minutes as it continued to fly southward. The field marks that were very distinctive were the dark fore areas of the wings, the quite large wedge-shaped white area on the back of each wing, and the white notched tail.

After seeing the bird I immediately looked up the Least Tern in both Peterson's and in Robbins, Bruun, and Zim. The description and pictures of an immature Least Tern fit my observations very well.

I am not sure of the status of this species in Minnesota but understand there are only a couple of hypothetical sightings. I am as positive of my identification as one can be without collecting the bird. *Paul Egeland, 12952 Nicollet Avenue South, Burnsville, Minnesota.*

GULLS DROWN HAWK IN LAKE SUPERIOR. — Sunday Afternoon, May 9, 1971, my son, Scott, and I visited the Split Rock Lighthouse on the north shore of Lake Superior. While there, we noticed Herring Gulls diving at an object in the water. Using 10-power binoculars, I soon ascertained that they were after an adult Broad-winged Hawk resting on the surface of the water. Every time the hawk would try to take off, the gulls would dive at it, and in several instances they actually struck the bird.

The hawk soon became water-logged, and I could see that it would not be able to take off. Within 3 to 5 minutes from the time we first noticed this happening, the hawk's head went under water and it was apparent it had succumbed to the cold water of Lake Superior.

Several other persons who noticed that we were watching this encounter said that the gulls, prior to our arrival, had been diving at an object several hundred yards to the west.

I concluded that the hawk was caught out over the water by the gulls, and in trying to escape, it was forced down. As soon as it managed to fly a distance, it was forced down again, back into the water where it became saturated and finally succumbed to the cold. When the hawk was obviously dead, the gulls ceased to be interested. *Dana R. Struthers, 1655 Bohn's Point Road, Wayzata 55391.*

TREE SWALLOW, BROAD-WINGED HAWK, AND BLUE-WINGED TEAL STAY LATE IN DULUTH. — Tree Swallow: Seen on November 6, 1970. This bird flew through the open, grassy area of the yard next door, then landed for a few seconds on the telephone wire just outside our window. The plumage was that of an adult Tree Swallow: clear white breast, dark greenish-blue back, dark head, white throat. *Marjorie M. Carr, 1834 Vermillion Rd., Duluth, Minn. 55803.*

Broad-winged Hawk: Observed from the hawk lookout in Lakeside on October 28, 1970; Marjorie Carr and I were counting hawks together there that day. When we first spotted this bird we could see the narrow banding on the tail typical of an immature Broad-wing. Right after we spotted it, the bird got progressively higher and flew toward the sun so we could not see the tail pattern any more. It was circling with two Red-tails, and its smaller size and chunkier shape were apparent. We both independently decided it was a Broad-winged Hawk; both of us have seen tens of thousands of Broad-wings from the same lookout. *Janet C. Green, 9773 N. Shore Dr., Duluth, Minn. 55804.*

Blue-winged Teal: On Saturday, November 7, 1970, I took my son, Bruce, duck hunting in St. Louis River between Fond du Lac and the U.S. Steel Plant downstream from the bridge between Duluth and Oliver, Wisconsin. The night before had been cold. Most back water areas were frozen. My son and I were jump-shooting in a bay next to the U.S. Steel Plant.

Ducks were scarce that day, but we did see one very late migrant, a Blue-winged Teal. The duck jumped into the air about 20 yards from us and flew parallel behind us. It was about 11 a.m. and the blue wing patches were clearly apparent in the bright sunlight.

This was the latest I had ever seen the Blue-winged Teal in this area. I saw two in St. Louis Bay on October 29, 1966, and two at Rice Lake, near Duluth, on October 28, 1955 (one of which was shot by Robert Jessen). *John G. Hale, 223 McQuade Road, Duluth, Minn. 55804.*

HAVE YOU SEEN OUR GULLS? — The sight of hundreds of Ring-Billed Gulls wheeling and soaring against a blue, spring sky; their whining and squealing notes filling the air; their white forms on the melting ice and on the newly opened water; their fighting for dead fish just released from their winter entombment — all this has been conspicuously absent the past two springs on Grey Cloud Island (south end of Washington County).

The hundreds of gulls that came toward the end of March are now too few to set up a clamor and cause one to stop and enjoy their antics. I hope you have more gulls where you live so that you can enjoy what I miss. If you also have few Gulls — WHY? *Thomas N. Bell, Rt. 1, St. Paul Park, Minn. 55071.*

PINE SISKINS AND RED CROSSBILLS NESTING OUTSIDE USUAL RANGE IN 1970. — During the winter of 1969 - 70 Pine Siskins and Red Crossbills were common in many settled areas of the state and evidently stayed to nest as the following observations from feeding stations testify. The data is summarized here in more detail than in the seasonal report because most of these observations are outside the usual range of the species. Also see "Notes of Interest" in the previous issue (Dec., 1970).

Pine Siskin

Rice Co. (Faribault): Feb. 17 to June 19 (1-8 birds); June 20 to 22 (2 adults feeding 2 young at feeder); June 23 to July 4 (1-2 birds). Mrs. Paul H. Weaver.

Carver Co. (Christmas Lake): April 30 (one short-tailed young seen; believed to have fallen out of nest); May 8 (one short-tailed young out of nest fed by adult). Rachel D. Tryon

Hennepin Co. (Minneapolis): June 3 (1); June 7 (2); July 10, 16, 19, 20 (1); Aug. 10 (adult feeding one young at feeder). Mrs. E. W. Joul.

Hennepin Co. (Minneapolis): June 12 (14); June 13 (16 including one young that begged for food and was fed by adult); June 14 (2 young fed by adult at feeder); flock of up to 40 siskins was at feeding station Dec. 7 to July 23. Mrs. Edward F. Harms.

Red Crossbill

Washington Co. (Stillwater): May 11 to June 1 (3 immatures with a total of up to 15 adults, usually 10 at any one time, about equally divided male and female; young birds periodically fed by adult crossbills); June 1 to 11 (saw the immatures on only two occasions, whereafter they left). Mrs. Nancy Jackson.

Crow Wing Co. (Emily): about May 15 to May 27 (young being fed at feeder of Mrs. Charlotte Oberg); May 31 (2 pair of crossbills brought 4 young to Oberg's feeder; adults chased young away and would not feed them; observed by Jo Blanich). *vide* Josephine Blanich.

St. Louis Co. (Virginia): March 12 (2; first seen); throughout most of April and early May (5); May 12 (2 nearly grown young fed by female at feeder); June 1 (young feeding themselves). Nels J. Hervi.

St. Louis Co. (Duluth): Jan. 1 to 3 (1); Jan. 28 to April 11 (usually 1-10; high of 20 on Feb. 16th); April 12 to May 10 (1-4); May 11 to 15 (female fed 1 young at feeder, another female present); May 26 (female); June 1 (2); June 15 (25). Marjorie M. Carr.

It is interesting that the timing of the nestings in the four Red Crossbill observations is almost the same, with the young first brought to the feeding stations within one or two days of May 12th. *Janet C. Green, 9773 N. Shore Dr., Duluth, Minn. 55804.*



Birds of Stearns County



LONG-BILLED CURLEW

Photo by Robert E. Turner

By Robert P. Russell Jr.

Stearns County is a famous county in Minnesota ornithological history. The last nest of the Swallow-tailed Kite in the Midwest was found at Collegeville in the early 1900's. The now-extinct Passenger Pigeon bred there in 1881. Reverend Severin Gertkin, a local naturalist, reported four Long-billed Curlews flying over Collegeville in 1894, the last year that the Bald Eagle nested there.

These gems are gone now, save for a stray eagle once or twice a year, but they still enlighten the journal pages of early explorers and naturalists who spent many happy days reveling over the abundant flora and fauna of the region as they tramped through the virgin maple-basswood forest known locally as the Big Woods and canoed the wild Mississippi. They passed the falls of Sauk Rapids and continued down past the heavily wooded islands south of present-day St. Cloud, named the Beaver Islands by Zebulon Pike for the abundance of these remarkable rodents that often blocked the explorers' passage down the river with their dams.

Pike was here, far from his Rocky Mountains, and noted that he shot "four pheasant and one deer" near the present town of St. Augusta. Since Ring-necked Pheasant were not introduced until the 1900's, since the Prairie Chicken probably was not present, and since Ruffed Grouse were known to Pike as "grouse", it seems reasonable that the birds he shot were Sharp-tailed Grouse; thus the first Stearns County bird observation was made.

Other famous names followed Pike. Father Hennepin came through, and the famous geologist-anthropologist Henry Schoolcraft entered notes about the birdlife in his journal. W.W. Cooke, author of *A Report on Bird Migration in Mississippi Valley in Years 1884 & 1885*, commented on the abundance of kites, waterfowl, and certain warblers as he helped survey the area for Mr. Hill's railroad, soon to be built. Thomas Sadler Roberts, author of *The Birds of Minnesota*, cited many records from Stearns County in his journal, and certainly the birdlife of the county and his many pleasant experiences there played an important influence in his sensitive writings later in life.

As a student at St. John's University at Collegeville from 1963 to 1967, I also spent several years of pleasant birding experiences within the county. No one memory stands out-rather it is a succession of remembrances of sometimes casual, sometimes intimate, but always reflective occasions with the flora and fauna of the area. Memories: some 400 Wood Duck on a forest pond; a Woodcock blitzing over a still lake at sunset; a Hooded Merganser-Wood Duck hybrid that wintered one year on the Lake Watab; thousands upon thousands of calling longspurs pouring south in the darkness as a blizzard moved in from the Dakotas; a Screech Owl that sat one entire 35-yellow day in the sunny south boughs of an Austrian pine; a sleek adult Goshawk escaping from the wrath of 200 patchwork-plumaged, tame and very upset Mallards; the return of the Red-shouldered Hawks to the forest behind the pothole, renewing belief in the verity of the yearly cycle after four succeeding March blizzards had raised doubts that Redpolls were merely winter residents.

The visitor to the county should also bring back pleasant memories if he has reasonable luck and knows where to go at the right season. Even in 1970 many species are present that are quite uncommon in the remainder of Minnesota. Stearns has a county list of over 270 species, one of the highest lists in the state — understandable when one realizes that the three great vegetational areas of Minnesota meet here: the prairies with their grassland birds and march birds, the deciduous forest with its many southern species reaching their northern limit, and the northern conifer forest, White Pine long ago but now replaced by several hundred acres of planted and naturalized red, white, and Scotch pine, mainly around Collegeville.

The area around Collegeville and St. John's University is perhaps the most undisturbed part of the county. Since 1857 the monks have had the 2000-plus acres in care, with the result that patches of virgin forest still occur on the property. Selective cutting continues, and the Dutch Elm disease is now present, so it is questionable whether certain species such as Cerulean Warbler and Red-shouldered Hawk, which prefer the taller trees, especially elm, will continue to breed here. At present these species seem to be holding their own however.

Since each season offers its own specialties, I will start with the season that offers the birder the rarest species:

SPRING

Red-shouldered Hawk — At least two pairs present the past six years. Can often be seen flying over the woods east of the pothole, from the ski hill, over Lake Watab, and occasionally elsewhere. They arrive in late March or early April and put on a beautiful diving, soaring, and screaming courtship display for several weeks. In May they begin nesting and are seldom seen again until June, when the young hatch, and feeding begins.

Wood Thrush — Has been present the past 3-4 years and can be heard at the south end of Lake Watab, especially in the evening. Best times are late May and early June.

Towhee – Not present anymore as reported in older bird guides. Common in the 1940's. Perhaps the bird prefers more second-growth, which was present in the 40's.

Cerulean Warbler – A county specialty, perhaps more common here than any other place in America! *The Book The Warblers of North America* states that the most Ceruleans seen in one day was 25, and I personally heard 18 singing males on a May morning around Collegetown with only partial coverage of the territory. The Cerulean arrives in mid-May and can be heard singing its characteristic rising trill from the crowns of tall trees, particularly elm and maple. On occasion the birds feed lower, but often only the tell-tale breast band of the male can be seen from the ground. Most frequent at the south end of Lake Watab, the west side of Lake Hilary, and along the trail from Lake Sagatagan to Hilary. By June the foliage is too thick for good observation.

The Louisiana Water-thrush and Prothonotary Warbler have been reported from Lake Hilary and the south end of Lake Watab and should be looked for. The south end of Watab is the best place to observe warblers; Parula, Cape May, and Golden-wing Warblers are quite regular. The Connecticut Warbler also comes through late in May, when most birders have hung up the binocs for the summer. Other interesting species around in late spring are Yellow-throated Vireos, Pileated Woodpeckers, a few nesting Canada Geese, and a pair of Loons on Lake Sagatagan.

FALL

Anyone driving U.S. highway 52 at this season should check the Albany sewage ponds (excellent in spring also) south of the town of Albany (10 miles west of Collegetown.) Go west on 52 and turn left (south) on route 41, a paved road on the west side of the Albany golf course. Go south about a half mile until a gravel road leads off to the right (west). About 200 yards on this road will bring you to the ponds. If it is a dry year a dirt road can be driven that circles the ponds. This is an excellent shorebird and waterfowl area; swans, pipits, phalaropes, plover, and grebes are present every year. Adjacent fields should be scanned for shorebirds, Brewer's Blackbirds, and Pipits.



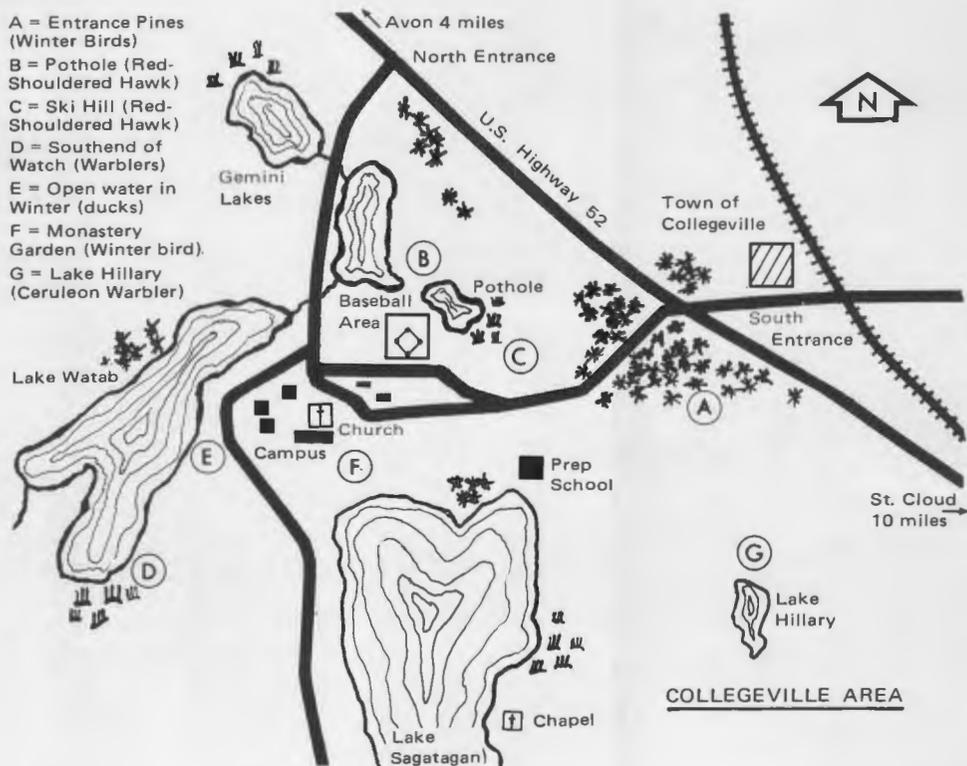
WINTER

St. John's campus (including the 2000-acre state game refuge surrounding it) is possibly the finest spot in Minnesota to find a large number of wintering species. Listing 25 species is no problem, and a good day may bring as many as 30-33 species. Creepers, Golden-crowned Kinglets, Purple Finches, Cardinals, Canada Geese, and Red-bellied and Red-headed Woodpeckers are all regular in winter.

The pines at the junction of U.S. highway 52 and the St. John's entrance road are excellent for winter finches, owls, and creepers, and you may find something rare such as Black-backed Woodpecker, Gray Jay, Pigeon Hawk, or Hoary Redpoll, all of which have occurred in this tract. This area is the site of a winter population study of birdlife (*Audubon Field Notes* 1968 – present) which has revealed a high density of birds, as high as 224 per 100 acres. The best time to bird this area is late afternoon in December and January. By February, some of the winter finches are moving north already.

The pines and feeders in the monastery gardens (behind the church) are excellent, especially at dawn and again in late afternoon. Oregon Juncos, Red-breasted Nuthatches, and Pine Grosbeaks are usually present here. Also check the small area of open water on Lake Watab, where a few feral ducks mix with a tame flock of Mallards. A few geese, occasionally a Snow Goose, Black Ducks, Coot, or Wood Duck are always present, and the grain put out for the waterfowl has attracted blackbirds and wintering sparrows. Directly across the lake is another conifer grove, good for owls and winter finches.

Hazards – The Collegeville area has the usual Minnesota pests—poison ivy, wood ticks, and mosquitoes in season. Caution should be taken off the trail near Lake Hilary, where bog land makes hiking a bit risky.



GYRFALCON LOADED WITH POISONS

If there ever was a born loser, it was the Arctic Gyrfalcon that strayed to the Sherburne National Wildlife Refuge near the Twin Cities last fall, as reported in the previous issue of *The Loon*.

This rare visitor to Minnesota was found shot on the national wildlife refuge in November. Efforts to save it failed. Even if it had not been shot, its future might not have been rosy, according to the U. S. Fish and Wildlife Service.



Chemical analyses of the bird's brain and body, conducted by an independent laboratory, showed an alarming array of persistent pesticide residues and other environmental contaminants.

The Fish and Wildlife Service's Wildlife Services Division said the analysis showed 0.72 parts per million (ppm) of mercury in the big falcon's body tissues. The federal government has ruled unfit for consumption any food products with more than 0.5 ppm mercury.

Both the bird's body and brain contained

an assortment of chlorinated hydrocarbon insecticide residues. These included 0.98 ppm DDE, 0.046 ppm DDD, 0.057 ppm DDT, 0.022 ppm dieldrin, 0.027 ppm benzene hexachloride, and 0.77 ppm estimated PCB's.

DDE and DDD are metabolites or breakdown products of DDT in the body. Dieldrin and Benzene hexachloride, like DDT, are long-lived insecticides.

PCB's (polychlorinated biphenyls) are complex organic compounds used in industry. They are biologically and chemically similar to persistent pesticides, and their widespread presence in the environment has greatly concerned environmentalists.

The levels of insecticides, PCB's, and mercury found in the Gyrfalcon are far below those known to cause acute toxic effects in birds, FWS pesticides specialists say. Of greater concern to biologists are possible adverse chronic effects of DDT and PCB's.

The Peregrine Falcon, a closely related species of falcon, has suffered severe population declines in the U. S. and Canada, due in part to reproductive failure caused by chronic exposure to DDT.

DDT causes the bird to lay thin-shelled eggs that fail to hatch. The same phenomenon has been occurring in nature in Bald Eagles, Ospreys, Pelicans, and other species. Studies of DDT and caged birds, particularly meat-eaters, gave the same results as DDT field studies.

Just how much the Gyrfalcon populations have been affected by environmental exposure to DDT is unknown. The Gyrfalcon, largest of the falcons, breeds in the Arctic north of the treeline.

The Gyrfalcon rarely reaches the northern U. S., even in winter. It feeds mainly on Willow Ptarmigan but will take other birds, including ducks and geese, for food.

"It is a good thing to know something about the earth. For to be initiated into knowledge of the earth — to feel a reawareness of even the very simplest of her miracles — is really nothing less than a returning home. For out of the earth we are sprung, and on it we live, and into it we are interred; and it is still quite as much our mother as it was mother to the caveman. It is still full of the forces which are life to us, if rightly used, and death if wrongly. It is still, whatever happens in politics or theology or art — our one and inescapable dwelling place" — Alan Devoe.



BOOK REVIEWS

by Robert E. Turner

ORNITHOLOGY IN LABORATORY AND FIELD, 4th edition, by Olin Sewall Pettingill Jr. Illustrated by J. W. Breckenridge. Burgess Publishing Co. (Minneapolis) 1970. 524 pages. \$11.95.

You may know the excellent previous edition of this book, which was called *A Laboratory and Field Manual of Ornithology*. This new edition, which is already in its second printing, deserves its new title, for it is much updated and enlarged, and the type has been completely reset. Page size has been reduced, and many pages have been added. Illustrations, organization, writing, printing, and binding are excellent. The latest information on ornithological research has been included. That is, now and for some months or years to come, this is the most up-to-date book of its kind.

What kind? Originally a college manual for lab and field, this latest edition has grown to include much of the information that you would expect to find in a college text or reference book. This book is important because it is sure to be used as a main book — perhaps the only book — in many college courses in ornithology; thus it is sure to have a powerful influence on the upcoming generation of bird students. For those of us who delight in being lifelong students (though no longer enrolled in school), this book will be a valued reference. If you are really interested in birds, and if you can buy only four or five bird books, this should be one of them.

The chapters, which are well organized and well written, cover anatomy, physiology, identification, classification, distribution, migration, behavior, territory, nests and nesting, song, evolution, decrease of birds, how to photograph and tape record birds, how to write about birds, bird banding, and almost everything else that a birder might want to know.

The author, O. S. Pettingill, is a life member of the MOU and a former professor at Northfield, Minnesota. You may know his books or columns on birdfinding, or you may have attended one of his Audubon Screen Tour talks.

The illustrator, W. J. Breckenridge, has been a member of the MOU Board from the beginning, and his contributions to this magazine go back 40 years. He and the publisher have kindly grant-

ed me permission to use the drawings from this book, and some of them will grace the pages of future issues of *The Loon*.

WATERFOWL: THEIR BIOLOGY AND NATURAL HISTORY by Paul A. Johnsgard. University of Nebraska Press (Lincoln) 1968. 138 pages, with the author's 148 photos (39 in color) and his 16 pages of drawings. \$8.95.

Let me list the chapter titles in this splendid book. Introduction to the Waterfowl. Distribution and Migrations. Ecology and General Behavior. Sound Production. Social Behavior. Breeding Biology. Molts and Plumages. Evolution and Hybridization. Some Unanswered Questions. Waterfowl, Man, and the Future. Identification of Unfamiliar Waterfowl. Annotated List of the Anatidae of the World. Selected Bibliography. Index.

Does that seem remarkably complete? Now take into account that the book is also authoritative, well organized, and well written, and that it tells about and pictures every species of waterfowl in the world. And somehow it does all this without seeming fact-packed. The author, by the way, has been called the foremost waterfowl expert in the world. No wonder this was the top honor book at a 1969 book exhibition.

The bird called the Fulvous Tree Duck should be called the Fulvous Whistling Duck, says Johnsgard, and this bird is unique in being the only species of waterfowl that occurs in all four hemispheres. A number of species are circumpolar, but few cross the equator. Northern hemisphere swans are all white, but southern hemisphere swans may be black, or black-necked. The book is full of many interesting and important facts, not just about classification and identification but about ecology, ethology, and natural history as well.

Chapter 11 is a dichotomous key to identification of the world's waterfowl. To me it seemed fascinating and ingenious, but impractical, for it requires the user to be wholly familiar with each species in the field (to know their calls, for example), but at the same time it requires the user to have the bird in hand to examine details of its anatomy. But if this is a shortcoming, it is a minor one. On the whole, the book is excellent.

recognized as a leading ecologist. I recommend this easy-reading latest book of his to readers who enjoy being stimulated mentally.



PEREGRINE FALCON POPULATIONS: THEIR BIOLOGY AND DECLINE, edited by Joseph J. Hickey. The University of Wisconsin Press (Madison) 1969. 596 pages illus. \$10.

In 1969 many of the most prominent ornithologists in the United States, Canada, England, France, Switzerland, East Germany, West Germany, and Finland met in Madison, Wisconsin, to try to determine the reason for the alarming crash-down in numbers of the Peregrine Falcon in western Europe and in the man-populated parts of North America. The skillfully edited papers and discussions at that meeting make up this important book. I hope that every member of the MOU will study it.

Somehow the Peregrine always evokes a strong emotional reaction in people. Most of us admire him for the magnificent free spirit that he is. But the pigeon fanciers of England and Belgium hate the Peregrine and put a price on his head. Is it their persecution that has caused the Peregrine population crash? Or is it the egg collectors and the people who disturb the bird's nest environment? Or is it the natural predators, such as the raccoon? Could the decline have something to do with the absence now of the Passenger Pigeon? Diseases perhaps? Parasites? Sonic booms? Or is it another case of those widespread poisons, the chlorinated insecticides such as DDT, BHC, and dieldrin?

The conference considered all these possibilities and others. Perhaps all have some effect, members decided, but the insecticides probably are most at fault. Unfortunately, conference members did not come up with any comforting solution to the tragedy still in progress. The conference (and this book) also included some papers on the decline of Ospreys, Golden Eagles, Bald Eagles, White-tailed Sea Eagles, Cooper's Hawks, Prairie Falcons, and Harriers.

Did you know that the Peregrine Falcon normally inhabits all land areas of the earth except Antarctica, New Zealand, Iceland, and extensive deserts? Did you know that once these birds nested in tree cavities here in the Midwest, and that they still do in Australia? Or that in north Germany and Poland they build open nests in trees, and that in Finland they nest on the ground? All the interesting facts of the Peregrine's classification, life history, and biology make up an early part of this big book. After that the conference delves into the mystery of the population crash.

Besides Joseph Hickey, the session chairmen of the conference include Dean Amadon, Roland C. Clement, Frederick Hamerstrom, Roger Tory Peterson, Gustav A. Swanson, and other prominent American ornithologists. Gus Swanson, who is

now at Colorado State University, was the founder of this magazine, *The Loon*, and founder of one of the three bird clubs that eventually merged to form the MOU.

Considering that it is the proceedings of a conference, this book is surprisingly well organized and easy to read, thanks I am sure to Professor Hickey. Because of its quality, its importance, and its sheer bulk, it is a great bargain at \$10. Required reading for all serious birders.



BATS OF AMERICA by Roger W. Barbour and Wayne H. Davis. The University Press of Kentucky (Lexington) 1970. 286 pages illus. \$17.50.

Did you know that the "holy smell" of some country churches comes from the bats that live in their walls and steeples? That most kinds of bats bear one young at a pregnancy, but that some may have as many as four young? That a mother bat, if disturbed while nursing her young, may fly away carrying her young? That bats do not get tangled in ladies' hair, but that they can be caught in mist nets? That bats, like birds, are decreasing in numbers, and that DDT and other insecticides probably are the main cause?

All these and many other facts may be found in this valuable and attractive book. Professors Barbour and Davis have been studying bats for 50 years, and in preparation for this book they made extensive travels. They also combed through 1000 references, most of which are listed in an excellent bibliography. Bats interest many persons.

Vampires and a few other accidental species are not included, but the authors present several pages on each of the 40 regular species of bats in the United States. The book's title is misleading in that Mexico and Canada are not covered. Oddly, Hawaii and Alaska are included in the range maps, but the maps stop sharply at U. S. borders. Bats themselves are not respecters of political boundaries however.

Besides a map of the U. S. range, the account of each species also includes good black/white photos and drawings. Then in a central colored section of the book the authors present an excellent color photo of each of the 40 species. All color photos and most others are by RWB.

This is primarily a scientific book, but the writing is simple, straightforward, easily comprehensible, and appealing. Besides the bibliography there is a good index, an interesting introduction that gives general facts about bats, and a final chapter titled "A Guide to the Study of Bats." This book deals with taxonomy and natural history. It does not go into anatomy, physiology, parasitology, nor (regrettably) migrations of bats. Recommended; in fact, essential for those of us interested seriously in mammals.

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 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.



TABLE OF CONTENTS

Ring-necked Duck — Photo by Ernest H. Strubbe	Front Cover
President Writes	3
The Western Grebe in Minnesota by Joanna Burger	4
The 1970 Fall Season by Kim R. Eckert and Paul Egeland	10
Notes of Interest	19
Birds of Stearns County by Robert P. Russell, Jr.	28
Gyrfalcon Loaded With Poisons	32
Book Reviews by Robert E. Turner	33

SUGGESTIONS TO AUTHORS

The Loon needs articles, shorter "Notes of Interest," and black/white drawings and photos. Photos should be close-ups of wildlife, preferably 5 x 7 inches or larger. "Notes of Interest" and articles should be similar in subject matter and in style to those in recent issues. Be accurate, direct, clear, interesting, and concise. Manuscripts should be double spaced and typewritten if possible. Leave generous margins, and type on one side of the page. Please use a good ribbon. "Notes of Interest" should be less than two double-spaced pages. IMPORTANT: DOUBLE SPACE. Letters to the editor should be separate from manuscripts. If you write to the editor, and if you believe a reply is appropriate, please enclose a self-addressed, stamped envelope or postcard.

Style details will be taken care of by the editor if you wish. We use Arabic numerals for numbers of two or more digits, or for all numbers followed by a word expressing a unit of measurement: 1 day, 2 hours, 3 mm, 5 percent, 9 ml, 8 oz, 7 Hz, 4 acres; but two 5-bird groups or 2 five-bird groups. Also dozens, scores, hundreds, pairs, braces, millions, and so on. Do not use foreign words (except, when inescapable, scientific

names) nor abbreviations based on Latin (except a. m. and p. m.). Do not use periods after abbreviations, except in. (for inch) and a. m. and p. m. Do not add an s to make an abbreviation plural: 2 lb, 5 lb, 5000 lb. Spell out degrees and percent. That is, do not use non-word symbols except the dollar sign. Exception: in tables or graphs where space is scarce.

Spell it gray with an A. D-O-V-E spells dove, a noun, the name of a kind of bird; but the past tense of the verb dive is always dived. Note the editor's last name and the name of his village, and please do not interchange the two.

Send material for publication to: Robert E. Turner, Editor of *The Loon*, Box 66, Shafer, MN 55074. No payment to contributors. Authors can have reprints printed offset anytime after publication by any printer; or reprints can be ordered through the editor.

Bird-sighting reports for "The Season" should be sent promptly at the end of each season to Mrs. Janet Green. See inside front cover.

ANNOUNCEMENTS

WATCH FOR COLOR-MARKED SHOREBIRDS — In 1971-72 you may see a shorebird marked with a colored tag or with dyed underparts. Note species, color, and number (visible thru binoculars) on tag. Report to Dr. Raymond McNeil, Department of Biological Sciences, University of Montreal, C. P. 6128, Montreal 101, Quebec, Canada.

IMPORTANT ARTICLE COMING IN NEXT LOON — The summer issue of *The Loon* will list all bird species known to occur in Minnesota, with brief comments on the status of each.

FREE WHILE THEY LAST — Two good booklets on ducks. Send your request only to: Division of Wildlife Services, BSWF, Federal Building, Fort Snelling, Twin Cities MN 55111.

A detailed black and white woodcut-style illustration of a woodpecker perched on a tree trunk. The bird is facing left, with its beak pointed downwards. The tree trunk is textured with fine lines, and there are several leaves around it.

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BRECKENRIDGE

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

MEMBERSHIPS AND SUBSCRIPTIONS: Mrs. Elizabeth Campbell, 5267 W. Bald Eagle Blvd., Saint Paul, Mn. 55110. To join the MOU and receive both MOU publications, send Mrs. Campbell \$4 for a regular yearly subscription. Or other classes of membership that you may choose are: Family \$5 yearly; Sustaining \$25 yearly. Life \$100. Also available from Mrs. Campbell: back issues of **The Loon** (\$1 each ppd.) and MOU checklists of Minnesota birds (30 for \$1 ppd.). Gifts, bequests, and contributions to the MOU Endowment Fund should also be sent to Mrs. Campbell.

EDITOR OF THE LOON: Robert E. Turner, Box 66, Shafer, Mn. 55074. (phone 257-7871.). The editor solicits articles, short notes, and black/white illustrations about birds and nature. See back cover for details.

"The Season" section of **The Loon** publishes reports of bird sightings throughout Minnesota. We particularly desire 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 forms from the **EDITOR OF "THE SEASON,"** Mrs. Janet Green, 9773 North Shore Drive, Duluth, Mn. 55804. (area 218, phone 525-5654).

EDITOR OF THE MOU NEWSLETTER: Robert Jefferson, 10315 Thomas Ave. S., Bloomington, Mn. 55431 (phone 881-8925). Publishes announcements and reports about activities of the MOU and its affiliated clubs. (Club officers should keep both MOU editors informed.)

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The President writes...

What is this world, if full of care,
We have no time to stop and stare,
To see a bird among the bowers,
Then, ponder him in later hours.

This poetic take-off on an old verse is aimed at setting the stage for a special new challenge for M. O. U. members. We'd like to suggest some special pondering in the months ahead.

We suggest pondering and personal research on biological answers to avoiding nest pirating by undesirable species. Hopefully, with over 700 M. O. U. birders putting their minds and observation recall to work, we may find some inventive solutions.

Perhaps the biggest nest pests of the moment are the starlings and the house sparrows. Wouldn't it be great if members of our organization could use their ornithological skills to come up with simple, easy-to-use solutions?

To start the creative process let's think about obvious distinctions of the species that may lead to house designs that may discourage the unwanted. Consider bill length, wing spread, leg construction, perching habit, landing approach, wing beat, wing angle, other mated pair tolerance, nest dimensions etc. For example: Is a hanging gourd type of nest for a purple martin less attractive to a starling? Should the house opening or perch be modified. Could a tube type of entry be used to accommodate a martin's short legs. Should it angle up or down? Could an entry obstruction be designed to trip up the big bill, wing action or long legs of a starling? Is it possible that a martin can glide up into a nest entry where a starling must fly up? Can we build a house to take advantage of an unwanted species limitations or behavior patterns? For example, there are reports that a screened opening to let light into the roof of a bluebird house will discourage sparrows, and that mounting it on a low post will discourage starlings.

Experimenting can add an extra dimension to bird watching. There are many directions one can go on houses, feeders etc. At present, the writer is playing with a little experiment on whether wood ducks will nest in grouped boxes on poles or trees. Wood ducks are not territorial and appear to be tolerant of other pairs. Occasionally two females are reported to share a nest. So will grouping work? If so, it could make for easier predator guard protection in raccoon areas and also may discourage duck house use by sparrow hawks, tree swallows and other more territorial birds. So here's another direction for experimentation.

We hope the next nesting season will see an array of weird and unusual houses built to check your various hunches on birds' physical characteristics and behavior. Who will hit the magic combinations? Hopefully there will be exciting follow-up stories. Give it a try and please keep in touch.

MARV BORELL

An Annotated List of Minnesota Birds

By Janet C. Green and Robert B. Janssen

This list gives the status and seasonal occurrence of all species that have been found in Minnesota through the end of 1970. Except for a few species with a very limited range it does not include information on the geographical distribution of species within the state. Information on the geographical distribution and abundance will be included in another report on Minnesota birds. The nomenclature conforms to the A. O. U. Checklist of North American Birds (1957); subspecies are not treated.

Definitions

A) For current status:

Regular — Occurs somewhere in the state every year. 294 species.

Casual — Not known to occur every year but expected to occur again at intervals of a few to several years somewhere in the state. Five or more acceptable records. 25 species.

Accidental — Not expected to occur again ever or only at very infrequent intervals. Four or fewer acceptable records. 37 species.

Extinct — Does not occur any more anywhere in the world. 1 species.

Extirpated — Has not occurred in Minnesota since 1900. 2 species.

Hypothetical — Species for which there is 1) no specimen or identifiable photograph on file, or 2) for which there are three or fewer acceptable sight observations. 13 species.

B) For acceptable record:

1) a specimen currently in an ornithological collection or one that was examined by a competent ornithologist.

2) an identifiable photograph that has either been published or is on file in the Bell Museum of Natural History of the University of Minnesota or the Wildlife Photoduplicate File of the U. S. Fish and Wildlife Service.

3) a sight observation for which convincing details have either been published or are on file at the Bell Museum, or for which there were multiple observers of known competence. There are a number of sight observations submitted to the authors or the Bell Museum, or published in the literature that do not meet these criteria; these are not included in this list.

C) For seasonal occurrence:

Migrant — Species that pass through some portion of the state in the spring and fall, going to a winter and/or summer territory. Species that occur at only one migration season are so indicated.

The migration season is what is considered normal for that species and may include parts of months that are traditionally thought of as summer and/or winter. For example, the spring migration period normally extends into early June, especially for species such as shorebirds, warblers, and flycatchers. On occasion during warm years, spring movement can begin in late February for some species such as waterfowl. Horned Larks' normal spring migration period begins in early February. All migration begins in July for many species of shorebirds and in early August for many warblers, thrushes, and flycatchers. The fall migration also extends into December and early January for many species of waterbirds, especially ducks and geese.

Summer resident — Species known to nest somewhere in the state. Species for which breeding is restricted to one or two counties are so indicated.

Summer visitant — Species that occur in the summer, either regularly or casually, and for which there are no known breeding data.

Permanent resident — Species in which most individuals remain in the same area throughout the year.

Winter visitant — Species that occur in the winter in some area of the state, either regularly or casually, and for which there are no data to indicate that these individuals breed there. This term is also used for several species which breed in the state but for which banding records (e. g. Great Horned Owl) or migration paths (e. g. Robin) in-

dicates that all or part of the winter population in an area is represented by different individuals than the breeding population in that area. If it is not known whether a part of the wintering population is different from the summering population, the phrase 'regular in winter' is used.

Family GAVIIDAE: Loons

COMMON LOON. *Gavia immer.* Regular. Migrant and summer resident.

RED-THROATED LOON. *Gavia stellata.* Regular. Migrant; accidental in summer and winter.

ARCTIC LOON. *Gavia arctica.* Hypothetical. One fall record.

Family PODICIPEDIDAE: Grebes

RED-NECKED GREBE. *Podiceps grisegena.* Regular. Migrant and summer resident; accidental in winter.

WESTERN GREBE. *Aechmophorus occidentalis.* Regular. Migrant and summer resident.

HORNED GREBE. *Podiceps auritus.* Regular. Migrant and summer resident; accidental in winter.

PIED-BILLED GREBE. *Podilymbus podiceps.* Regular. Migrant and summer resident; casual in winter.

EARED GREBE. *Podiceps caspicus.* Regular. Migrant and summer resident.

Family PELECANIDAE: Pelicans

WHITE PELICAN. *Pelecanus erythrorhynchos.* Regular. Migrant, summer resident and summer visitant.

Family PHALACROCORACIDAE: Cormorants

DOUBLE-CRESTED CORMORANT. *Phalacrocorax auritus.* Regular. Migrant and summer resident.

Family ARDEIDAE: Herons and Bitterns

GREAT BLUE HERON. *Ardea herodias.* Regular. Migrant and summer resident; casual in winter.

SNOWY EGRET. *Leucophoyx thula.* Casual. Migrant and summer visitant.

GREEN HERON. *Butorides virescens.* Regular. Migrant and summer resident.

LOUISIANA HERON. *Hydranassa tricolor.* Accidental. One spring and one summer record.

LITTLE BLUE HERON. *Florida caerulea.* Casual. Spring migrant and summer visitant.

BLACK-CROWNED NIGHT HERON. *Nycticorax nycticorax.* Regular. Migrant and summer resident; casual in winter.

CATTLE EGRET. *Bubulcus ibis.* Casual. Migrant and summer visitant.

COMMON EGRET. *Casmerodius albus.* Regular. Migrant and summer resident.

YELLOW-CROWNED NIGHT HERON. *Nyctanassa violacea.* Regular. Migrant; summer resident in Houston and Dakota Counties.

LEAST BITTERN. *Ixobrychus exilis*. Regular. Migrant and summer resident.

AMERICAN BITTERN. *Botaurus lentiginosus*. Regular. Migrant and summer resident.

Family THRESKIORNITHIDAE: Ibises

WHITE-FACED IBIS. *Plegadis chihi*. Casual. Migrant and summer visitant. Summer resident in Jackson County in 19th century.

Family ANATIDAE: Swans, Geese, and Ducks

WHISTLING SWAN. *Olor columbianus*. Regular. Migrant; casual summer visitant and accidental winter visitant.

TRUMPETER SWAN. *Olor buccinator*. Extirpated. Occurred as a migrant and summer resident in 19th century. A semi-captive flock being reared at Hennepin Park Reserve, Carver County. Carver County may be the nucleus for reintroduction into Minnesota.

CANADA GOOSE. *Branta canadensis*. Regular. Migrant, summer resident and winter visitant.

BRANT. *Branta bernicla*. Accidental. One fall record.

BLACK BRANT. *Branta nigricans*. Accidental. One spring record.

WHITE-FRONTED GOOSE. *Anser albifrons*. Regular. Migrant; accidental in winter.

SNOW GOOSE. *Chen hyperborea*. Regular. Migrant; casual summer and winter visitant.

BLUE GOOSE. *Chen caerulescens*. Regular. Migrant; casual summer and winter visitant.

ROSS' GOOSE. *Chen rossii*. Casual. Fall migrant and winter visitant.

FULVOUS TREE DUCK. *Dendrocygna bicolor*. Accidental. One spring and one fall record.

BLUE GOOSE. *Chen caerulescens*. Regular. Migrant; casual summer and winter visitant.

ROSS' GOOSE. *Chen rossii*. Casual. Fall migrant and winter visitant.

FULVOUS TREE DUCK. *Dendrocygna bicolor*. Accidental. One spring and one fall record.

MALLARD. *Anas platyrhynchos*. Regular. Migrant and summer resident; regular in winter.

BLACK DUCK. *Anas rubripes*. Regular. Migrant, summer resident, and winter visitant.

GADWALL. *Anas strepera*. Regular. Migrant and summer resident; accidental in winter.

PINTAIL. *Anas acuta*. Regular. Migrant and summer resident; casual in winter.

GREEN-WINGED TEAL. *Anas carolinensis*. Regular. Migrant and summer resident; casual in winter.

BLUE-WINGED TEAL. *Anas discors*. Regular. Migrant and summer resident; accidental in winter.

CINNAMON TEAL. *Anas cyanoptera*. Casual. Migrant.

EUROPEAN WIDGEON. *Mareca penelope*. Casual. Spring migrant.

AMERICAN WIDGEON. *Mareca americana*. Regular. Migrant and summer resident; casual in winter.

SHOVELER. *Spatula clypeata*. Regular. Migrant and summer resident; accidental in winter.

WOOD DUCK. *Aix sponsa*. Regular. Migrant and summer resident; regular in winter.

REDHEAD. *Aythya americana*. Regular. Migrant and summer resident; accidental in winter.

RING-NECKED DUCK. *Aythya collaris*. Regular. Migrant and summer resident; casual in winter.

CANVASBACK. *Aythya valisineria*. Regular. Migrant and summer resident; accidental in winter.

GREATER SCAUP. *Aythya marila*. Regular. Migrant; winter records unsatisfactory.

LESSER SCAUP. *Aythya affinis*. Regular. Migrant and summer resident; casual in winter.

COMMON GOLDENEYE. *Bucephala clangula*. Regular. Migrant, summer resident, and winter visitant.

BARROW'S GOLDENEYE. *Bucephala islandica*. Casual. Migrant and winter visitant.

BUFFLEHEAD. *Bucephala albeola*. Regular. Migrant, summer and winter visitant.

OLDSQUAW. *Clangula hyemalis*. Regular. Migrant and winter visitant.

HARLEQUIN DUCK. *Histrionicus histrionicus*. Regular. Migrant and winter visitant.

COMMON EIDER. *Somateria mollissima*. Casual. Fall migrant.

KING EIDER. *Somateria spectabilis*. Accidental. One fall, one spring, and one winter record.

WHITE-WINGED SCOTER. *Melanitta deglandi*. Regular. Migrant; casual in winter, accidental in summer.

SURF SCOTER. *Melanitta perspicillata*. Regular. Migrant; accidental in winter.

COMMON SCOTER. *Oidemia nigra*. Regular. Migrant.

RUDDY DUCK. *Oxyura jamaicensis*. Regular. Migrant and summer resident; accidental in winter.

HOODED MERGANSER. *Lophodytes cucullatus*. Regular. Migrant and summer resident; casual in winter.

COMMON MERGANSER. *Mergus merganser*. Regular. Migrant, summer resident, and winter visitant.

RED-BREASTED MERGANSER. *Mergus serrator*. Regular. Migrant and summer resident; winter records unsatisfactory.

Family CATHARTIDAE: American Vultures

TURKEY VULTURE. *Cathartes aura*. Regular. Migrant and summer resident; accidental in winter.

Family ACCIPITRIDAE: Hawks, Eagles, and Harriers

SWALLOW-TAILED KITE. *Elanoides forficatus*. Accidental. One summer and one spring record since 1920's. Summer resident in 19th century.

GOSHAWK. *Accipiter gentilis*. Regular. Migrant, summer resident, and winter visitant.

SHARP-SHINNED HAWK. *Accipiter striatus*. Regular. Migrant and summer resident; regular in winter.

COOPER'S HAWK. *Accipiter cooperii*. Regular. Migrant and summer resident; regular in winter.

RED-TAILED HAWK. *Buteo jamaicensis*. Regular. Migrant, summer resident, and winter visitant.

HARLAN'S HAWK. *Buteo harlani*. Regular. Migrant.

RED-SHOULDERED HAWK. *Buteo lineatus*. Regular. Migrant and summer resident; regular in winter.

BROAD-WINGED HAWK. *Buteo platypterus*. Regular. Migrant and summer resident.

SWAINSON'S HAWK. *Buteo swainsoni*. Regular. Migrant and summer resident.

ROUGH-LEGGED HAWK. *Buteo lagopus*. Regular. Migrant and winter visitant; accidental in summer.

FERRUGINOUS HAWK. *Buteo regalis*. Regular. Migrant; accidental in summer.

GOLDEN EAGLE. *Aquila chrysaetos*. Regular. Migrant and winter visitant.

BALD EAGLE. *Haliaeetus leucocephalus*. Regular. Migrant, summer resident, and winter visitant.

MARSH HAWK. *Circus cyaneus*. Regular. Migrant and summer resident; regular in winter.

Family PANDIONIDAE: Ospreys

OSPREY. *Pandion haliaetus*. Regular. Migrant and summer resident.

Family FALCONIDAE: Falcons

GYRFALCON. *Falco rusticolus*. Casual. Winter visitant.

PRAIRIE FALCON. *Falco mexicanus*. Accidental. Three summer records since late 1930's. Regular fall migrant during the 1930's.

PEREGRINE FALCON. *Falco peregrinus*. Regular. Migrant; accidental in winter. Regular summer resident until 1960.

PIGEON HAWK. *Falco columbarius*. Regular. Migrant and summer resident; casual in winter.

SPARROW HAWK. *Falco sparverius*. Regular. Migrant and summer resident; regular in winter.

Family TETRAONIDAE Grouse and Ptarmigan

SPRUCE GROUSE. *Canachites canadensis*. Regular. Permanent resident.

RUFFED GROUSE. *Bonasa umbellus*. Regular. Permanent resident.

WILLOW PTARMIGAN. *Lagopus lagopus*. Accidental. Two spring records in addition to the many records of the winter invasion of 1933-34.

GREATER PRAIRIE CHICKEN. *Tympanuchus cupido*. Regular. Permanent resident; casual winter visitant.

SHARP-TAILED GROUSE. *Pedioecetes phasianellus*. Regular. Permanent resident.

Family PHASIANIDAE: Quails and Pheasants

BOBWHITE. *Colinus virginianus*. Regular. Permanent resident.

RING-NECKED PHEASANT. *Phasianus colchicus*. Regular. Permanent resident.

CHUKAR. *Alectoris graeca*. Regular. Permanent resident at Ely, St. Louis County.

GRAY PARTRIDGE. *Perdix perdix*. Regular. Permanent resident.

Family MELEAGRIDIDAE: Turkeys

TURKEY. *Meleagris gallopavo*. Hypothetical. Present status as a wild species unknown; 19th century status also unknown. Intro-

ductions have been attempted in a number of areas, especially Whitewater Refuge, Winona County.

Family GRUIDAE: Cranes

WHOOPIING CRANE. *Grus americana*. Accidental. Two fall records, including one on the North Dakota border. Migrant and summer resident in the 19th century.

SANDHILL CRANE. *Grus canadensis*. Regular. Migrant and summer resident.

Family RALLIDAE: Rails, Gallinules, and Coots

KING RAIL. *Rallus elegans*. Regular. Migrant and summer resident.

VIRGINIA RAIL. *Rallus limicola*. Regular. Migrant and summer resident; accidental in winter.

SORA. *Porzana carolina*. Regular. Migrant and summer resident; accidental in winter.

YELLOW RAIL. *Coturnicops noveboracensis*. Regular. Migrant and summer resident.

BLACK RAIL. *Laterallus jamaicensis*. Hypothetical. One summer and two spring records.

PURPLE GALLINULE. *Porphyryula martinica*. Accidental. One fall record and one summer record.

COMMON GALLINULE. *Gallinula chloropus*. Regular. Migrant and summer resident.

AMERICAN COOT. *Fulica americana*. Regular. Migrant and summer resident; regular in winter.

Family CHARADRIIDAE: Plovers and Turnstones

SEMIPALMATED PLOVER. *Charadrius semipalmatus*. Regular. Migrant.

AMERICAN GOLDEN PLOVER. *Pluvialis dominica*. Regular. Migrant and summer visitant.

PIPING PLOVER. *Charadrius melodus*. Regular. Migrant and summer resident.

BLACK-BELLIED PLOVER. *Squatarola squatarola*. Regular. Migrant.

KILLDEER. *Charadrius vociferus*. Regular. Migrant and summer resident; casual in winter.

RUDDY TURNSTONE. *Arenaria interpres*. Regular. Migrant.

Family SCOLOPACIDAE: Woodcock, Snipe, and Sandpipers

AMERICAN WOODCOCK. *Philohela minor*. Regular. Migrant and summer resident.

WHITE-RUMPED SANDPIPER. *Erolia fuscicollis*. Regular. Migrant.

COMMON SNIBE. *Capella gallinago*. Regular. Migrant and summer resident; regular in winter.

BAIRD'S SANDPIPER. *Erolia bairdii*. Regular. Migrant.

LONG-BILLED CURLEW. *Numenius americanus*. Casual. Migrant. Summer resident in the 19th century.

LEAST SANDPIPER. *Erolia minutilla*. Regular. Migrant.

WHIMBREL. *Numenius phaeopus*. Regular. Migrant.

DUNLIN. *Erolia alpina*. Regular. Migrant.

ESKIMO CURLEW. *Numenius borealis*. Extirpated. Regular migrant in the 19th century.

SHORT-BILLED DOWITCHER. *Limnodromus griseus*. Regular. Migrant.

UPLAND PLOVER. *Bartramia longicauda*. Regular. Migrant and summer resident.

LONG-BILLED DOWITCHER. *Limnodromus scolopaceus*. Regular. Migrant.

SPOTTED SANDPIPER. *Actitis macularia*. Regular. Migrant and summer resident.

STILT SANDPIPER. *Micropalama himantopus*. Regular. Migrant.

SOLITARY SANDPIPER. *Tringa solitaria*. Regular. Migrant.

SEMIPALMATED SANDPIPER. *Ereunetes pusillus*. Regular. Migrant.

WILLET. *Catoptrophorus semipalmatus*. Regular. Migrant and summer resident.

WESTERN SANDPIPER. *Ereunetes mauri*. Casual. Migrant.

GREATER YELLOWLEGS. *Totanus melanoleucus*. Regular. Migrant.

BUFF-BREADED SANDPIPER. *Tryngites subruficollis*. Regular. Migrant.

LESSER YELLOWLEGS. *Totanus flavipes*. Regular. Migrant.

MARbled GODWIT. *Limosa fedoa*. Regular. Migrant and summer resident.

KNOT. *Calidris canutus*. Regular. Migrant.

HUDSONIAN GODWIT. *Limosa haemastica*. Regular. Migrant.

PURPLE SANDPIPER. *Erolia maritima*. Accidental. One winter record.

RUFF. *Philomachus pugnax*. Accidental. One spring record.

PECTORAL SANDPIPER. *Erolia melanotos*. Regular. Migrant.

SANDERLING. *Crocethia alba*. Regular. Migrant.

Family RECURVIROSTRIDAE: Avocets

AMERICAN AVOCET. *Recurvirostra americana*. Regular. Migrant and summer resident.

Family PHALAROPODIDAE: Phalaropes

RED PHALAROPE. *Phalaropus fulicarius*. Accidental. One fall record.

NORTHERN PHALAROPE. *Lobipes lobatus*. Regular. Migrant.

WILSON'S PHALAROPE. *Steganopus tricolor*. Regular. Migrant and summer resident.

Family STERCORARIIDAE: Jaegers

POMARINE JAEGER. *Stercorarius pomarinus*. Hypothetical. One fall record.

LONG-TAILED JAEGER. *Stercorarius longicaudus*. Accidental. Two fall and one summer record.

PARASTITIC JAEGER. *Stercorarius parasiticus*. Regular. Migrant.

Family LARIDAE: Gulls and Terns

GLAUCOUS GULL. *Larus hyperboreus*. Regular. Migrant and winter visitant.

IVORY GULL. *Pagophila eburnea*. Accidental. Four winter records.

ICELAND GULL. *Larus glaucoides*. Casual. Winter visitant; accidental in summer.

BLACK-LEGGED KITTIWAKE. *Rissa tridactyla*. Accidental. One winter record.

GREAT BLACK-BACKED GULL. *Larus marinus*. Accidental. One spring and one fall record.

SABINE'S GULL. *Xema sabini*. Hypothetical. One fall record.

HERRING GULL. *Larus argentatus*. Regular. Migrant, summer resident, summer visitant, and winter visitant.

FORSTER'S TERN. *Sterna forsteri*. Regular. Migrant and summer resident.

RING-BILLED GULL. *Larus delawarensis*. Regular. Migrant and summer visitant; summer resident on Mille Lacs Lake; accidental in winter.

COMMON TERN. *Sterna hirundo*. Regular. Migrant and summer resident.

FRANKLIN'S GULL. *Larus pipixcan*. Regular. Migrant and summer resident.

LEAST TERN. *Sterna albifrons*. Accidental. Two fall, one spring, and one summer record.

BONAPARTE'S GULL. *Larus philadelphia*. Regular. Migrant and summer visitant.

CASPIAN TERN. *Hydroprogne caspia*. Regular. Migrant and summer visitant; summer resident on Leech Lake.

BLACK TERN. *Chlidonias niger*. Regular. Migrant and summer resident.

Family ALCIDAE: Auks and Murres

DOVEKIE. *Plautus alle*. Accidental. Two fall records.

ANCIENT MURRELET. *Synthliboramphus antiquum*. Accidental. Three fall records and one winter record.

Family COLUMBIDAE: Pigeons and Doves

BAND-TAILED PIGEON. *Columbia fasciata*. Accidental. One summer record.

ROCK DOVE. *Columba livia*. Regular. Permanent resident.

MOURNING DOVE. *Zenaidura macroura*. Regular. Migrant and summer resident; regular in winter.

PASSENGER PIGEON. *Ectopistes migratorius*. Extinct. Last record in Minnesota about 1895.

Family CUCULIDAE: Cuckoos and Anis

YELLOW-BILLED CUCKOO. *Coccyzus americanus*. Regular. Migrant and summer resident.

GROOVE-BILLED ANI. *Crotophaga sulcirostris*. Accidental. Three fall records.

BLACK-BILLED CUCKOO. *Coccyzus erythrophthalmus*. Regular. Migrant and summer resident.

Family TYTONIDAE: Barn Owls

BARN OWL. *Tyto alba*. Casual. Occurs in all seasons and has bred; formerly more regular.

Family STRIGIDAE: Typical Owls

SCREECH OWL. *Otus asio*. Regular. Permanent resident.

GREAT GRAY OWL. *Strix nebulosa*. Regular. Winter visitant; casual summer resident.

GREAT HORNED OWL. *Bubo virginianus*. Regular. Primarily permanent resident; also winter visitant.

LONG-EARED OWL. *Asio otus*. Regular. Migrant, summer resident, and winter visitant.

SNOWY OWL. *Nyctea scandiaca*. Regular. Migrant and winter visitant; accidental in summer.

SHORT-EARED OWL. *Asio flammeus*. Regular. Migrant, summer resident, and winter visitant.

HAWK OWL. *Surnia ulula*. Regular. Winter visitant; casual summer resident.

BOREAL OWL. *Aegolius funereus*. Regular. Winter visitant.

BURROWING OWL. *Speotyto cunicularia*. Regular. Migrant and summer resident.

SAW-WHET OWL. *Aegolius acadicus*. Regular. Migrant, summer resident, and winter visitant.

BARRED OWL. *Strix varia*. Regular. Permanent resident.

Family CAPRIMULGIDAE: Goatsuckers

WHIP-POOR-WILL. *Caprimulgus vociferus*. Regular. Migrant and summer resident.

COMMON NIGHTHAWK. *Chordeiles minor*. Regular. Migrant and summer resident.

POOR-WILL. *Phalaenoptilus nuttallii*. Accidental. One spring record.

Family APODIDAE: Swifts

CHIMNEY SWIFT. *Chaetura pelagica*. Regular. Migrant and summer resident.

Family TROCHILIDAE: Hummingbirds

RUBY-THROATED HUMMINGBIRD. *Archilochus colubris*. Regular. Migrant and summer resident.

Family ALCEDINIDAE: Kingfishers

BELTED KINGFISHER. *Megaceryle alcyon*. Regular. Migrant and summer resident; regular in winter.

Family PICIDAE: Woodpeckers

YELLOW-SHAFTED FLICKER. *Colaptes auratus*. Regular. Migrant and summer resident; regular in winter.

RED-SHAFTED FLICKER. *Colaptes cafer*. Hypothetical. One spring record. Many records of probably hybrids.

PILEATED WOODPECKER. *Dryocopus pileatus*. Regular. Permanent resident.

RED-BELLIED WOODPECKER. *Centurus carolinus*. Regular. Permanent resident; casual migrant and winter visitant outside regular range.

RED-HEADED WOODPECKER. *Melanerpes erythrocephalus*. Regular. Migrant and summer resident; regular in winter.

YELLOW-BELLIED SAPSUCKER. *Sphyrapicus varius*. Regular. Migrant and summer resident; casual in winter.

HAIRY WOODPECKER. *Dendrocopos villosus*. Regular. Permanent resident.

DOWNY WOODPECKER. *Dendrocopos pubescens*. Regular. Permanent resident.

BLACK-BACKED THREE-TOED WOODPECKER. *Picooides arcticus*. Regular. Summer resident, migrant, and winter visitant.

NORTHERN THREE-TOED WOODPECKER. *Picooides tridactylus*. Regular. Winter visitant; casual summer visitant.

Family TYRANNIDAE: Tyrant Flycatchers

EASTERN KINGBIRD. *Tyrannus tyrannus*. Regular. Migrant and summer resident.

WESTERN KINGBIRD. *Tyrannus verticalis*. Regular. Migrant and summer resident.

SCISSOR-TAILED FLYCATCHER. *Muscivora forficata*. Casual. Spring migrant and summer visitant; one fall record.

GREAT CRESTED FLYCATCHER. *Myiarchus crinitus*. Regular. Migrant and summer resident.

EASTERN PHOEBE. *Sayornis phoebe*. Regular. Migrant and summer resident.

BLACK PHOEBE. *Sayornis nigricans*. Hypothetical. One fall record.

SAY'S PHOEBE. *Sayornis saya*. Hypothetical. One fall record.

YELLOW-BELLIED FLYCATCHER. *Empidonax flaviventris*. Regular. Migrant and summer resident.

ACADIAN FLYCATCHER. *Empidonax virescens*. Regular. Summer resident in Houston County.

TRAILL'S FLYCATCHER. *Empidonax traillii*. Regular. Migrant and summer resident.

LEAST FLYCATCHER. *Empidonax minimus*. Regular. Migrant and summer resident.

EASTERN WOOD PEWEE. *Contopus virens*. Regular. Migrant and summer resident.

OLIVE-SIDED FLYCATCHER. *Nuttallornis borealis*. Regular. Migrant and summer resident.

Family ALAUDIDAE: Larks

HORNED LARK. *Eremophila alpestris*. Regular. Migrant and summer resident; regular in winter.

Family HIRUNDINIDAE: Swallows

VIOLET-GREEN SWALLOW. *Tachycineta thalassina*. Hypothetical. One fall record.

TREE SWALLOW. *Iridoprocne bicolor*. Regular. Migrant and summer resident.

BANK SWALLOW. *Riparia riparia*. Regular. Migrant and summer resident.

ROUGH-WINGED SWALLOW. *Stelgidopteryx ruficollis*. Regular. Migrant and summer resident.

BARN SWALLOW. *Hirundo rustica*. Regular. Migrant and summer resident.

CLIFF SWALLOW. *Petrochelidon pyrrhonota*. Regular. Migrant and summer resident.

PURPLE MARTIN. *Progne subis*. Regular. Migrant and summer resident.

Family CORVIDAE: Jays, Magpies, and Crows

GRAY JAY. *Perisoreus canadensis*. Regular. Primarily permanent resident; also erratic fall migrant and winter visitant.

BLUE JAY. *Cyanocitta cristata*. Regular. Primarily permanent resident; also regular migrant north.

BLACK-BILLED MAGPIE. *Pica pica*. Regular. Fall migrant and winter visitant; casual summer resident.

COMMON RAVEN. *Corvus corax*. Regular. Summer resident, fall migrant, and winter visitant.

COMMON CROW. *Corvus brachyrhynchos*. Regular. Migrant and summer resident; regular in winter.

CLARK'S NUTCRACKER. *Nucifraga columbiana*. Casual. Fall migrant and winter visitant.

BLACK-CAPPED CHICKADEE. *Parus atricapillus*. Regular. Primarily permanent resident; also erratic migrant and winter visitant.

BOREAL CHICKADEE. *Parus hudsonicus*. Regular. Permanent resident; casual winter visitant outside regular range.

TUFTED TITMOUSE. *Parus bicolor*. Regular. Permanent resident; casual winter visitant outside regular range.

Family SITTIDAE: Nuthatches

WHITE-BREASTED NUTHATCH. *Sitta carolinensis*. Regular. Primarily permanent resident; also regular winter visitant outside regular range.

RED-BREASTED NUTHATCH. *Sitta canadensis*. Regular. Permanent resident; also erratic migrant and winter visitant.

Family CETHIIDAE: Creepers

BROWN CREEPER. *Certhia familiaris*. Regular. Migrant, summer resident, and winter visitant.

Family CINCLIDAE: Dippers

DIPPER. *Cinclus mexicanus*. Accidental. One winter record.

Family TROGLODYTIDAE: Wrens

HOUSE WREN. *Troglodytes aedon*. Regular. Migrant and summer resident.

WINTER WREN. *Troglodytes troglodytes*. Regular. Migrant and summer resident; casual in winter.

BEWICK'S WREN. *Thryomanes bewickii*. Casual. Migrant and summer resident.

CAROLINA WREN. *Thryothorus ludovicianus*. Casual. Migrant, summer resident, and winter visitant.

LONG-BILLED MARSH WREN. *Telmatodytes palustris*. Regular. Migrant and summer resident; accidental in winter.

SHORT-BILLED MARSH WREN. *Cistothorus platensis*. Regular. Migrant and summer resident.

ROCK WREN. *Salpinctes obsoletus*. Accidental. Two spring and two fall records.

Family MIMIDAE: Mockingbirds and Thrashers

MOCKINGBIRD. *Mimus polyglottos*. Regular. Migrant, summer resident, and winter visitant.

CATBIRD. *Dumetella carolinensis*. Regular. Migrant and summer resident; accidental in winter.

BROWN THRASHER. *Toxostom rufum*. Regular. Migrant and summer resident; casual in winter.

Family TURDIDAE: Thrushes, Solitaires, and Bluebirds

ROBIN. *Turdus migratorius*. Regular. Migrant, summer resident, and winter visitant.

VARIED THRUSH. *Ixoreus naevius*. Regular. Migrant and winter visitant.

WOOD THRUSH. *Hylocichla mustelina*. Regular. Migrant and summer resident.

HERMIT THRUSH. *Hylocichla guttata*. Regular. Migrant and summer resident.

SWAINSON'S THRUSH. *Hylocichla ustulata*. Regular. Migrant and summer resident.

GRAY-CHEEKED THRUSH. *Hylocichla minima*. Regular. Migrant.

VEERY. *Hylocichla fuscescens*. Regular. Migrant and summer resident.

EASTERN BLUEBIRD. *Sialia sialis*. Regular. Migrant and summer resident; casual in winter.

MOUNTAIN BLUEBIRD. *Sialia currucoides*. Casual. Migrant; one winter record.

TOWNSEND'S SOLITARIE. *Myadestes townsendi*. Casual. Migrant and winter visitant.

Family SYLVIIDAE: Gnatcatchers and Kinglets

BLUE-GRAY GNATCATCHER. *Poliophtila caerulea*. Regular. Migrant and summer resident.

GOLDEN-CROWNED KINGLET. *Regulus satrapa*. Regular. Migrant, summer resident, and winter visitant.

RUBY-CROWNED KINGLET. *Regulus calendula*. Regular. Migrant and summer resident; accidental in winter.

Family MOTACILLIDAE: Pipits

WATER PIPIT. *Anthus spinoletta*. Regular. Migrant.

SPRAGUE'S PIPIT. *Anthus spragueii*. Regular. Migrant and summer resident.

Family BOMBYCILLIDAE: Waxwings

BOHEMIAN WAXWING. *Bombycilla garrulus*. Regular. Migrant and winter visitant; accidental in summer.

CEDAR WAXWING. *Bombycilla cedrorum*. Regular. Migrant, summer resident, and winter visitant.

Family LANIIDAE: Shrikes

NORTHERN SHRIKE. *Lanius excubitor*. Regular. Migrant and winter visitant.

LOGGERHEAD SHRIKE. *Lanius ludovicianus*. Regular. Migrant and summer resident; accidental in winter.

Family STURNIDAE: Starlings

STARLING. *Sturnus vulgaris*. Regular. Primarily permanent resident; also regular migrant.

Family VIREONIDAE: Vireos

WHITE-EYED VIREO. *Vireo griseus*. Hypothetical. One spring and one summer record.

RED-EYED VIREO. *Vireo olivaceus*. Regular. Migrant and summer resident.

BELL'S VIREO. *Vireo bellii*. Regular. Migrant and summer resident.

PHILADELPHIA VIREO. *Vireo philadelphicus*. Regular. Migrant and summer resident.

YELLOW-THROATED VIREO. *Vireo flavifrons*. Regular. Migrant and summer resident.

WARBLING VIREO. *Vireo gilvus*. Regular. Migrant and summer resident.

SOLITARY VIREO. *Vireo solitarius*. Regular. Migrant and summer resident.

Family PARULIDAE: Wood Warblers

BLACK-AND-WHITE WARBLER. *Mniotilta varia*. Regular. Migrant and summer resident.

NASHVILLE WARBLER. *Vermivora ruficapilla*. Regular. Migrant and summer resident.

PROTHONOTARY WARBLER. *Protonotaria citrea*. Regular. Migrant and summer resident.

PARULA WARBLER. *Parula americana*. Regular. Migrant and summer resident.

WORM-EATING WARBLER. *Helmitheros vermivorus*. Casual. Spring migrant.

YELLOW WARBLER. *Dendroica petechia*. Regular. Migrant and summer resident.

GOLDEN-WINGED WARBLER. *Vermivora chrysoptera*. Regular. Migrant and summer resident.

MAGNOLIA WARBLER. *Dendroica magnolia*. Regular. Migrant and summer resident.

BLUE-WINGED WARBLER. *Vermivora rapinus*. Regular. Migrant and summer resident.

CAPE MAY WARBLER. *Dendroica tigrina*. Regular. Migrant and summer resident.

TENNESSEE WARBLER. *Vermivora peregrina*. Regular. Migrant and summer resident.

BLACK-THROATED BLUE WARBLER. *Dendroica caerulescens*. Regular. Migrant and summer resident.

ORANGE-CROWNED WARBLER. *Vermivora celata*. Regular. Migrant; accidental summer visitant.

MYRTLE WARBLER. *Dendroica coronata*. Regular. Migrant and summer resident; accidental in winter.

AUDUBON'S WARBLER. *Dendroica auduboni*.
Accidental. Three spring records.

BLACK-THROATED GRAY WARBLER. *Dendroica nigrescens*. Accidental. Two spring records.

BLACK-THROATED GREEN WARBLER. *Dendroica virens*. Regular. Migrant and summer resident.

HERMIT WARBLER. *Dendroica occidentalis*.
Accidental. One spring record.

CERULEAN WARBLER. *Dendroica cerulea*.
Regular. Migrant and summer resident.

BLACKBURNIAN WARBLER. *Dendroica fusca*.
Regular. Migrant and summer resident.

CHESTNUT-SIDED WARBLER. *Dendroica pennsylvanica*. Regular. Migrant and summer resident.

BAY-BREASTED WARBLER. *Dendroica castanea*. Regular. Migrant and summer resident.

BLACKPOLL WARBLER. *Dendroica striata*.
Regular. Migrant.

PINE WARBLER. *Dendroica pinus*. Regular.
Migrant and summer resident.

KIRTLAND'S WARBLER. *Dendroica kirtlandii*.
Accidental. One spring record in 1892.

PRAIRIE WARBLER. *Dendroica discolor*.
Hypothetical. One spring record.

PALM WARBLER. *Dendroica palmarum*. Regular.
Migrant and summer resident.

OVENBIRD. *Seiurus aurocapillus*. Regular.
Migrant and summer resident.

NORTHERN WATERTHRUSH. *Seiurus noveboracensis*. Regular. Migrant and summer resident.

LOUISIANA WATERTHRUSH. *Serius motacilla*.
Regular. Migrant and summer resident.

KENTUCKY WARBLER. *Oporornis formosus*.
Casual. Migrant and summer visitant.

CONNECTICUT WARBLER. *Oporornis agilis*.
Regular. Migrant and summer resident.

MOURNING WARBLER. *Oporornis philadelphia*.
Regular. Migrant and summer resident.

YELLOWTHROAT. *Geothlypis trichas*. Regular.
Migrant and summer resident.

YELLOW-BREASTED CHAT. *Icteria virens*.
Regular. Migrant and summer resident.

HOODED WARBLER. *Wilsonia citrina*.
Accidental. Two spring records.

WILSON'S WARBLER. *Wilsonia pusilla*. Regular.
Migrant; accidental summer visitant.

CANADA WARBLER. *Wilsonia canadensis*.
Regular. Migrant and summer resident.

AMERICAN REDSTART. *Setophaga ruticilla*.
Regular. Migrant and summer resident.

Family PLOCEIDAE: Weaver Finches

HOUSE SPARROW. *Passer domesticus*. Regular.
Permanent resident.

Family ICTERIDAE: Meadowlarks, Blackbirds, and Orioles

BOBOLINK. *Dolichonyx oryzivorus*. Regular.
Migrant and summer resident.

EASTERN MEADOWLARK. *Sturnella magna*.
Regular. Migrant and summer resident; regular in winter.

WESTERN MEADOWLARK. *Sturnella neglecta*.
Regular. Migrant and summer resident; regular in winter.

YELLOW-HEADED BLACKBIRD. *Xanthocephalus xanthocephalus*. Regular. Migrant and summer resident; accidental in winter.

RED-WINGED BLACKBIRD. *Agelaius phoeniceus*. Regular. Migrant and summer resident; regular in winter.

ORCHARD ORIOLE. *Icterus spurius*. Regular.
Migrant and summer resident.

BALTIMORE ORIOLE. *Icterus galbula*. Regular.
Migrant and summer resident; accidental in winter.

BULLOCK'S ORIOLE. *Icterus bullockii*.
Accidental. One fall record.

RUSTY BLACKBIRD. *Euphagus carolinus*. Regular. Migrant and winter visitant.

BREWER'S BLACKBIRD. *Euphagus cyanocephalus*. Regular. Migrant and summer resident; casual in winter.

COMMON GRACKLE. *Quiscalus quiscula*. Regular. Migrant and summer resident; regular in winter.

BROWN-HEADED COWBIRD. *Molothrus ater*. Regular. Migrant and summer resident; casual in winter.

Family THRAUPIDAE: Tanagers

WESTERN Tanager. *Piranga ludoviciana*. Casual. Spring migrant.

SCARLET Tanager. *Piranga olivacea*. Regular. Migrant and summer resident.

SUMMER Tanager. *Piranga rubra*. Casual. Spring migrant.

Family FRINGILLIDAE: Grosbeaks, Finches, Sparrows, and Buntings

CARDINAL. *Richmondia cardinalis*. Regular. Permanent resident; casual winter visitant outside regular range.

ROSE-BREASTED GROSBEAK. *Pheucticus ludovicianus*. Regular. Migrant and summer resident.

BLACK-HEADED GROSBEAK. *Pheucticus melanocephalus*. Accidental. One summer record.

BLUE GROSBEAK. *Guiraca caerulea*. Regular. Spring and summer visitant in Rock, Nobles and Murray Counties.

INDIGO BUNTING. *Passerina cyanea*. Regular. Migrant and summer resident.

LAZULI BUNTING. *Passerina amoena*. Casual. Spring migrant and summer visitant.

PAINTED BUNTING. *Passerina ciris*. Accidental. Three spring records.

DICKCISSEL. *Spiza americana*. Regular. Migrant and summer resident.

EVENING GROSBEAK. *Hesperiphona vespertina*. Regular. Migrant, summer resident, and winter visitant.

PURPLE FINCH. *Carpodacus purpureus*. Regular. Migrant, summer resident, and winter visitant.

HOUSE FINCH. *Carpodacus mexicanus*. Hypothetical. One spring record of possible escaped cage bird.

PINE GROSBEAK. *Pinicola enucleator*. Regular. Migrant and winter visitant.

GRAY-CROWNED ROSY FINCH. *Leucosticte tephrocotis*. Accidental. Two winter records.

EUROPEAN GOLDFINCH. *Carduelis carduelis*. Hypothetical. One spring record of possible escaped cage bird.

HOARY REDPOLL. *Acanthis hornemanni*. Regular. Migrant and winter visitant.

COMMON REDPOLL. *Acanthis flammea*. Regular. Migrant and winter visitant.

PINE SISKIN. *Spinus pinus*. Regular. Migrant, summer resident, and winter visitant.

AMERICAN GOLDFINCH. *Spinus tristis*. Regular. Migrant and summer resident; regular in winter.

RED CROSSBILL. *Loxia curvirostra*. Regular. Migrant and winter visitant; erratic summer resident and visitant.

WHITE-WINGED CROSSBILL. *Loxia leucoptera*. Regular. Migrant and winter visitant; erratic summer resident and visitant.

GREEN-TAILED TOWHEE. *Chlorura chlorura*. Accidental. One winter record.

RUFIOUS-SIDED TOWHEE. *Pipilo erythrophthalmus*. Regular. Migrant and summer resident; casual in winter.

LARK BUNTING. *Calamospiza melanocorys*. Regular. Migrant; casual summer resident.

- SAVANNAH SPARROW. *Passerculus sandwichensis*. Regular. Migrant and summer resident.
- GRASSHOPPER SPARROW. *Ammodramus savannarum*. Regular. Migrant and summer resident.
- BAIRD'S SPARROW. *Ammodramus bairdii*. Regular. Migrant and summer resident in only Clay County since about 1960; formerly more widespread.
- LE CONTE'S SPARROW. *Passerherbulus caudacutus*. Regular. Migrant and summer resident.
- HENSLow'S SPARROW. *Passerherbulus henslowii*. Regular. Migrant and summer resident.
- SHARP-TAILED SPARROW. *Ammospiza caudata*. Regular. Migrant and summer resident.
- VESPER SPARROW. *Poocetes gramineus*. Regular. Migrant and summer resident; accidental in winter.
- LARK SPARROW. *Chondestes grammacus*. Regular. Migrant and summer resident.
- SLATE-COLORED JUNCO. *Junco hyemalis*. Regular. Migrant, summer resident, and winter visitant.
- OREGON JUNCO. *Junco oreganus*. Regular. Migrant and winter visitant.
- GRAY-HEADED JUNCO. *Junco caniceps*. Accidental. Two fall records.
- TREE SPARROW. *Spizella arborea*. Regular. Migrant and winter visitant.
- CHIPPING SPARROW. *Spizella passerina*. Regular. Migrant and summer resident.
- CLAY-COLORED SPARROW. *Spizella pallida*. Regular. Migrant and summer resident.
- FIELD SPARROW. *Spizella pusilla*. Regular. Migrant and summer resident; accidental in winter.
- HARRIS' SPARROW. *Zonotrichia querula*. Regular. Migrant; casual in winter.
- WHITE-CROWNED SPARROW. *Zonotrichia leucophrys*. Regular. Migrant; casual in winter.
- WHITE-THROATED SPARROW. *Zonotrichia albicollis*. Regular. Migrant, summer resident, and winter visitant.
- FOX SPARROW. *Passerella iliaca*. Regular. Migrant; casual in winter.
- LINCOLN'S SPARROW. *Melospiza lincolni*. Regular. Migrant and summer resident.
- SWAMP SPARROW. *Melospiza georgiana*. Regular. Migrant and summer resident; casual in winter.
- SONG SPARROW. *Melospiza melodia*. Regular. Migrant and summer resident; regular in winter.
- MCCOWN'S LONGSPUR. *Rhynchophanes mccownii*. Accidental. One fall record since 1900. Before then occurred as a migrant and summer resident.
- LAPLAND LONGSPUR. *Calcarius lapponicus*. Regular. Migrant and winter visitant.
- SMITH'S LONGSPUR. *Calcarius pictus*. Regular. Migrant.
- CHESTNUT-COLLARED LONGSPUR. *Calcarius ornatus*. Regular. Migrant and summer resident.
- SNOW BUNTING. *Plectrophenax nivalis*. Regular. Migrant and winter visitant.

Editor's Note: The authors of the above article have been MOU officers and have long played important special roles in the Minnesota Ornithologists' Union. Mrs. Green has been supervisor of MOU bird-sighting records for some years. Mr. Janssen was editor of THE LOON for about eleven years.

notes of interest

BLUE-GRAY GNATCATCHER NEST SIGHTING. — On June 25, 1971, I was nest-hunting at the Nature Center at Carver Park — Hennepin County Park Reserve District (actually in Carver Co.). At the edge of some woods just before a meadow I sighted a silent adult Robin being harassed by a pair of Redstarts, a Wood Pewee, and possibly another pair of Redstarts — a sure sign of nest or young. One pair of birds dived at unbelievable speed and pecked the Robin. The Robin stopped the attack by flying 20 or 30 feet and came to rest on its nest. The Wood Pewee moved to another oak within 30 feet of the Robin's nest and settled on its nest saddled on a fork. The identification was made on the Wood Pewee at that time.

One of the remaining birds flew up less than 10 feet from the attack area and within 30 feet of both Robin and Wood Pewee nests to alight on another nest in such a way that only the underside of the tail was visible, showing white feathers (outer when folded) and dark tips on the middle feathers, which indicated it was not a Redstart. Recollections of the wild activity brought to mind the sure presence of Redstarts, now gone from the area, and the other pair of birds that looked like elongated warblers — faster than vireos and even warblers.

The nest itself was small, saddled on a fork of a horizontal oak branch about 35 feet above the ground. It was covered with white fuzzy material, possible plant fibers, spider webs, and/or lichens, much like a Redstart's. However, the overcast sky with the noonday sun did not allow a positive identification.

At 2:15 Kathy Heidel went back with me after we studied possibilities of nest ID and bird shape. After discarding a few species, she suggested a Blue-gray Gnatcatcher, a life bird for both of us. In the better light we watched the pair for more than 45 minutes. We saw the characteristic tail wagging and cocking, the eye ring, the long slender beak, and the blue-gray back with white underneath. Without the commotion caused by the Robin's intrusion, we were able to identify the pair by sound as well as one bird called on approaching the nest and while flitting in the treetops.

The birds took turns on the nest — one for 24 minutes. No food or materials were brought to the nest — one worked in the nest (possibly rearranging the lining or turning eggs) or a few seconds before settling on. It is suspected that there are eggs in the nest and incubation has started, but verification was impossible as the height was beyond reach of the long pole equipped with a mirror. **Marlyn Mauritz, Rt. 4, Box 886, Excelsior, Minn. 55331.**

GREAT HORNED OWL NESTING DATES DIFFER IN WINONA AND MILLE LACS COUNTIES. — In *The Loon* of June, 1970, Mr. P. LeDuc gave interesting information on the 1969 nesting dates of Great Horned Owls at Troy, Winona County. My 1970 observations indicate that this species nests appreciable later near Onamia, Mille Lacs County, just 150 miles farther north.

Let us say that the important dates for a nest are the dates of egg laying,

of hatching, and when the young leave the nest. Both LeDuc and I have dates when young Great Horned Owls left the nest. LeDuc has also a date, March 21, when his owl was newly hatched. And from Bent (1938) we learn that the incubation period of the Great Horned Owl is 28 days.

If we take Bent's figures for the incubation period, LeDuc's owl in Winona County must have laid on Feb. 21. As LeDuc found the newly hatched owl March 21, and saw later that it left the nest some time between May 1-7, it must have spent 6 weeks in the nest.

In 1970, I discovered that an owlet left the Mille Lacs nest May 27. Figuring 28 days from laying until hatching (according to Bent), and figuring 6 weeks in the nest (as found by LeDuc), the Mille Lacs Owl must have laid March 18, and the egg must have hatched April 15. The following lines are showing the difference in LeDuc's and my dates:

LeDuc in Winona Co.	Ivanovs in Mille Lacs Co.
Laid Feb. 21	March 18, 26 days later
Newly hatched March 21	April 15, 26 days later
Left nest between May 1-7	May 27, 20-27 days later

The nesting dates look rather constant in Onamia. In 1968 I saw an incubating Great Horned Owl in the same nest as 1970 on March 24. On May 25 there were two big owlets in the nest. On May 30 they were sitting in nearby trees. **M. Ivanovs, Onamia, MN 56359.**

POSSIBLE SMITH'S LONGSPURS, DULUTH. — On Wednesday, October 13, 1971, about 2:30 p. m., we were on Minnesota Point near Duluth. As we drove near the recreation area, about 30 Lapland Longspurs attracted my attention. As I looked the flock over with 7x50 binoculars, I noticed three birds that appeared much buffier than the others. I soon realized that they were Smith's Longspurs.

They were observed both in flight and on the ground, apparently feeding. All field characteristics were noted, including the buffy underparts, the prominent white wingbar, and the large amount of white on the outer tail feathers. Even though I have never identified Smith's Longspurs in the field before, I am very certain of my identification.

Roberts (1932) lists the Smith's Longspur as being an uncommon migrant through the extreme western areas of the state. Since then, a few more sightings have been reported, all in the western part of the state. There have been comparatively few sightings. Janssen (1965), thinks this may be due to confusion with the Lapland Longspur. In this sighting, I had the chance to compare the two. **James A. Baumhofer, 1884 Berkeley Ave., St. Paul, MN 55105.**

SNOWY EGRET IN ST. PAUL SUBURB. — At about noon, June 1, 1971, I was driving north along the road which divides Lake Vadnais. Just at the spot where the road narrows and the lake is on both sides, three birds flew up from the lake shore west of the road. Two were Black-crowned Night Herons; the other, which rose slowly and flew over my head, was a Snowy Egret. It was about the length of the Black-crowned Night Heron, but trimmer looking and with longer legs.

I could plainly see the black legs and yellow feet which are the distinguishing mark of the Snowy Egret. Having recently seen this species in Texas, I had no difficulty with the identification, which I verified by looking at Robbins' book. **Alice Swedenborg Johnson.**

BAND-TAILED PIGEON. — On June 12, 1971, a Band-tailed Pigeon spent the afternoon in the mature oak trees near my cabin in the Sand Dunes State Forest. It first attracted my attention by its large size, being larger than domestic pigeons, and by the white band on the back side of its neck. Although the body was drab in color, the head showed some iridescence in the sunlight. It was not until two neighbors and I had an opportunity to study it with glasses that the rather indistinct band on the tail could be clearly defined. It caused some concern among the Blue-jay population, which scolded it from a distance. It stayed long enough and posed enough so that detailed study was possible and identification was definite. It was not seen again nor was a second one observed. **Percy Fearing, 110 Virginia, St. Paul, Minnesota 55102.**

NOCTURNAL HUNTING BY THE GREAT BLUE HERON. — It is known that the Great Blue Heron occasionally hunts at night under some conditions, as well as during the day (Audubon, J. J. 1835. Ornithological Biography V. III., A. and C. Black, Edinburgh). However, the actual feeding behavior employed at night remains undescribed. This lack of information is due to the difficulty of observing nocturnal behavior without the use of interfering lights.

During several summers of banding ducks at night, I have often seen Great Blue Herons standing in shallow water far from any roosting site. These observations suggested that night-time feeding is probably a common occurrence in this species. The birds were always disturbed by the lights and by generator noise, however, so night-time feeding could not be described, nor even verified.

While observing night-time behavior of duck broods with a light-intensifying vision scope ("Starlight Scope," Northern Prairie Wildlife Research Center, Jamestown, North Dakota, and Electronics Command, U. S. Army, Philadelphia, Pa.), I was able to observe a 9-minute segment of undisturbed nocturnal hunting behavior of a Great Blue Heron. The observation was made on the night of 5 August, 1971, beginning at 11:55 p. m., on the Mississippi River, about 5 miles northwest of the town of Cass Lake, Minnesota.

Two primary foraging techniques of the Great Blue Heron have been described and categorized as "Stand and Wait" and "Wade or Walk Slowly" (Meyerriecks, 1960, Publ. Nuttall. Orn. Club., No. 2:88)

As I watched, the night-hunting heron waded briefly, then stood motionless for about 2 minutes before making its first thrust. The bird was standing in water about 8 inches deep and was hunting toward shallower clear water over a light sandy bottom. The moon was nearly full and apparently supplied enough light for efficient foraging, at least on brightly colored prey in shallow clear water. The heron made a total of three thrusts during the observation period; one was successful while the other two were unscorable. The prey item taken was a bright silver fish 3 to 4 inches long which I believed from its appearance and location to be a common shiner.

Clearly the Great Blue Heron is capable of hunting successfully at night

under some conditions, despite a lack of specialized eyes as found in the Black-crowned Night Heron. **Joe Ball, Graduate Student, James Ford Bell Museum, University of Minnesota, Mpls. 55455.**

BLACK RAIL IN GOODHUE COUNTY. — Enroute to Frontenac May 12, 1971, Karen and Whitney Eastman, my husband, and I stopped at the marsh located a mile north of Frontenac along old Highway 61. At 10 o'clock the morning was mild and clear. We looked in vain for the Little Blue Heron, a visitor at this marsh in recent years.

While Karen and I were walking along the road, bordered by dense, dried Phragmites and Lythrum and new green sedge, she stated that she thought she had seen a Black Rail. Scarcely moving from my tracks, I glued my eyes on the spot she was watching. Almost before Karen had finished the sentence I got a glimpse of something that flew up in a semi-circle so fast that I could not detect any form or color. In about a minute I saw a tiny bird dart between the green tufts of grass no more than 3 feet in front of me. I told Karen that what I saw was not black but black-and-brown with white spots. She said, "You saw the Black Rail."

Upon returning to the car we referred to three field guides: Peterson, Pough, and Robbins. To my amazement and delight, these sources verified that it **was** the Black Rail I had seen. Because I had never expected to find this smallest rail, I had not previously studied it and so was unfamiliar with any identification marks. When Karen said "Black Rail," I pictured a black chick (the chicks of all rails are black), and so I was surprised when I saw the colors.

Later, we four got out of the car and searched for another look at the rail but did not see it again. Five days later I returned to the marsh, this time in heavy rain with the road flooded, but did not find the bird.

There is no specimen in the Bell Museum, but a feather taken several years ago by Dr. Warner was studied and identified as that of the Black Rail. In addition, one was seen in Anoka County August 14, 1968, by Jerry Kaufman and his brother. (*Loon*, Vol. 40, p. 101). Are there other reliable observations. **Fran Nubel, 2000 Cedar Lake Blvd., Mpls., Mn.**

NESTING OF RING-BILLED AND HERRING GULLS ON MILLE LACS LAKE, 1970. — In 1963 Ring-billed Gulls and in 1966 Herring Gulls were first reported nesting on Mille Lacs Lake. In the summer of 1970 I visited two small islands on Mille Lacs Lake.

Spirit Island (June 15): There were at least 50 Ring-billed Gulls and a few Herring Gulls. Two adult and two downy young Herring Gulls were standing at a nest in a crevice between two boulders. Another pair was on the other side of the island. Either they had no young or the latter stayed hidden among the adults. There was also a group of six immature Herring Gulls in first and second-year plumage. They stayed apart from the adult birds. Also a single Caspian Tern and about 50 Common Terns were there. All observations were made from a boat.

Hennepin Island (June 26): There were also not less than 50 Ring-billed Gulls and Common Terns, but no Herring Gulls.

The Ring-billed Gulls and Common Terns were nesting on both islands, which consist of high piles of huge boulders. I was unable to walk among the boulders, so staying in a boat I saw all adult birds and some of the young and eggs. But the Onamia game warden, D. McShane, who took me to the islands, took a walk there and told me there were eggs and young everywhere. **M. Ivanovs, Route 1, Box 217, Onamia, Minn. 56359**

ATTEMPT TO ESTABLISH WILD TURKEYS IN OTTER TAIL CO. —

On the evening of May 14, 1971, while driving to Battle Lake, Minnesota, my family and I sighted a turkey feeding along the shoulder of State Highway 78 some 1.3 miles south of the junction with State Highway 210. This bird had the chestnut-colored tips on its tail feathers.

The next morning I made an inquiry in Battle Lake about the presence of wild turkeys in that area. I was informed that Paul Duetsch had raised some wild turkeys. Later Mr. Deutsch told me that he had obtained wild turkeys in 1969. The females had nested in the area during the summer of 1970. Young had been observed then, but none were known to have survived.

During the winter of 1970-1971 10 females and 6 males had wintered at Mr. Deutsch's farmyard. During our conversation he indicated that the females had once again taken to the woods and now came back to the farmyard for only short periods of time. Hopefully this year some of the chicks might survive. **Oscar L. Johnson.**

EDITOR'S NOTE: If wild turkeys ever existed naturally in what is now the state of Minnesota, it was in the extreme southeast, where Minnesota winters are their mildest. It seems unlikely that an attempt to establish wild turkeys in west central Minnesota can ever be successful for long. R. E. T.

POSSIBLE TRUMPETER SWANS FROM CARVER PARK CAPTIVE

FLOCK. — Sunday morning, May 23, 1971 my boys, Brad, 10, and Mark, 7, gave out a shout of delight when they spotted a swan swimming on Goose Lake, Hennepin County. At that time the swan was approximately 30 to 40 yards away from shore. Later it swam to within about 25 yards from our point of observation. At that time I was able to see a pinkish-orange color on the edge of the mandibles. Kortright indicates that this mark is diagnostic for the Trumpeter Swan.

Later that same morning we sighted at a distance of about 300 yards what I believe was another Trumpeter Swan at Hayden Lake, Hennepin County. Since we had not taken our telescope with us on this particular trip, we were unable to get a close-up view of the mandibles.

We again saw a Trumpeter Swan on Goose Lake the evening of May 25, 1971. At this time we were accompanied by Jamie Nelson. The swan we observed on this occasion obliged us with several loud "trumpet" calls. These Trumpeter Swans we have observed are very likely from the flock at Carver Nature Center. **Oscar L. Johnson, 7733 Florida Circle, Brooklyn Park, MN 55428.**

OWL AND GROUSE SEEMINGLY TRY TO OUTDO EACH OTHER AS

NOISEMAKERS. — I was camping with another boy in a small woods just

outside the village of Shafer. An hour or two before sunrise on April 12, 1971, I heard a Ruffed Grouse drum nearby. Then a Great Horned Owl hooted, apparently triggered by the grouse. For a half hour or so they kept taking turns, the grouse drumming and the owl hooting. It seemed they were answering one another, or trying to outdo each other.

Later, when I got up, I found the grouse near an old fallen tree, but I never saw the owl. **Garth K. Turner, Box 66, Shafer, MN. 55074.**

REPORT FROM TODD COUNTY. — Someone pointed out that reports from Todd County have been scarce. Since I was brought up there, and since I often hunt and watch birds there, let me report a few things about the birds there.

Todd County is not noted for its Woodcock migration, but Woodcock do come through about the first weekend in October, and I have flushed a dozen in an afternoon's hunting near Eagle Bend. Usually they are along creek bottoms and swampy areas, but occasionally I have found them on high ground.

I can not name all the birds of Todd County, but some that have interested me are Snowy Owls, Barred Owls, Yellowheaded Blackbirds, Hungarian Partridges, Pileated Woodpeckers, Red-bellied Woodpeckers, and American Magpies.

In the mid-1950's this area was fairly good for Pheasant hunting, and it was not difficult to shoot three cocks in an afternoon. But in the past 2 years I am sure I have not seen half a dozen Pheasants in Todd County. They have just disappeared in the last 5 or 10 years.

Todd County is good duck territory, and all familiar species occur here. We get a fairly good flight of big Canadian honkers, some stopping and others going straight on through. **Jerry N. Barringer, 602 E. 25th Street, Minneapolis 55404.**

EDITOR'S NOTE: Mr. Barringer attached a list of birds that he had identified in Todd County. Members and other readers are urged to send reports of other Minnesota areas that are not often mentioned in this magazine. The first and most obvious step would be to report bird sightings to Mrs. Jan Green for inclusion in "The Season" article that appears in each issue of this magazine. And if you have sufficient information, write a "Note of Interest" or an article of full length. **R. E. T.**

You can't teach an old gnu tricks.

1970-71 WINTER SEASON

by Janet C. Green

The most obvious aspect of the winter of 1970-71 was the lack of winter finches and waxwings. Almost no redpolls, Pine Grosbeaks, crossbills, or Bohemian Waxwings were seen, which contrasted sharply with the previous winter when all these species were widespread and the Common Redpoll was particularly abundant. This year the Common Redpoll was conspicuous by its absence, and the American Goldfinch was the invasion bird of the winter. The Purple Finch and Evening Grosbeak were also less numerous than in the previous winter.

All this points up why these species are known as erratic winter visitors. The exact why's and where's of their population movements are not systematically charted on a continental basis, and it is impossible to predict what the winter will bring. Detailed knowledge of food preferences, food availability in breeding and wintering areas, and nesting success over a wide area of boreal forest would be necessary for prediction. This is not available, especially for the vast areas of boreal forest areas in Canada, where there are few people, never mind birders. So the unknown is always one

of the interesting dimensions of winter birding.

The most exciting bird of the winter was the Ivory Gull on Lake Superior. Records show only three other sightings of this rare arctic species: in the winter of 1948-49, 1955-56, and 1966-67, with only one bird seen each time. The three observations this winter of an adult Ivory Gull are probably all the same bird, although they were made in three different localities.

The last two sightings were at late winter gull concentrations areas. It seems from the number and ages of the Glaucous Gulls in the flock that the gulls move freely back and forth from the Duluth city dump to the Knife River fishing harbor. When Lake Superior is frozen over at this arm of the Lake there is little other food available.

Some 85 observers reported the 116 species found this winter (an average number). Three species that are only of casual occurrence in Minnesota were reported: the Gyrfalcon, Mountain Bluebird, and Townsend's Solitaire. A few species that do not normally try to overwinter were seen: the Black-crowned Night Heron, Ring-billed Gull, and Rufous-sided Towhee.

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Eared Grebe: 4-12 (2) Nobles HSH.

Red-necked Grebe: 12-1 Hennepin VL.

Horned Grebe: 12-1 Hennepin VL; 1-23 Cook T. Dyke.

Pied-billed Grebe: 12-4 Hennepin CLH.

Great Blue Heron: 12-5 Winona AFR.

Green Heron: 4-24 Hennepin FN.

BLACK-CROWNED HERON: 12-6 (HFH) — 1-23 (DAB) Black Dog, Dakota; also seen by RG, RBJ.

Whistling Swan: fall: — 12-12 (500, FZL) — 12-20 (BTV) Wabasha.

Trumpeter Swan: two out of flock of 15 flew away 2-17 Carver KH.

Canada Goose: last North 12-13 Lake JCG; South lingered to 1-7 Hennepin, Ramsey (up to 10), Dec. Wabasha (300 on 12-6, BTV; 40 on 12-31, DGM); wintered Olmsted (15,000), Goodhue (2), Lac qui Parle (1500, 1-25, BAH), Carver (130, KH).

Snow Goose: all winter, Brainerd, Crow Wing JB; 1-16 (2, CW) — 2-6 (1, RG) — 2-28 (1, CW) Olmsted.

Snow/Blue Goose: 3-12 (6) Olmsted FN.

Mallard: wintered North in Crow Wing (Brainerd, 35, JB), Cook (40), St. Louis (Virginia, 80, KRE; North Shore up to 6); South in Wabasha, Olmsted, Rice, Winona, Sherburne, Goodhue, Wright, Lac qui Parle (250, BAH), Dakota (5,000, RJB), Hennepin, Ramsey, Carver (400, KH).

Black Duck: wintered North in Cook (5), St. Louis (Virginia, 1); South in Winona (10), Goodhue (25), Dakota (30), Ramsey, Hennepin (up to 6).

Gadwall: 2-20 Goodhue DAB.

Pintail: 12-4 Hennepin CLH; 12-26 (BL), 1-2 (RG) Ramsey; 1-3 Goodhue Xmas; 2-3 (11) Watonwan EDK; 2-20 Goodhue K&JG.

Blue-winged Teal: 12-29 (free-flying bird) Hennepin HFH; 3-31 Dakota FN.

American Widgeon: 12-19 Winona FZL; 1-24 Hennepin RG; all winter Hennepin VL.

Wood Duck: North last migrant 12-6 Duluth MMC; wintered St. Louis (Virginia, 1-10 DAB, 2-15 KRE), Cass (Pine River, 2-13 pr RG); South migrants to 12-27 Wright ETS; wintered 1-3 Goodhue Xmas, 12-26 (BL), 2-14 (JJ) Ramsey.

Ring-necked Duck: wintered North in St. Louis (Virginia, 1-10 DAB, 2-15 KRE); lingered South to 1-2 Ramsey RG, 1-9 Dakota RBJ.

Canvasback: 12-3 (4) Wabasha DGM; 12-5 Hennepin HFH; 1-3 (JCG — 1-23 (MMC) French River, St. Louis.

Greater Scaup: 12-18 Duluth MMC.

Lesser Scaup: 12-2 (100) Wabasha BTV; 12-5 Hennepin HFH; 1-2 Ramsey RG; 1-3 Olmsted ETS.

Common Goldeneye: wintered North in Cook (18), Lake (23), St. Louis (15), Carlton (5); South in Wabasha (12),

Goodhue, Winona, Olmsted (4), Dakota (20), Ramsey, Hennepin (30), Sherburne (30), Stearns; spring migrants 2-16-28 (15-150) Wabasha DGM, 2-25 (15) Olmsted CW.

Bufflehead: 12-4 Hennepin CLH; 12-26 (2, HFH) — 2-28 (2, KRE) Dakota; 12-13 & 1-5 Lake JCG; 1-16 Duluth RBJ.

Oldsquaw: all winter on Lake Superior; greatest number 1-23 (13) Grand Marais MMC, 1-24 (20) Beaver Bay MMC, 2-26 (30) Two Harbors JCG.

Harlequin Duck: 12-5 (2 fem.) Duluth John Green; 12-6 (sub-adult male) French River, St. Louis MMC; 1-3 (2 fem.) Duluth KRE; 1-21 (different sub-adult male) Stoney Pt., St. Louis JCG.

Hooded Merganser: 12-5 Hennepin HFH; 12-26 Hennepin DAB.

Common Merganser: last migrants South 12-1 (400, BTV) — 12-8 (75, DGM) — 12-12 (10, FZL) Wabasha; wintered North on Lake Superior (up to 3); wintered South Dakota (1-1, 30, RBJ; 2-11, 10, K&JG), Goodhue; early migrants North 2-15 (7), 2-18 (13) French River, St. Louis JCG.

Red-breasted Merganser: last South 12-2 (20) Wabasha BTV; last North 1-9 French River, St. Louis DAB, 1-23 Cook MMC.

Goshawk: 3 reports South 12-15 Hennepin W&KE, 2-15 (3 ad) Ramsey JAB, 2-19 Hennepin CKS; 9 reports North from Itasca, Crow Wing, St. Louis, Lake — all singles and imm. except 1-3 (2 ad, 1 imm) Duluth KRE.

Sharp-shinned Hawk: 1-25 Stearns MC; 1-2, 1-7, 2-16 Wabasha DGM.

Cooper's Hawk: 12-6 Dakota JCG; 12-23 Winona BTV; 1-11 Goodhue FN.

Red-tailed Hawk: migration to 12-6 (12) Winona BTV; last North 1-3 Duluth Xmas; wintered South in Winona, Wabasha, Goodhue, Rice, Olmsted, Cottonwood, Wright, Washington, Hennepin, Carver, Dakota, Ramsey.

Red-shouldered Hawk: reported in Winona (12-2, BTV; 2-6, RG; 2-13, RBJ; 2-14, K&JG) Wabasha (12-31, DGM).

Rough-legged Hawk: last ne 12-6 Duluth MMC; wintered North in Clearwater, Marshall; early winter (to 1-1) South in Wright, Wabasha, Winona, Dakota, (plus 2-18, RC), Hennepin, Sherburne, Rice (plus 1-25, OAR); all winter Nobles, Anoka (WHL).

Swainson's Hawk: 5-15 s. of Chatfield, Fillmore Co., 5-17 southern Dakota Co., E. M. Campbell.

Golden Eagle: 12-5 Duluth S. Gilbertson; 12-31 Wabasha DGM; 1-19 St. Croix Park WHL; 1-23 & 31 Agassiz NWR staff; 2-6 (2 ad.) Winona RG.

Bald Eagle: fall migration peak 12-5 (about 22, Duluth), 12-6 (24 Wabasha, 14 Winona, BTV; 40 Goodhue to Winona, KRE); wintered in Crow Wing (1-1, 2 imm. JB), Lake (North Shore, 2), Duluth (1-12 MMC), Nobles (12-25 Ochoda Refuge, V. Leak), Lac qui Parle (1-23 Refuge BAH), Goodhue (16 on Xmas), Wabasha 12-30 (21, CKS) — 2-14 (19, K&JG); spring migration 2-22 (48) Upper Mississippi NWR, K. Krumm, 2-27 (24) Wabasha VL, 2-27 (22 ad, 5 imm.)

Houston FZL; one at nest site Houston 2-21, FZL; 3-12 Minn. City (6), Weaver (2), Read's Ldg (26) — total 24 ad., 10 imm., FN.

Marsh Hawk: 2-15 Dakota HFH; 3-12 Goodhue FN.

GYRFALCON: 12-23 (gray phase female, specimen in Bell Museum) Millville, Wabasha.

Sparrow Hawk: migration to 12-6 (14 Winona BTV, 6 Dakota JCG); wintered **South** in Winona, Wabasha, Goodhue, Olmsted, Rice, Ramsey, Cottonwood, Wright, Dakota, Carver, Hennepin; **North** in Clearwater (1-1, RCD).

Ruffed Grouse: reported from Cook, Lake, St. Louis, Crow Wing, Mille Lacs, Clearwater, Cass, Marshall, Pine, Anoka, Wright, Isanti, Washington, Sherburne, Goodhue, Winona.

Sharp-tailed Grouse: reported from Marshall, Carlton (15 Cromwell JGH), Pine.

BOBWHITE: 1-3 (8) sec. 12, Walcott Twp., Rice Co. OAR.

Ring-necked Pheasant: reported from Duluth, Crow Wing, and Big Stone Counties southward.

Chukar: 1-10 (8) K&JG, DAB; 2-14 (7) KRE; Ely, St. Louis Co.

Gray Partridge: reported from Cottonwood, Nobles, Jackson (20), Murray, Blue Earth, Watonwan, Rice, Olmsted, Winona, Wabasha, Dakota (23).

American Coot: last migrant 12-9 Hennepin MB; 2 wintered Howard Lake, Wright Co. (12-9, RBJ; 2-20, RG).

Killdeer: 12-19, 1-9 Winona FZL.

Common Snipe: wintered in Carver, Ramsey, Hennepin (3 to 4), Winona (4 to 5)

Glaucous Gull: first adult 12-6 Duluth MMC; peak wintering counts 12-13 (1 ad., 10 imm.) Eagles Nest Lake, rural Duluth; 1-16-17 (3 ad., 12 imm.) Knife River; 1-23 (4 imm.) Grand Marais; 2-18 (1 ad., 13 imm.) Duluth city dump; JCG.

Herring Gull: last South 12-6 (25) Wabasha BTV, 12-8 (6) Dakota RC; one, Black Dog, Dakota Co. 12-26 (HFH) 1-1 (RBJ, RG) 2-20 (RBJ); peak wintering counts Lake Superior 12-13 (700) Eagles Nest Lake, rural Duluth, 1-16 (400) Knife River, 1-24 (175) Grand Marais, JCG, 2-17 (125) Duluth city dump MMC.

Ring-billed Gull: last South 12-1 Anoka BAH; 12-6 (40, BTV), 12-7 (15, DGM) Wabasha; one, Black Dog, Dakota Co. 12-26 (HFH) 1-1 (RG, RBJ) 1-23 (DAB) 2-1 (RG) 2-13 (HFH) 2-15 (VL).

IVORY GULL: one adult 2-17 Duluth city dump MMC; one adult 3-14 Knife River harbor Jim & Judy Brandenburg; probably same bird as seen in Oct. (Loon 42:146).

Sandhill Crane: 3-30 Hennepin FN.

Mourning Dove: wintered **North** in Duluth 1-3 (8, Xmas), 2-4 & 3-2 (1, JKB); **South** in Cottonwood, Nobles, Rice, Pope, Fillmore, Winona, Wabasha, Goodhue, Carver, Sherburne, Anoka, Dakota, Ramsey, Hennepin, (31 in Dec., 14 in Feb., MB).

Screech Owl: reported from Sherburne, Hennepin, Dakota, Winona, Houston, Rice, Blue Earth, Nobles, Cottonwood.

Great Horned Owl: reported from St. Louis, Marshall, Mille Lacs, Wright, Sherburne, Carver, Hennepin, Wabasha, Winona, Rice, Olmsted, Blue Earth, Watonwan, Nobles, Cottonwood, Ramsey.

Snowy Owl: **North:** Duluth area 12-6 harbor MMC & rural OAF, mid-Dec. to mid-Feb. minimum of 18 birds **vide** JCG; 12-16 & 2-10 Agassiz NWR staff; 3 all winter Rice Lake NWR, JB; 1-23-24 Cook JCG; 2-11 Mille Lacs MI; 2-14 Sax, St. Louis MMC; 2-23 Crow Wing JB; **Southwest:** 12-14 Pope JAH; 12-26 Nobles **vide** JCG; 12-27 Rock JCG; **Southeast:** 1-11-23 Coates, Dakota Co. FN & RG; 1-18 Sherburne NWR, BD; 1-18-24 N. Mpls. ETS; 1-23 — 2-3 Brooklyn Ctr. HFH; Feb. Wabasha **vide** KRE; 2-14 Wright EHD.

Barred Owl: reported from Cook, Lake, St. Louis, Crow Wing, Washington, Hennepin, Carver, Dakota, Wabasha, Goodhue, Winona, Fillmore, Pope (Cyrus WH).

Great Gray Owl: 1-23 Grand Portage, Cook Co., John Miles, Laura Howe; 2-19 near Gooseberry, Lake Co., M. Penner.

Long-eared Owl: 1-3 Duluth D. Sheer.

Short-eared Owl: 12-25 Nobles V. Leak; 12-15 (2) 1-2 (13) 1-17 (2) Sherburne NWR, BD; 1-16 (3) Wright BAH; 1-23 Stearns BAH; 1-24 Wright ETS; 1-23 (1) — 2-1 (2) Dakota RG.

Belted Kingfisher: 12 observations Dec. to 1-3 (Ramsey, JJ; Goodhue Xmas) from Hennepin, Carver, Dakota, Fillmore, Winona, Houston, Goodhue; 2-14 Pig's Eye, Ramsey Co. CU.

Yellow-shafted Flicker: 15 observations Dec. to 1-3 (Goodhue Xmas) from Hennepin, Goodhue, Rock, Freeborn, Cottonwood, Rice, Sherburne, Nobles, Wabasha, Winona; all winter Pope WH, Murray AD; mid-Jan. Lake **vide** JCG; 2-4-6 (2) Ramsey JAB; 2-9 McLeod FN.

Pileated Woodpecker: reported from Cook, Lake, St. Louis, Crow Wing, Cass, Clearwater, Mille Lacs, Sherburne, Wright, Carver, Washington, Hennepin, Dakota, Goodhue, Fillmore, Rice, Wabasha, Lac qui Parle (Refuge 1-23 BAH).

Red-bellied Woodpecker: reported from Winona, Wabasha, Goodhue, Fillmore, Olmsted, Rice, Cottonwood, (1, Xmas) Wright, Carver, Hennepin, Dakota, Ramsey, Washington, Chisago (2-12 Stacy FN), Sherburne (12-21 Sherburne NWR, BD).

Red-headed Woodpecker: reported from Crow Wing (12-8, JB), Mille Lacs (Dec. to 1-8, MI), Anoka, Sherburne, Rice, Goodhue, Wabasha, Winona.

Hairy Woodpecker: reported from 27 counties.

Downy Woodpecker: reported from 30 counties.

Black-backed Three-toed Woodpecker: 12-31 (2) Itasca State Park JAH; 1-23 Lutsen, Cook Co. W. Jiracek; 1-23 Maple Hill (Cook Co., Christensen; 1-24 (2) Gunflint Trail, Cook Co. MMC; 2-14 Lake KRE.

Horned Lark: wintered in Sherburne, Wright, Hennepin, Carver, Dakota, Goodhue, Wabasha, Winona, Olmsted, Fillmore, Nobles, Murray, Rock; migration **South** was noticeable 1-22-26, 2-12-14; **North** late Jan. — 3-2 (3) Duluth **vide** J. K. Bronoel; 2-4 Marshall, Agassiz staff;

2-18 Clearwater RCD; 2-19 Cass ES; 2-20 Crow Wing JB.

Gray Jay: reported from Cook, St. Louis, Crow Wing (Dec. JB), Cass (Walker, ES), Aitkin (1-3 six RG).

Blue Jay: reported from 29 counties.

Black-billed Magpie: all winter, Marshall, Agassiz staff; 1-2 Upper Red Lake OAF; 2-21 Clay fide EGA.

Common Raven: wintered in Cook, Lake, St. Louis, Carlton (1-16 Hwy 23, RBJ), Pine (1-16 Hwy 23, RBJ; 1-27, two, Kettle River, MHM; Dec. thru Feb., St. Croix State Park, four, WHL), Crow Wing (2-20, JB), Aitkin (1-3, RG), Clearwater.

Common Crow: reported from 30 counties from Duluth and Crow Wing southward.

Black-capped Chickadee: reported from 31 counties.

Boreal Chickadee: reported from Cook, Lake, St. Louis and BUFFALO CO., WISC. (12-23, BTV; 1-21, DGM).

Tufted Titmouse: reported from Olmsted, Winona, Goodhue, Washington (2 reports), Hennepin (2 reports).

White-breasted Nuthatch: reported from 25 counties from Duluth and Clearwater southward.

Red-breasted Nuthatch: scarce this winter; reported from Lake, St. Louis, Clearwater, Crow Wing, Pine, Hennepin, Goodhue, Rice, Sherburne, Cottonwood.

Brown Creeper: wintered in 13 counties from Duluth (MMC) and Crow Wing (JB) southward to Nobles and Winona.

Winter Wren: 12-25 Winona AFR.

Brown Thrasher: 6 birds from Olmsted (to 2-1, fide CW), Carver (Dec. thru Feb., KH), Crow Wing (Crosby, early Nov. to 1-23, T. Savajola), Lake (Little Marais, Nov. to 1-23, fide JCG), Duluth (12-15 to 1-8; Nov. to 2-12; fide JCG); 4-14 Hennepin FN.

Water Pipit: 5-5 (2) Goodhue, 5-8 (30) Dakota, FN.
Sprague's Pipit: 9-23 (one collected) Wadena, R. Oehlen-schlager.

Robin: a few (groups 1-6) wintered in Hennepin, Carver, Ramsey, Winona, Goodhue, Cottonwood, Nobles; flocks (10-50) along North Shore in Cook Co., invasion began 12-5, more birds noticed in late Feb. when a few also spilled over into Lake, St. Louis to Duluth.

Varied Thrush: 12-23 to 2-10 Worthington, Nobles Co. HSH.

Eastern Bluebird: 1-20-24 Lutsen, Cook Co. JP, K&JG, KH.

MOUNTAIN BLUEBIRD: 1-20-24 Lutsen, Cook Co. JP, K&JG, KH.

TOWNSEND'S SOLITAIRE: 1-1-12 Wirth Park, Mpls ETS & 1-12 M. Howe.

Golden-crowned Kinglet: reported only from Rice, Goodhue, Winona.

Bohemian Waxwing: only reports: 12-2 (2) Crow Wing JB; 12-6 (6) Duluth MMC; 1-3 (22) Duluth MMC; 1-23 Duluth D. Struthers; 2-21 Carver MHM; 4-8 (12) Ramsey, E. M. Campbell.

Cedar Waxwing: small flocks (10-30) reported by 13 observers in Cook (100 on 12-4, JP), St. Louis, Mille Lacs, Carver, Hennepin (50 on 1-9, B&DC), Winona, Rice, Nobles; only 3 Feb. reports: 2-17 Carver MHM, 2-17 Cook JP, 2-20 Carver KH.

Northern Shrike: reported by 31 observers (out of 58 total) from Cook and Marshall southward to Nobles and Winona.

Meadowlark sp.: in Dec. and Jan. 18 observations from Anoka, Hennepin, Dakota, Winona, Rice, Olmsted, (latest 1-25 CW), Freeborn, Blue Earth, Jackson, Cottonwood, Nobles; only Feb. report: 2-25 Hennepin VL.

Red-winged Blackbird: reported from Wright, Anoka, Hennepin, Goodhue, Wabasha, Winona, Watonwan; 1-2 birds except for flock Wabasha in Dec.

Rusty Blackbird: 12-16 Hennepin Mrs. EWJ; 1-9 (3) Winona FZL; 1-23 Dakota RG; 1-23 Cook C. Christensen; 2-13 Pine River, Cass Co. RG; 12 all winter Pope WH.

Brewer's Blackbird: 12-28 Swift BAH.

Common Grackle: wintered (1 to 4) in Cook, St. Louis, Ramsey, Hennepin, Dakota, Goodhue, Winona, Cottonwood, Olmsted.

Brown-headed Cowbird: 12-19 (3) Houston FZL.

Cardinal: common in se range from Wright and Washington se to Rice, Olmsted, Houston; further west 1 to 2 reported from Freeborn, Watonwan, Cottonwood, Swift; a few in n. part of regular range in Stearns, Mille Lacs; winter invasion in Itasca (Wawina), St. Louis (Duluth-Floodwood, minimum of 8 birds), Cook (2 birds).

Evening Grosbeak: generally scarce in South; small groups (up to 8) erratic in Hennepin, Ramsey, Washington, Winona, Wabasha, Rice, Stearns, Sherburne (40 all winter BD); more abundant in North, flocks reported by 13 observers in Pine, Mille Lacs, Aitkin, Crow Wing, Clearwater, Beltrami, Cass, St. Louis, Cook, Lake.

Purple Finch: less abundant than usual in normal winter range in the South from Anoka, Sherburne, Stearns southward — only 2 reports of more than 6 birds (12 all winter VL; 35 on 12-3 Hennepin PF); more abundant than usual but not an invasion year in the North, reported in Cook (12 on 1-24 JCG), Lake, St. Louis, Clearwater, Clay (1 bird), Mille Lacs (up to 14), Swift (5).

Blue Grosbeak: 5-23 (2 males) Murray, N. DeKam; 6-13

Pine Grosbeak: none in the South and scarce in the North; first 1-3 25) Duluth MMC; small flocks (up to 15) reported in Jan. & Feb. from Carlton, St. Louis, Lake, Cook; last 2-15 (10) Ely, St. Louis KRE.

Common Redpoll: almost completely absent from state; only reports: 12-19 Winona BTV; 1-3 Ramsey JJ; 2-1 (100) Rice OAR; 2-9 (6) Duluth MMC; 2-20 (2) Crow Wing JB.

Pine Siskin: two reports of singles from South, 12-6 Carver MHM, 2-13 Wabasha JAB; in the North flocks reported by 5 observers in Clearwater, Crow Wing, St. Louis (30 in Duluth), Lake (50 Encampment Forest 2-27, J. Olyphant).

American Goldfinch: most abundant winter finch throughout eastern part of state; reported from Cook and Cass southward to Winona, Olmsted, Carver; one report west

from Lac qui Parle; in the **North** maximum flock size, 20; in the **South**, 100-200.

Red Crossbill: 12-30-31 (10) Itasca State Park JAH; 1-3 Duluth John Green.

RUFIOUS-SIDED TOWHEE: 12-19 (CLH) — 2-27 (RBJ) Wirth Park, Mpls., also seen by HFH, MHM, DAB, FN, ETS; 1-1 Cottonwood Co. *vide* Mrs. LAF.

Slate-colored Junco: wintered from Cook and Beltrami southward to Nobles and Winona.

Oregon Junco: singles reported by 12 observers in the southern half of the state.

Tree Sparrow: wintered from Wright and Sherburne southward to Watonwan and Winona; in the **North** reported from Duluth (3 on Xmas) and Lake (two, 1-23 Little Marais JCG).

Harris' Sparrow: 12-24 (2) Watonwan EDK; Jan. Rice *vide* JAH.

White-crowned Sparrow: 11-12 — 12-5 Clifton, 1-3 French River, (same bird?) Duluth Twp. JCG.

Fox Sparrow: 12-12 Carver KH; 12-27 Winona BTW.

Swamp Sparrow: 1-1 Hennepin HFH, RG, RBJ; 1-19 Hennepin VL.

Song Sparrow: 12-27 (2) Winona BTW; 1-3 Cottonwood Mrs. LAF; 1-17-25 Olmsted CW; 2-14 Hennepin VL.

Lapland Longspur: 12-23 (50) Pope JAH; 1-23 (9) Dakota DAB; 1-24 (20) Stearns RBJ.

Snow Bunting: reported in 27 counties from Cook and Marshall southward to Nobles and Wabasha; largest flocks 2-6 (150) Hubbard JAH; 2-8 (400) Pine WHL; 2-28 (200) Pine JCG.

Black and White Warbler: 4-28 Hennepin FN.

Northern Waterthrush: 4-23 Hennepin FN.

Orchard Oriole: 5-15 Hennepin, E. Cruzen. Murray, E. Beukelman.



by Robert E. Turner

THE AUK, THE DODO, AND THE ORYX: VANISHED AND VANISHING CREATURES by Robert Silverberg. Apollo Editions (New York) 1970. 246 pages illus. Paperback: \$1.65.

Written by a professional writer of popular science books, this book deals mainly with the mammals and birds that have been and are becoming the victims of human progress and shortsightedness. The chapter titles tell best what the book covers: "The idea of extinction." "The Dodo." "The Aurochs and the Bison." "Steller's Sea Cow." "The Great Auk." "The Quagga." "The Moa and the Rukh." "The Giant Ground Sloth." "The Passenger Pigeon and the Heath Hen." "Back from oblivion." "Saved at the brink." "On their way out."

Named as close to extinction are the Tiger, the Everglade Kite, the California Condor, the Arabian Oryx, the Whooping Crane, four species of Rhinoceroses (White, Sumatran, Indian, and Javan, the latter being in greatest danger), Pere David's Deer, the Kaibab Squirrel, the Spanish

Lynx, the Spanish Imperial Eagle, the Spanish Flamingo, Hunter's Antelope, and the Giant Grebe of Guatemala.

This book is good reading, important, and inexpensive.



COMMUNICATION IN THE ANIMAL WORLD by William F. Evans. Thomas Y. Crowell Company (New York) 1968. 182 pages illus. \$5.95.

Most creatures are interacting with other creatures much of the time. Accordingly, much of their behavior can be interpreted as communication with one another. So this book encompasses much of animal behavior. And an interesting book it is.

The only avian vocal signal that is not a survival mechanism, says the author, is the cackle of a hen just after she has laid an egg. The hearing range of many birds is similar to that of young human beings, the upper auditory limit being about 13,000 herz for many species. But for owls, hearing is excellent at 18,000 Hz — presumably because that tonal range enables them to hear the squeaking of mice. Little is known, says Evans, about the communicative behavior of non-marine, non-primate mammals.

In almost all groups of animals, communication may be auditory, visual, tactile, or chemical. This book covers them all, briefly and clearly. Black/white illustrations. Bibliography. Index. A good introduction to a fascinating topic.

CONSERVATION: NOW OR NEVER by Nicholas Roosevelt. Apollo Editions (New York) 1970. 238 pages. Paperback: \$1.95.

In these sad times we have become accustomed to reading true horror stories about our world environment. That being so, how refreshing it is to come across an environment book with an upbeat. Nicholas Roosevelt, who is Teddy's cousin, has written a hopeful book about things that are being done to save our good earth.

Not primarily a birder nor wildlife enthusiast, Roosevelt writes mainly about open spaces and landscapes and what is being done to preserve them, especially near population centers in the United States. Minnesotans will be interested in the chapter titled "Rural Parks for City People" (pages 129-143), which tells about the admirable parks in the Twin City Metropolitan Area. Well worth reading.



THE BUFFALO by Francis Haines. Thomas Y. Crowell (New York) 1970. 242 pages illus. \$7.95.

The author, a retired history professor, has written a good history book. Do not expect an all-about-buffalo biology book. Nor is it about those true buffalo of the Old World. Instead, it tells the story of the American Bison and its relationships with human beings, mostly on the western plains of North America during the 1800's.

Often the book seems to be much more about people than about buffalo. In fact, whole chapters are about Indians or Mountain Men and scarcely mention buffalo. Most entries in the index are for people, places, and events in human history. But some chapters do tell about the American Bison itself.

I am not against books on the history of the American Bison; indeed, their history and important effects on man's history are the outstanding thing about these great mammals. The old drawings and the pre-1900 photos in this book are of special interest. Francis Haines writes better than most professors. You will enjoy this account.



NORTH AMERICAN BIRDS by Lorus and Margery Milne. 300 paintings in color by Marie Nonnast Bohlen. Prentice-Hall (Englewood Cliffs, N. J.) 1969. 340 pages. \$25.

This is not a complete book of birds of this continent. The introduction deals with the history

of bird painting in America. The final chapter tells briefly about some vanishing and vanished birds of America. In between are chapters on some birds of various regions and habitats, with fine color paintings and skimpy text.

The authors are a man-wife team, college professors of zoology. They are also the most prolific writers of popular books on many topics in biology. Since they produced 25 other books before doing this one on birds, you might conclude that birds are far from foremost in their interests.

In much of the book each page has a large color picture of a bird together with generous white space and seven to a dozen or so lines of text. The paintings are good to very good, and the editing and printing are excellent; but I find it somewhat disconcerting to see some species depicted larger than life-size. A junco the size of a quail just doesn't look right. Arrangement of species is not according to their classification but according to habitat. This book can be recommended, perhaps, as a luxurious picture book to impress persons who have a casual interest in birds.



LIFE HISTORIES OF NORTH AMERICAN BIRDS OF PREY by Arthur Cleveland Bent. Dover (New York) 1961. (Reprints of Smithsonian Museum bulletins originally published in 1937 and 1938.) In two illustrated volumes. Part One 409 pages, \$4. Part Two 482 pages, \$4. Quality paperbacks.

For any of you who are unfamiliar with the thorough series of books known as "Bent's Life Histories," these two volumes on birds of prey can be considered representative. Bent, who was not a professional ornithologist, spent much of his life compiling and writing this detailed series of books on North American birds. Though he did not live to finish the late volumes, other persons did it for him, and recently the series was completed up through the sparrows and their relatives. The earlier books in the series are now quite old, but they remain about the most complete treatment yet given of most North American birds.

Originally published as paperbacks by the government, these books became unobtainable until Dover republished them. For that we can all be thankful, even though the price has edged upward considerably since the reprints first appeared. Dover has done a good job, printing offset from the original pages, using good paper, and sewing the bindings to insure good physical quality.

Obviously, the latest information about hawks, owls, and their relatives can not be in

these oldish books; but these and the other volumes of Bent remain excellent, and they are a lot for the money. Highly recommended.



DESERTS OF AMERICA by Peggy Larson. Prentice-Hall (Englewood Cliffs) 1971. Seventh book in the Prentice-Hall Series in Nature and Natural History; Joseph Wood Krutch consulting editor. 340 pages illus. \$9.95.

In his introduction, late editor Joseph Wood Krutch writes that many excellent books on the North American deserts have appeared, but none that "cover the whole subject so thoroughly and so interestingly in one volume as the present one does . . . There is hardly a question one is likely to ask which is not answered; and I believe that its accuracy everywhere can be taken for granted. Anyone who reads it will have learned a great deal about the desert."

I heartily agree. Mrs. Larson, a librarian in Tucson, knows her subject and writes with great skill, emphasizing plants, animals, and ecology. Her book is thorough, authoritative I am sure, and interesting to read. With her biologist husband she has written other acclaimed books on similar topics. This book has many excellent photos, mostly by Mr. Larson, who must rank high as a wildlife photographer.

Do you think of deserts as wastelands? Then you still are thinking in terms of agricultural productivity rather than of natural environments. This excellent book can make any reader a desert enthusiast. Highly recommended.



WHO OWNS AMERICA? by Walter J. Hickel. Prentice-Hall (Englewood Cliffs) 1971. 328 pages. \$6.95.

"Mr. Pearson's attitude toward me in his syndicated column had been vicious, pointed and personal," writes Walter Hickel, referring to the days when Drew Pearson was leading the fight against confirmation of Hickel as Secretary of the Interior. But some time later Pearson came to Hickel and congratulated him for the vigorous action Hickel had taken on behalf of the environment, particularly with regard to the Santa Barbara oil spill, the slaughter of alligators in Florida, and the ecologically disastrous Miami jetport.

Still later Pearson came to Hickel again, begged to help in the fight for the environment, offered to devote his column to the cause, or to give it up and work in other ways, or to do anything that would be most effective. "Just tell me what you want me to do and I'll do it no matter what it would cost me personally," said Pearson. But he died six weeks later.

Like Drew Pearson, from whom we got our cues at first, many of us did an about-face with regard to Secretary Hickel. You probably will become a Hickel fan as you read this book, which is an autobiography skewed to emphasize those two years when Hickel was Nixon's Secretary of the Interior.

Son of a tenant farmer in Kansas, Wally Hickel was an indifferent student who never went beyond high school. Eventually he became a boxer and a drifter. When he arrived in Alaska he realized that he had found his land of opportunity. Real estate and construction became his field, he prospered, and eventually he became governor.

Though he seemed wholly unfitted for the job as Interior's boss, Hickel had just the right blend of idealism, willingness to learn, and scrappiness. And when he saw oil spills, or slaughter of gators, or other things that he knew were wrong, he had just one simple reaction: Put a stop to it. And somehow he did find a way to put a stop to a number of ruinous practices. In doing so, he cut through red tape and he outbluffed the big business interests that opposed him. This book tells how. You should read it.



THE WILD TURKEY: ITS HISTORY AND DOMESTICATION by A. W. Schorger. University of Oklahoma Press (Norman, Oklahoma) 1966. 625 pages illus. \$15.00.

This big, thorough, undoubtedly accurate book is THE book on the turkey, and every public and school library as well as every private ornithological library should have a copy. When you want to look up something about this important species, this book is likely to have the information you want. What is more, you will read some chapters with great interest.

Despite these good points, the book is badly organized and, in my opinion, difficult to use. (The author should have enlisted as co-author Peggy Larson or someone else with a flair for organization and explanation.) At the outset Dr. Schorger gets bogged down in a mass of detail, and time after time he loses his readers — or this one at least — in a morass of minutia that should have been relegated to a series of appendices. Nothing about the book is over anyone's head, but many of us will find it hard to stick with page after page of names, or probable names, given the turkey by this or that Indian tribe — or do these names refer to some other species? The author is not sure. But I am sure that almost no one could care.

A valuable reference, but poorly organized.

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 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.



TABLE OF CONTENTS

Red-bellied Woodpecker and Pileated Woodpecker — Drawing by Walter J. Breckenridge (from <i>The Conservation Volunteer</i>)	Front Cover
President Writes	39
An Annotated List of Minnesota Birds by Janet C. Green and Robert B. Janssen	40
Notes of Interest	55
1970-71 Winter Season by Janet C. Green	61
Book Reviews by Robert E. Turner	65

SUGGESTIONS TO AUTHORS

The Loon needs articles, shorter "Notes of Interest," and black/white drawings and photos. Photos should be close-ups of wildlife, preferably 5 x 7 inches or larger. "Notes of Interest" and articles should be similar in subject matter and in style to those in recent issues. Be accurate, direct, clear, interesting, and concise. Manuscripts should be double spaced and typewritten if possible. Leave generous margins, and type on one side of the page. Please use a good ribbon. "Notes of Interest" should be less than two double-spaced pages.

Send material for publication to: Robert E. Turner, Editor of *The Loon*, Box 66, Shafer, MN 55074. No payment to contributors. Authors can have reprints printed offset anytime after publication by any printer; or reprints can be ordered through the editor.

Bird-sighting reports for "The Season" should be sent promptly at the end of each season to Mrs. Janet Green. See inside front cover.

ANNOUNCEMENTS

HELP ASKED IN SAVING EAGLES — Citizens interested in helping to save America's Bald and Golden Eagles can play a part in this effort. "We are increasingly concerned about the nationwide decline in eagle populations," Travis Roberts, U. S. Fish and Wildlife Service regional director, said today. "We need prompt reports on any dead or injured eagles found by citizens," he said, "if we are to be able to investigate and determine the cause of death or injury."

Roberts said recent reports from Colorado indicate a much higher loss among both Bald and Golden Eagles from power line electrocutions than was believed previously. He said this is only one of many factors contributing to the sharp decline in eagle populations.

The Fish and Wildlife Service is working with power companies, landowners, citizens groups, and other government agencies now in an effort to pinpoint and investigate eagle losses. Delay in reporting known eagle losses makes it more difficult to determine the cause of death or injury.

U. S. game management agents have been assigned the work of coordinating the reporting and investigation program. Federal agents in this state are:

W. J. Ellerbrock, Agent-in-charge, St. Paul, Minn., 612-725-7830

Joseph W. Hopkins, Fergus Falls, Minn., 218-736-2577

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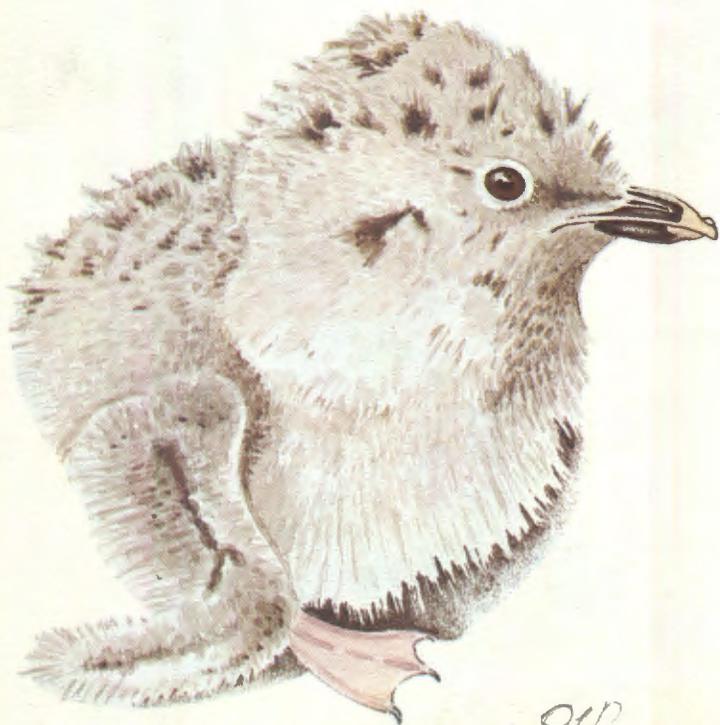
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If citizens are unable to reach the nearest federal game management agent to report an eagle loss or injury, they can call the Service's Division of Management and Enforcement in Minneapolis at Area Code 612-725-3530 to give details of the sighting.

The LOON

FALL 1971

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EDITOR OF THE LOON: Robert B. Janssen, 14321 Prince Place, Hopkins, Mn. 55343. (phone 938-7464). The editor solicits articles, short notes, and black/white illustrations about birds and nature. See back cover for details. Associate Editors, Kim R. Eckert and Paul Egeland.

"The Season" section of **The Loon** publishes reports of bird sightings throughout Minnesota. We particularly desire 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 forms from the **EDITOR OF "THE SEASON," Mrs. Janet Green, 9773 North Shore Drive, Duluth, Mn. 55804. (area 218, phone 525-5654).**

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The President writes . . .

The more we get together!

Birding like most other hobbies is enriched when the participant establishes contact with other persons of similar interest. This of course, is at the heart of our MOU organization. So the following paragraphs are offered to suggest ways of getting more of us together . . . both as individual new members and as new affiliates. Every MOU member can take an active role.

The assignment could start with a pleasant bird hike or drive in your neighborhood. Let's call this the Winter Birder Census, the object is to look for yards with suet bags and well-tended feeders that are the mark of true birders. This is the best season to find them. The next step is take down the address (include name if you have it) and then send your list to our membership chairman Joe Blanch, 101 Birch Street, Crosby Minnesota 56441. She'll send our new MOU brochure and membership application to invite them to join with us.

Now, if you happen to know the neighbor or are a bit more outgoing, you might want to make the contact yourself. Perhaps you'll want to let him examine a copy of your "Loon" as well as giving him a membership brochure. Remember, it's one of the nicest things you can do for a fellow birder.

The next step is for MOU members who live in areas where there is, as yet, no local club affiliate. We'd like to suggest a positive course of action for you. This is an excellent time of year to get together with a couple other enthusiastic birders, biology teachers or youth leaders and put out a flock assembly call. Perhaps the best call to use is to offer a spring nature program series or bird identification course. Generally you'll find the local news media very cooperative in helping you get out your announcement. By offering your programs as a free public service you'll likely be able to get free use of local library, school or church meeting rooms. The forming of a formal club organization is a natural follow-up that comes about with the association of good birders as future field trips and programs are wanted.

To encourage MOU members to take these suggested actions, your president is willing to stick out his neck and offer help from our members and affiliates. If you want assistance with the loan of slides, speakers, field trip leaders or nature talks, just drop me a line with as much advance time as possible. We think we'll be able to find people and groups who'll be willing to help. In this regard, it would be really great if each of our affiliates would make a special effort in this behalf. Perhaps each president and board would be willing to take on as special challenge of helping another new group get going. How about it?

MARV BORELL

NESTING OF RING-BILLED GULLS ON LEECH LAKE, CASS COUNTY, MINNESOTA

by David F. Parmelee

On June 9, 1971, Lewis W. Oring, his wife and I visited a well known Common Tern colony on Gull Island in Leech Lake, finding, in addition to many tern nests, six nests of the Ring-billed Gull. Three well constructed gull nests within a few feet of one another among boulders held three heavily incubated eggs each. Some distance from there in gravel just above the high-water mark were three others that also were close to one another but strung out in a line. These were mere scrapes, scantily lined, and with one, two and two eggs respectively. Obviously three pairs had laid early

and three had laid late. We observed 12 adult and one subadult Ring-billed Gulls on the island that day.

On June 12, my wife and I returned to the island, finding at the early gull nests among one clutch of unpipped eggs, one of pipped (or starred) eggs, and one with a pipped egg and two small chicks. Allowing 26-27 days for incubation (see Godfrey, 1966:181), egg laying at Gull Island probably commenced before May 15. At the other site we found all three nests with two eggs each — the apparent clutch of the late nesters. One of these was collected, and the eggs definitely were



Well feathered young.



Early nest among boulder.

only slightly incubated.

Young from the early nestings were running when Oring and students from The University of Minnesota Forestry and Biological Station at Lake Itasca visited the island next on June 25. Of the two remaining late nests, the clutch of one had been reduced to one egg.

When I last visited Gull Island with Dwain W. Warner and students from the Forestry and Biological Station on July 10, we found several, well feathered but flightless young gulls. For fear of displacing young Common Terns that were about in large numbers, we did not attempt to find every gull young, but judging by the sizes of young seen that day, at least two of the early nestings were represented. We have no reason to doubt that some if not most of the young from the early nestings fledged, though we did not

actually witness the fledging.

The late nestings were unsuccessful. By July 10 only one nest remained. It held two gull eggs and one tern egg and was abandoned. Whether these late nestings had been attempted by young adults is not known.

The only other bird species found nesting on Gull Island by us was a Mallard with eight heavily incubated eggs beneath a bush partly concealed by boulders on June 12. A hen and brood (at least 10 young) of Common Goldeneye swimming close to the island on July 10 may have come from some other area, seemingly one with a tree cavity. Although five Caspian Terns were seen by us within a mile of the island on July 10, we found no evidence of their nesting on Gull Island as was the case in 1969 (Warner and Beimborn, 1969).

Ring-billed Gulls have nested at

least sparingly on Gull Island in the past according to Dickerman and Lefebvre (1961), who found one egg with a dead embryo there on July 8, 1960. Oring (personal communication) recalls seeing "some gull nests" on Gull Island during the summer of 1970, but kept no record. Whether the birds had ever nested there successfully be-

fore 1971 is not clear, in spite of the name of the island. Evidently the species nests sparingly and sporadically elsewhere in Minnesota, except perhaps at Mille Lacs Lake, Mille Lacs County, where many nestings have been observed since 1963 (Hiemenz, 1963; Ivanovs, 1971; Janet C. Green, personal notes).



Late nest in gravel near highwater mark.

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THE 1971 SPRING MIGRATION AT THE COLD SPRING HERON COLONY

by Max Partch

The Cold Spring Heron Colony, now owned by the Minnesota Chapter of the Nature Conservancy, is located in Sec. 13, Wakefield Township, Stearns County, Minnesota and has been studied since 1954. The colony has been divided into 100-foot-square quadrats so that an accurate count of the nests in each tree in each quadrat could be recorded. The colony, in expanding westward, has changed in area from the 23 quadrats occupied in 1954 to 80 quadrats in 1971. During the same time the number of Great Blue Heron nests increased from 386 to 1402. Several studies to determine the effects of the herons on the ground vegetation have also been made.

This note reports some 1971 migration data and their probable correlation with weather.

Part of the heron colony property owned by the Nature Conservancy south of the Sauk River, and adjacent to Highway 23, is an observation hill from which the number of Great Blue Herons in the trees of the colony were observed with a 20-power spotting scope. The numbers recorded in Fig. 1 do not indicate the total number of herons that had returned to the colony as of any one date, but merely the numbers seen in the bare colony trees. There could be no accurate count of the herons standing on the nearby flood plain or of those foraging away from the colony. Perhaps more important is the fact that the trees and nests seen from the observation hill are mostly only those located on the levee area which means that many trees and nests further to the north could not be seen. Thus, the population figures presented here are merely an index to the actual numbers of returning migrants.

Debe Denn, who lives near the heron colony, reported the first two returning herons on March 13, 1971, the first date this year that the tempera-

ture had gotten above 40 degrees. Jeffrey Latzka flushed one Great Blue Heron from an open stretch of the Sauk River between the heron colony and the city of Cold Spring, a distance of 2 miles, on January 8; but this probably represents a late 1970 straggler rather than an early returnee. I made daily observations, usually in the afternoon, from March 14, to April 10, except for April 6.

The population fluctuated, but except for the absence of herons in the trees on March 15 and March 22, the population increased slowly until March 27, when a five-day increase began which sent the observed number to over 300. On April 1 and 2, a spectacular decrease occurred. These changes seem definitely correlated with the weather conditions as recorded by the U.S. Weather Bureau at St. Cloud, located 13.5 air miles N.E. of the colony. The weather data (Fig. 1) indicate a sudden drop in temperature accompanied by high winds and snow on March 15, March 22, and April 1 and 2 owing to the passage of cold fronts. On March 22, on snowshoes, I flushed 12 herons from the snow-covered flood plain meadow at the edge of the colony woods below the levee, which was, at that time, somewhat protected from the north wind.

The observed population continued to increase, with one minor decrease, to a high of 534 on April 9. The great decrease recorded on April 10 was correlated with the 30 mile per hour winds with gusts to 42 miles per hour. All of the major decreases in observable birds coincided with winds gusting to 25 miles per hour or more.

Besides the four major decreases there were also minor decreases in the otherwise generally upward trend. These occurred on March 18-19, March 25-26, March 28, and April 6(?) and 7. These minor setbacks coincide with

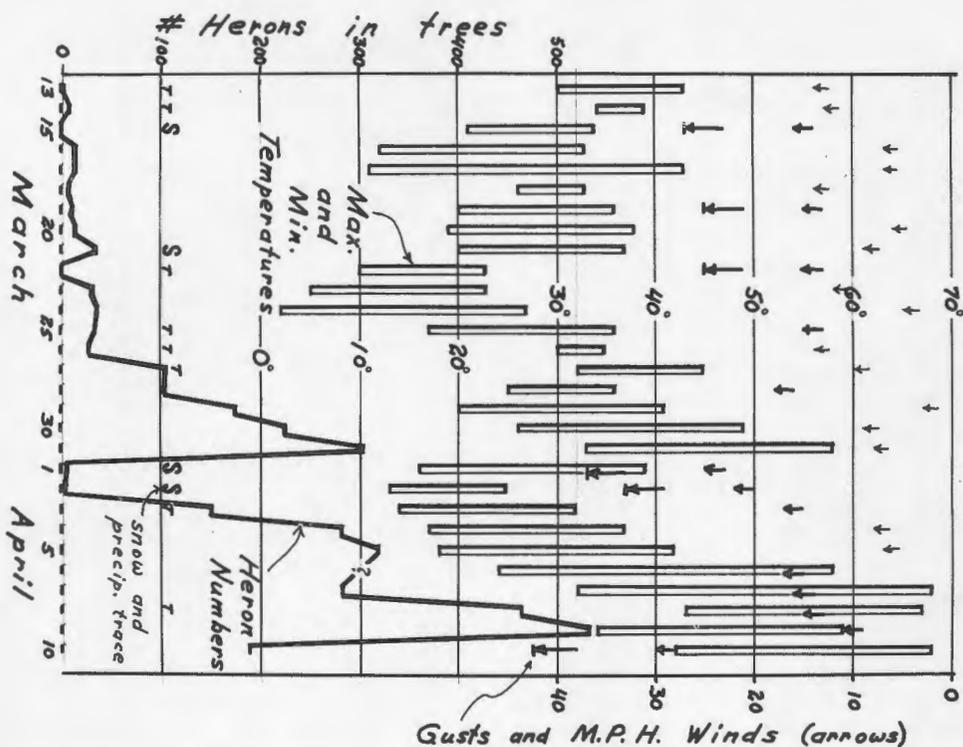


FIG. 1 — OBSERVED GREAT BLUE HERON NUMBERS AT THE COLD SPRING HERON COLONY AND WEATHER DATA FOR PARTS OF MARCH-APRIL, 1971.

winds of 15 miles per hour or more.

All of the herons observed before March 27, except one, were seen only at the west end of the colony. The single exception was a heron observed temporarily in the "big center elm" on March 16. The west end is the newer part of the colony which has been occupied only since the late 1950's. This early spring occupancy of the west end has also been observed by David Grether in previous years. On March 27, when the observed number exceeded 100 birds, I began to make counts of "segments" of the colony which were recorded separately and then added to give a total count. I used certain "landmarks", such as trees in the colony which I recognized, as well as a TV antenna and a red barn easily seen at a distance beyond the colony.

The trees used as landmarks were two large elms, one birch, and one dead hackberry with no bark. These trees could be accurately located on the grid map of the colony.

Fig. 2 shows the observed numbers of herons as recorded for the several "segments" of the colony, with emphasis on those east of the large triple elm in quadrat 89. It was not until March 27 that the first two herons were observed east of the "big center elm" in quadrat 67. The graph illustrates the increase in number of returnees toward the east end of the colony. By April 4 the last several nest trees at the east end were still not occupied. On April 7, I noted that the herons had gotten to the second to the last tree but it was not until April 8 that the eastern most tree in the

colony (as observed from the bur oak on observation hill) was finally occupied.

(Numbers seen in the two "land-mark" elms and in the dead hackberry are omitted. The relatively low numbers "between" the red barn and the triple elm are due to this being a short segment).

On March 28, when 104 herons were observed at the Cold Spring Colony, I visited four other heron colonies. There were six Great Blue Herons at the island colony in Mud Lake north of New London in Kandiyohi County. The outlet of Mud Lake (Crow River) was barely open at the time, but there was more open water below the dam 3 miles to the south at New London. No

herons were seen at three other island colonies located in lakes which were still solidly frozen on this date. These were at Lake Koronis in Stearns County, Lake Johanna in Pope County, and Pelican Lake in Grant County.

At the Cold Spring Colony some herons had been back for more than 2 weeks. The Sauk River below the dam at Cold Spring, 2 miles upstream, is open all winter and was open at the colony before the earliest arrivals although the land was still covered with deep snow. A heron was seen standing in the swollen open river near Rockville, 2 miles downstream from the colony, on March 24, illustrating further the greater amount of early feeding territory available to this colony. **Biology Dept., St. Cloud State College, St. Cloud Minn. 56301.**

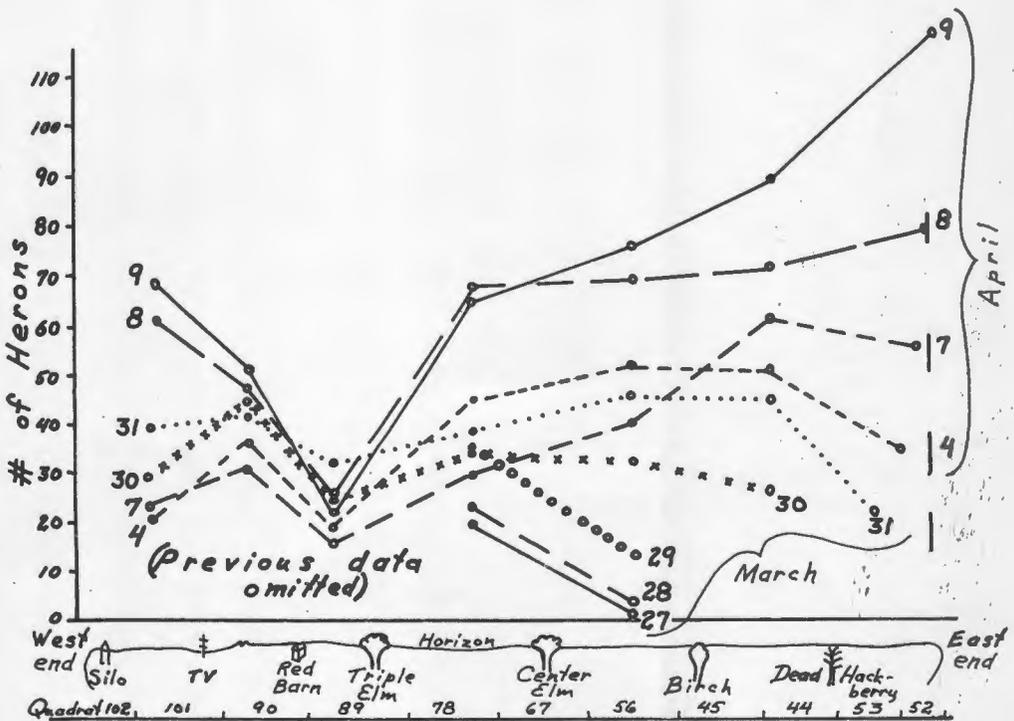


FIG. 2 — OBSERVED NUMBERS OF GREAT BLUE HERONS COUNTED IN CERTAIN UNEQUAL "SEGMENTS" OF THE COLD SPRING HERON COLONY.

BLACK-BILLED MAGPIE: NEW BREEDING RECORDS IN MINNESOTA

by Joanna Burger and Marshall Howe

Although Black-billed Magpies, are occurring more and more regularly in the fall and winter seasons in northwestern Minnesota, summer records remain scarce. Since Erickson (1957) summarized the distributional status of the species in the state, only 4 additional summer sightings have been published in *The Loon* (or as it used to be called, *The Flicker*). These records, extracted from the seasonal reports, are as follows:

Date	County	Locality
15 June 1965	Polk	4 mi WSW Fertile
15 July 1966	Lake	Split Rock Lighthouse
4 June 1967	Roseau	Pine Creek
16 July 1970	Marshall	Agassiz Nat. Wildlife Refuge

Evidence of breeding was not discovered for any of the above birds. The only confirmed nesting record remains that reported by Leo Manthei in Eland Township, Beltrami County, in 1951 (Erickson, 1957). Earlier reports of nestings in Grygla, Marshall County, in 1921 and Zippel, Lake of the Woods County, in 1920 (Roberts, 1932) were unconfirmed. This paper describes three successful nestings in Marshall County in 1971.

Four Black-billed Magpie fledglings and a recently-occupied magpie nest were discovered by the senior author in a woodlot 9 miles NE of Holt, Marshall County, on June 25, 1971. The young were accompanied by two adults and were being fed by at least one of them about 75 yards from the nest site. On June 26 two of the young were collected and are now preserved in the collection of the Bell Museum of Natural History, University of Minnesota. The nest was a typical large, roofed-over structure of large sticks with a

side entrance. Specifications of the nest and its surroundings are as follows:



Magpie nest which fledged four young near Holt, Minnesota in 1971.

Woodlot Features

Size: 300 ft x 200 ft

Composition: Quaking aspen, Box elder, Bur oak

Features of the Nest Tree

Species: Quaking aspen

Location: 10 ft from edge of woodlot

Height: 30 ft

Other: Dead above 19 ft

Features of the Nest

Position: Central Crotch, base 19 ft off the ground

Composition: Large twigs

Lining: Mud, rootlets, grass stalks

Dimensions:

Outside height — 30 in.

Outside diameter — 24 in.

Inside height — 10.5 in.
Inside diameter — 13.5 in.
Diameter of cup proper — 9.5 in.
Location of entrance: On side, 12 in. from bottom

Physical characteristics of the entrance:

Shape — approximately cylindrical
Height — 2.5 in.
Diameter — 3 in.
Length — 8 in. (from outside to edge of nest cup)
Angle — ascending at about 30 degrees from outside to cup edge

A second magpie nest was discovered at a height of 12 feet in a Bur Oak, in the same woodlot, 150 feet from the other nest. It had partially collapsed and appeared to be a nest from a previous year.

Another recently fledged magpie family (distinguished from the first by the decidedly shorter tails of the juveniles) was observed in a woodlot about 1.5 miles SW of the first brood on July 26. The nest, however, was not located.

A third successful nesting was established on July 25 when an empty nest was located at a height of 12 feet in a dense spruce, on the edge of a shelter belt 1 mile W. of Middle River, Marshall County (about 10 miles NW of the first nesting areas). The nest was not readily accessible but the large size and domed top were evident, leaving no doubt that it belonged to a magpie. In the same area two adult and three juvenile magpies (identified by their short tails and characteristic begging calls) had been observed on several occasions by local residents familiar with the species.

Summering magpies had been noted occasionally by the senior author at other locations in the general area of Holt, Middle River and Agassiz National Wildlife Refuge during 1969 and

1970. It therefore seems likely that the species is a regular, though rather uncommon and local, breeding bird in eastern Marshall County and possibly neighboring counties. Two of the three nests described here were visible from the road, so hopefully additional breeding sites may be found by observers scanning the borders of woodlots in that area.



Juvenile Magpie near Holt, Minnesota on June 25, 1971 (note short tail feathers).

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THE SPRING SEASON - March 1, to May 31, 1971

by Kim R. Eckert and Paul Egeland

Weather this season was interesting though inconsistent in the state. For example, while most of the state in March had near average temperatures, Brainerd was 5 1/2 degrees below normal and the southeast was almost 3 degrees below average. The high for the month reached 71° at 3 locations and the low was - 25° at Beardsley. Most areas were slightly drier than normal, but the northeast was wet with Tower receiving 3/4" more than the usual precipitation. 33 inches of snow fell on Isabella in March, and on the 16th 49" was on the ground there. On the other hand, Beardsley received only a trace of snow during the month, and by the 2nd the ground was bare.

Most of the state in April was warmer than usual. Pipestone's temperatures were 4° above normal, but Virginia it was a degree colder than usual. The high was 83° and the low for the month was -8° at Crane Lake. Dry conditions continued into the month in most areas, though Hallock had almost an inch above the usual precipitation. Pine River received over 14" of snow during April, and the most snow on the ground was at Sandy Lake where 25" on the 1st melted away by the 16th.

May continued dry in most areas, but Winona received over 6" of rain, almost 2" above their average. But the real news in May were the cold temperatures which made the warbler migration virtually nonexistent. Most areas were from 2 to 3 degrees below average, with wet Winona no less than 6.3° colder than usual. The temperature reached a low of 16° at Moose Lake, and the thermometer in the last half of the month never reached the high of 90° recorded on the 14th at Springfield. And to top off the month and the season, 8 1/2 inches of snow fell on Grand Rapids on May 19!

Our style in this report is the same as in our two migration reports in 1970. And Marygail Gilly Eckert again

helped us compile this report.

SUMMARY: No less than 295 species were recorded this spring, 11 more than last year, and the highest total in the past several years if not the highest ever. It was not necessarily a better migration; there was simply better coverage by the observers. We still only received 59 reports, which was the same as last year's record low number, but it seems that this spring the observers we had were more observant and covered more areas, especially in the north and west. However, of these 59 only 19 were from the north, and even fewer were in the western prairie counties. It is obvious then, that these seasonal reports will continue to be incomplete and even misleading without more observers, especially in the west and north, Minnesota's two most interesting areas.

There were few "waves" or peaks noted this spring, but the season quite interesting in several respects. Grebes showed up in unprecedented numbers, especially the Eared and Western Grebes which have been uncommon in former years. The heron family contributed several rarities including 2 Snowy Egrets, 2 White-faced Ibis reports, 3 extralimital Yellow-crowned Night Herons in Stearns, Nobles and Cottonwood Counties, and last but not least 7 Cattle Egret reports scattered throughout the state as far north as Agassiz refuge. This last species finally nested this summer in Pope Co., and there is an unconfirmed report of the species nesting the past two years in Grant Co. A number of ducks were interesting, including the impressive and precise peaks at Agassiz, a pair of Black Ducks nesting in Washington Co. only a few miles from last summer's nesting, a late pair of Harlequin Ducks in April following last winter's influx of this species, a good migration of scoters on Lake Superior plus an inland Common Scoter in Beltrami Co., and the third state record of not

one but 4 King Eiders on Lower Red Lake, not on Lake Superior. Both Red-shouldered and Goshawks were recorded in late May on the same day in Brainerd, Rough-legged Hawks staged an unprecedented late migration, and both Golden Eagles and Peregrine Falcons appeared in encouraging numbers. Rails made a good showing, especially the "hordes" of Yellow Rails at the Waubun marsh, and the very elusive Black Rail made a rare appearance at Frontenac. Shorebirds perhaps made the biggest news, with many observers discovering the Marshall sewage ponds, now the best shorebirding place in the state. No less than 34 shorebirds were recorded this spring, and all but 4 of them were found at Marshall. The highlights of this family were 3 Western Sandpiper reports, 2 Buff-breasted Sandpiper records, an impressive peak of Whimbrels at Duluth, more than the usual Knot records including a rare appearance inland in Pennington Co., and the second state record of a Ruff in Sibley Co. The uncommon Iceland Gull made a late appearance at Two Harbors, the very rare Ivory Gull showed up at Knife River only 5 months after last fall's report, and a good peak of 14,000 Common Terns was at Duluth. Rare owls made a good showing: Saw-whet Owls were commoner than usual, there was one record each of the Barn, Burrowing and Boreal Owls, and Great Gray Owls again appeared near last year's nesting area in Roseau Co. Received too late to include in the main body of this report was a Northern Three-toed Woodpecker on March 1 south of its normal range in Stearns Co. Only one Varied Thrush was seen this year, and not until March in Two Harbors. Many shrikes were again reported, and again many of them were misidentified. Both a Bell's Vireo and a Henslow's Sparrow, normally recorded only in the south east, appeared west in Jackson and Lyon Counties. Warblers were extremely late and disappointing in most places, with some areas noting no appreciable migration at all. The Blue Grosbeak continues to occur in the southwest and may be ex-

tending its range, since it has been seen in Pipestone Co. since 1969. A Baird's Sparrow was again reported at Felton (but with no details), and Smith's Longspur's again proved their regularity by appearing twice in Lyon Co. R. Ochenschlager did some good collecting in Wadena Co. where he found a female Red Crossbill with a brood patch, a Red-shouldered Hawk north of its normal range, and both Chestnut-collared Longspur and Sprague's Pipit east of their Felton Prairie. And it was a poor year for winter finches with few redpolls or siskins reported, and no Pine Grosbeak or White-winged Crossbill reported by anyone.

As a final note to this spring season, KE, PE, and RR found no less than 166 species on the May 15 Big Day. The same basic itinerary as last year was used when 153 were found. 166 is undoubtedly the highest total ever compiled in the state in one day, and certainly one of the highest May counts in the nation. On the same day 160 M. O. U. members spread out over southwest Minn. to record an aggregate 163 species. Combining these two lists results in a formidable 188 species found in the state in one day!

Common Loon: early south 4-7 Wabasha JAB; 4-11 McLeod RBJ; 4 reports on 4-12; early north 4-12 Morrison LR; 4-14 Duluth MMC.

Red-throated Loon: 2 reports from Duluth: 5-22 (2) and 5-25 (2) JG, MMC.

Red-necked Grebe: earliest in north: 4-12 Duluth JG; 4-13 Duluth MMC; 4-16 Marshall AR; early south 4-22 Hennepin WKE, FN; 4-25 Hennepin OJ; peak 5-1 Lake and Cook (200) KE, RR.

Horned Grebe: early south 4-7 Watonwan EK; 4-9 Wabasha WDM; 4-11 Lyon PE; early north 4-6 Duluth, D. and P. Sheer; 4-13 Duluth MMC; 4-13 Morrison LR; late south 5-2 Winona TV; 5-2 Sherburne RLD; peak 5-3 Duluth and Lake (4000)JG.

Eared Grebe: no less than 10 reports (only 4 last year): 4-15 Big Stone (6), Liz Campbell; 4-23 Marshall (3) AR; 4-23 Jackson (2) JAB; 5-1 Nicollet FL; 5-9, 5-14, 5-30 Clay (2-6) LW; 5-11 Morrison LR; 5-12 Lac Qui Parle (2) RR; 5-15, 5-16 Lyon (4-6), many observers; 5-16 Martin TV; 5-22 Lac Qui Parle (10) BDC; a total of 38 individuals!

Western Grebe: 9 reports of 83 individuals: early south 5-1 Nicollet BL, FL; 5-9 Big Stone MS; early north 5-1 Marshall AR; 5-9 Marshall KE, RR; 5-15 Todd (10) BH; peak 5-22 Stevens (50) BDC, FN.

Pied-billed Grebe: early south 3-14 Winona KE, PE and Wabasha KE, PE, WDM and Dakota KJG and Nobles HH; early north 4-8 Duluth KE; 4-9 Marshall AR; peak 5-6 Marshall (370) AR.

White Pelican: early south 4-9 Traverse DB; 4-10 Nicollet BL; 4-11 Lac Qui Parle HK; early north 4-8 Marshall AR; 5-9 Marshall KE, RR; late 5-21 Jackson LF; 5-22 Stevens FN; peak 4-25 Jackson (1500) LF

Double-crested Cormorant: early south 4-3 Lac Qui Parle KE, PE, DB; 4-10 Nicollet BL; 4-11 Houston JAB and Lac Qui Parle HK; early north 4-4 Clay LW; 4-7 Marshall AR; peak 5-5 Lac Qui Parle (150) JB.

Great Blue Heron: early south 3-14 Pope WH and Hennepin CH and Dakota KJG; early north 3-27 Ottertail AMB; 3-30 Marshall AR; peak 4-17 Pope (150) BH.

Green Heron: early south 4-20 Hennepin OJ; 4-22 Winona TV; 4-24 Carver HK and Goodhue DB; early north 4-10 Crow Wing JB; 5-2 Morrison LR.

CATTLE EGRET: an amazing influx this year, 7 reports of 15 individuals throughout the state: 4-20 to 4-24 (2) and 4-28, 29 (1) Wabasha WDM; 5-3 Winona (2) TV; 5-7 Chisago (6) FS; 5-10 St. Cloud, Stearns Co. (1), Norman Ford; 5-15 Heron Lake, Jackson Co. (1), DB, TV; 5-18 to 5-28 Agassiz Refuge, Marshall Co. (2) AR, BDC; 5-20 downtown Mpls., Hennepin Co. (1) RBJ; it is only a matter of time before the first nesting record.

Common Egret: early south 4-3 Winona TV; 4-4 Houston JLB; 4-8 Wabasha WDM; early north 4-11 Ottertail AMB; 4-14, 4-17, 5-27 Marshall (3) AR peak 4-17 Pope (100) BH.

SNOWY EGRET: 2 reports, the 8th and 9th state records: 5-14 Marshall, Lyon Co. (photographed), Liz and Rex Campbell; 6-1 Lake Vadnais, Ramsey Co., Alice Johnson.

Black-crowned Night Heron: early south 4-3 Ramsey DM; 4-12 Murray AD; 4-15 Carver KH; only reports north 4-7 Marshall AR; 5-2 Morrison LR; peak 5-15 Jackson (150) ES.

Yellow-crowned Night Heron: 4-29 (5), 6-1 (2) La Crescent, Houston Co. FL, TV, KE; also 3 extralimital reports: 5-1 to 5-11 Westbrook, Cottonwood Co. (2), Gladys Point; 4-18 St. Cloud, Stearns Co. NMH; 5-16 Nobles, many observers.

Least Bittern: 5-12 Ramsey DM; 5-25 Hennepin DB, KJG; only reports!

American Bittern: early south 4-16 Washington BL; 4-17 Houston JLB; 4-18 Stearns MLC; early north 4-7 Aitkin JB; 4-19 Duluth JH.

WHITE-FACED IBIS: 2 reports: 4-13 Ocheda, Nobles Co., 3 photographed by Jim Brandenburg; 5-10 to 5-15 Heron Lake, Jackson Co., Ross Wagner; perhaps this species is returning to its former nesting range in Minn.?

Whistling Swan: early south 3-28 Houston FL and Hennepin VL; 4-3 Wabasha TV and Scott, Lac Qui Parle, Chippewa KE, PE; early north 3-31 Duluth, R. Kohlbry; 4-3 Mille Lacs MI; late 5-18 Marshall AR; 5-29 Duluth MMC; peak 4-11 (2000) and 4-22 (800) Wabasha TV, Mr. and Mrs. Fred Bradford.

Trumpeter Swan: the swans from Carver Park are in the process of dispersing and may begin to nest outside the park: single birds were observed from 5-23 to 5-30 on Goose and Hayden Lakes in Hennepin Co. by OJ.

Canada Goose: early south 3-13 Wright BH and Nobles HH and Murray AD; early north 3-31 Marshall AR; 4-5 Mille Lacs MI; peak 4-3 Lac Qui Parle (10,000) KE, PE.

White-fronted Goose: 9 reports, more than usual: 4-4 Lyon (40) KE, PE, HK; 4-8 and 5-31 Sherburne RLD; 4-9 Lac Qui Parle DB and Clay (500) BH; 4-10 Nicollet BL; 4-11 Lac Qui Parle RBJ; 4-12 Washington BL; 4-30 and 5-6 Marshall AR; 5-8 Roseau KE, RR.

Snow/Blue Goose: early south 3-28 Houston FL; 3-29 Winona TV; 3-30 Cottonwood LF; early north 4-11 Clearwater RCD; 4-23 Marshall AR; late 5-24 Sherburne RLD; 5-26 Wadena ES; peaks of 2000 on 4-4 Lyon KE, PE, HK and 5-1 to 5-12 Lac Qui Parle BH, RR.

Mallard: peak 4-16 Marshall (5540) AR.

Black Duck: early south 3-14 Winona KE, PE; 3-20 Winona RBJ and Goodhue KJG; early north 4-5 Duluth KE, MMC; another south nesting record: 5-24 Hugo, Washington Co., 1 ad. with 10 young, Liz Campbell.

Gadwall: early south 3-10 Winona TV; 3-14 Winona KE, PE and Dakota KJG; 3-13 Wabasha WDM; early north 4-8 Marshall AR; 4-10 Duluth KE, JG; peak 5-6 Marshall (2990) AR.

Pintail: 3-6 Hennepin ES; 3-14 Winona KE, PE and Lyon HK; early north 4-7 Marshall AR; 4-8 Mille Lacs MI; peak 4-12 Sherburne (1500) RLD; 4-23 Marshall (1470) AR.

Green-winged Teal: early south 4-3 Winona TV and Le Sueur DB and Chippewa, Lac Qui Parle KE, PE; 3-13 Wabasha WDM; early north 4-8 Marshall AR; 3-30 Ottertail AMB; peak 4-30 Marshall (1870) AR.

Blue-winged Teal: early south 4-1 Wabasha WDM; 4-3 Lac Qui Parle KE, PE and Le Sueur DB and Winona TV; early north 4-6 Ottertail AMB; 4-10 Itasca MS; peak 4-30 Marshall (5320) AR.

American Widgeon: early south 3-13 Wabasha WDM; 3-14 Winona KE, PE; 3-20 Winona RBJ; early north 4-7 Marshall AR; 4-8 Mille Lacs MI; peak 4-30 Marshall (700) AR.

Shoveler: early south 3-21 Washington ES; 3-30 Nobles HH and Lyon HK; early north 4-11 Marshall AR and Mille Lacs MI and Clearwater RCD; peak 5-6 Marshall (1640) AR.

Wood Duck: early south 3-14 Dakota KJG; 3-27 Carver KH and Pope WH; early north 4-6 Ottertail AMB; 4-7 Marshall AR.

Redhead: early south 3-13 Nobles HH; 3-14 Dakota KJG; 3-20 Dakota DB; early north 4-11 Duluth KE; 4-12 Marshall AR; peak 4-30 Marshall (2240) AR.

Ring-necked Duck: early south 3-12 Lyon HK; 3-14 Winona KE, PE and Dakota KJG; early north 4-8 Duluth KE and Marshall AR; peak 4-23 Marshall (2970) AR.

Canvasback: early south 3-25 Winona TV; 3-27 Olmsted HW; 3-30 Nobles HH; early north 4-10 Duluth KE, JG; 4-12 Marshall AR; peak 4-30 Marshall (390) AR.

Greater Scaup: 11 reports: early south 3-30 Lyon HK; 4-3 Chippewa and Lac Qui Parle KE, PE and Washington BL; early north 4-6 Ottertail AMB; 4-9 Duluth KE.

Lesser Scaup: early south 3-11 Nobles HH; 3-14 Winona KE, PE and Dakota KJG; early north 4-8 Duluth KE and Marshall AR and Crow Wing JB; peak 4-3 and 4-4 Chippewa, Nicollet, Sibley (20,000) KE, PE; 4-11 Sherburne (20,000) RLD; 4-30 Marshall (14,360) AR.

Common Goldeneye: late south 4-25 Carver KH and Stearns NMH; peak 4-9 Marshall (2460) AR.

Bufflehead: early south 3-13 Houston FL and Nobles HH; 3-14 Winona KE, PE and Dakota KJG; early north 4-10 Duluth KE, JG, MMC; 4-11 Marshall AR and Clearwater RCD and Crow Wing JB; late 5-27 Nobles, J. Brandenburg; 5-30 Hennepin OJ; peak 4-16 Marshall (580) AR.

Oldsquaw: 7 reports: 3-1 Lake KE; 3-19 Lake, M.E. Penner; 4-28 and 5-25 Lake RK; 5-1 Lake and Cook (50) KE, RR; 3-17 to 6-1 Duluth KE, RR, JG, MMC.

HARLEQUIN DUCK: 4-18 Duluth harbor (pair) KE; an unusual late date.

KING EIDER: 5-9 Lower Red Lake, Beltrami Co., 4 adults, KE, RR; third state record, see Notes of Interest.

White-winged Scoter: 4-21 to 5-29 Duluth KE, RR, JG, MMC; peak 5-25 (50) MMC.

Surf Scoter: 5-19, 5-22 (25), 5-25 Stoney Point, St. Louis Co. KE, RR, MMC.

Common Scoter: 5-1 (5) 5-25 (3), 5-27 (1) Duluth KE, RR, JG, MMC; also 5-7 Waskish, Beltrami Co. (1 imm. male) KE, RR; more scoter reports than usual.

Ruddy Duck: early south 3-14 Goodhue and Winona KE, PE; 3-20 Winona RBJ; 3-26 Winona TV; early north 4-11 Clearwater RCD; 4-16 Marshall AR; peak 5-6 Marshall (550) AR.

Hooded Merganser: early south 3-14 Dakota KJG; 3-20 Goodhue RBJ and Wabasha DB; early north 4-5 Duluth MMC; 3-30 Duluth, fide JG; peak 4-16 Marshall (50) AR.

Common Merganser: early north 3-1 Duluth KE; 3-28 Lake JG; 3-30 Marshall AR; late south 4-30 Wabasha WDM; 5-2 Lyon PE; peak 4-16 Marshall (370) AR.

Red-breasted Merganser: early south 3-14 Dakota KJG; 3-22 Wabasha WDM; 3-29 Rice OR; early north 4-10 Duluth KE, JG; 4-11 Crow Wing JB and Mille Lacs MI and Morrison LR and Lake RK; late south 5-9 Wright BH; 5-15 Stevens KE, PE, RR; peak 4-29 Duluth (1000) KE, RR.

Turkey Vulture: early south 4-2 Winona, Liz Campbell; 4-10 Hennepin DB; 4-10 Wabasha TV; early north 4-6 Crow Wing JB; 4-9 Duluth MMC; 4-10 Duluth KE, JG; peak 4-11 Duluth (25), D. Engstrom.

Goshawk: only 3 reports: 4-30 Hennepin OJ; 4-11 and 5-1 Duluth MMC; 5-29 Brainerd, Crow Wing Co. NMH

Sharp-shinned Hawk: early south 3-12 Wabasha WDM; 3-24 Stearns MLC; 4-3 Washington BL; early north 3-30 Duluth MMC; 4-3 Morrison LR.

Cooper's Hawk: earliest in north: 4-4 Crow Wing JB; 4-9 Marshall AR; 4-11 Duluth MMC; early south 3-14 Dakota KJG; 4-6 Hennepin CH.

Red-tailed Hawk: early north 3-17 Morrison LR; 3-21 Duluth G. Flaim; 3-23 Ottertall AMB; 2 Kriider's reports: 3-6 Scott ES; 5-11 Lac Qui Parle BH.

Red-shouldered Hawk: more reports than usual: reported from Wabasha, Washington, Goodhue, Winona, Olmsted, Nicollet, Houston, Carver, Chisago, Jackson (5-16 Linc Woods St. Pk., TV), Lac Qui Parle (4-11 LQP St. Pk., HK), Wadena (5-6, trapped and banded, R. Oehlenschlaeger), and Crow Wing (5-29 Brainerd, nest with 2 eggs, NMH: probably the northern most nesting in the state).

Broad-winged Hawk: early south 4-6 Carver KH; 4-11 Hennepin PF; 4-15 Wabasha WDM; early north 4-7 Crow Wing JB; 4-13 Duluth MMC; an unusually early migration.

Swainson's Hawk: 5 reports: 4-20 Dakota BH; 5-14 Washington BL; 5-15 Lac Qui Parle KE, PE, RR and Lyon RBJ; 5-22 Swift FN.

Rough-legged Hawk: early north 3-30 Clearwater RCD; 4-2 Pine KE; 4-8 Duluth MMC and St. Louis NJH; an unusually late migration: latest 5-2 Watonwan EK and Hennepin BDC; 5-12 Wabasha WDM and Goodhue WKE, FN; 5-17 Wabasha TV.

Golden Eagle: no less than 12 reports of 16 individuals; only 3 reports last year; an encouraging trend in light of last summer's persecution of this species in Wyoming and Colorado; all reports of this endangered species should indicate age, only 2 did this year: 3-1 Watonwan (1 ad) EK; 3-1 Marshall (1) AR; 3-8 Sherburne (1) RLD; 4-3 Chippewa (1 imm) KE, PE; 4-4 Hennepin (3) VL, ES; 4-7 Carlton (1) JH; 4-8 Hennepin (1) WKE, FN; 4-6 Hennepin (2) MHM; 4-9 Marshall (2) AR; 4-14 Ottertall (1) AMB; 4-16 Wabasha (1) TV; 4-17 Wilkin (1) KJG.

Bald Eagle: 29 reports from 3-6 to 5-12 of a total of 132 individuals (25 adults, 42 immatures, 65 with no age indicated); reported from Houston (13), Wabasha (47), Goodhue (1), Washington (1), Hennepin (14), Scott (1), Carver (19), Lyon (3), Lac Qui Parle (4), Chippewa (5), Sherburne (2), Lake (3), St. Louis (10), Aitkin (1), Crow Wing (3), Itasca (1), Clearwater (1), and Marshall (4).

Marsh Hawk: early south 3-13 Murray AD and Nobles HH; 3-17 Watonwan EK; early north 3-29 Marshall AR; 3-30 Clearwater RD; peak 4-11 Duluth (14) KE.

Osprey: 19 reports of 22 individuals from 4-20 (AR) to 5-15 (Stearns, Murray, Jackson) about the same as last year; reported from Goodhue (1) Hennepin (1), Scott (1), Carver (1), Jackson (1), Murray (1), Stearns (2), Sherburne (1), Crow Wing (3), St. Louis (6), Clearwater(1), Becker (1), Beltrami (1), and Marshall (1).

Peregrine Falcon: 5 reports this year as compared to only one last spring: 3-28 Hennepin KJG, 4-24 WDM; 4-27 Marshall AR; 5-1 Marshall (3) AR; 5-2 Sherburne RLD.

Pigeon Hawk: only 5 reports: 4-6 Washington, Liz Campbell; 4-9 Ramsey DM; 4-11 Duluth JG, MMC; 4-24 Carver HK; 5-15 Duluth MMC.

Sparrow Hawk: early north 3-14 Morrison LR; 3-25 Clearwater RD; 3-29 Mille Lacs MI; peak 4-3 and 4-4 in 9 southwestern counties (75) KE, PE.

Spruce Grouse: 2 reports: 3-14 Koochiching DB; 3-23 and 3-25 Lake (2), S. Gilbertson.

Ruffed Grouse: reported from Cook, St. Louis, Cass, Lake of the Woods, Beltrami, Clearwater, Marshall, Clay, Mille Lacs, Morrison, Stearns, Sherburne (peak 5-14 (16) RLD). Pine, Washington, Dakota, Goodhue, Wabasha, and Winona.

Greater Prairie Chicken: 4 reports all from Rothsay, Wilkin Co.: 4-9 (38) DB; 4-15 LW; 4-17 (68) KJG; 5-1 (12) KH.

Sharp-tailed Grouse: 3 reports: 5-8 Lake of the Woods (11) KE, RR; 5-31 Aitkin (2) JB; no date Beltrami RCD.

Ring-necked Pheasant: reported from Duluth, Beltrami (no date, Waskish, RCD), Wabasha, Cottonwood, Brown, Hennepin, McLeod, Pope, Carver, Mower, Winona, Dakota, Stearns, Wright, Sherburne, Nobles, Rice, Olmsted, and Murray.

Gray Partridge: 11 reports from Dakota, Nobles, Rice, Olmsted, Murray, Lyon, Goodhue, and Blue Earth.

Turkey: on 5-14 OJ reported this species from Battle Lake, Ottertall Co.; wild birds however had been raised in the area since 1969, nests and young were observed in 1970, and during the winter of '70-'71, 16 individuals were seen wintering in the area.

Sandhill Crane: 8 reports: 4-3 Sherburne (4) RLD; 4-9 Washington WL and Clearwater (6) RCD and Marshall (3) AR; 4-15 Wilkin (100); 4-21 Marshall (250) AR; 4-24 Carver (3) HK; 5-1 Norman (50) KH; 5-8 Roseau (2) KE, RR.

Virginia Rail: 10 reports: early south 5-1 Hennepin BDC, DB; 5-6 Lyon HK; 5-12 Ramsey DM; 2 reports north: 5-16 Duluth, D. Sheer; no date, Clearwater RCD.

Sora: early south 4-23 Lyon HK 4-24 Winona TV; 4-25 Houston FL; early north 5-9 Marshall KE, RR; 5-11 Marshall AR.

YELLOW RAIL: reported in the greatest numbers ever at the Waubun marsh location; Univ. of Minn. students conducting a study of this species captured at least 10 with the aid of a dog, and heard at least 20 more.

BLACK RAIL: one of the few reports of this species in the state came on 5-12 at Frontenac, Goodhue Co.; 1 adult was seen by WKE, FN and good supporting details were submitted.

Common Gallinule: only 3 reports: 5-13 Houston FL; 5-25 Hennepin KJG; 5-27 Hennepin DB.

Coot: early south 3-14 Goodhue, Winona KE, PE and Dakota KJG; 3-19 Olmsted FS; early north 4-7 Marshall AR; 4-9 Clearwater RCD and Crow Wing JB.

Semipalmated Plover: early south 4-18 Lac Qui Parle KJG; 4-24 Sibley HK and Nobles HH; early north 5-8 Polk KE, RR; 5-15 Morrison LR; late 5-29 Swift and Pope BH; 5-30 Lyon PE.

Piping Plover: 11 reports; 6 in Duluth from 5-11 to 5-30; 1 from Lac Qui Parle (5-12 RR); 4 from Lyon 5-2, 5-8, 5-15, 5-16. as many as 3, HK, PE, KE, RR.

Killdeer: early south 3-2 Hennepin PF; 6 reports on 3-13; early north 3-30 Ottertail AMB; 3-31 Duluth JG and Crow Wing JB and Mille Lacs MI.

American Golden Plover: early south 4-27 McLeod BDC; 4-28 Washington BL; 4-29 Sibley ES, FN, WKE; 3 reports north: 5-8 Polk KE, RR; 5-25 and 5-26 Duluth KE, RR, JG; late 5-27 Red Lake ES; 5-29 Lyon PE; peak 5-14 Watonwan (1000) EK.

Black-bellied Plover: early south 4-21 Wabasha WDM; 5-15 Jackson JAB, ES, HK; only reports north: 5-16 Clay LW; 5-16 to 6-5 Duluth, many observers; late 5-29 Lyon PE; peak 5-15 Jackson (250) TV.

Ruddy Turnstone: early south 5-15 and 5-16 Lyon, many observers; early north 5-20 Duluth KE, RR; late 5-29 Duluth RBJ, JG; 5-30 Lyon PE; peak 5-29 Duluth (150) CH.

American Woodcock: early south 3-24 Carver KH; 4-3 Washington BDC and Hennepin CH; early north 3-31 Crow Wing JB; 4-4 Lake, S. Gilbertson.

Common Snipe: early south 3-10 Hennepin VL; 3-20 Winona RBJ, TV; 3-25 Hennepin ES; early north 4-8 Duluth MMC; 4-10 St. Louis KE, JG.

Whimbrel: 3 reports from Duluth: 5-20 (7) KE, RR; 5-25 (an amazing peak of 28) KE, RR, JG; 5-26 (1) MMC.

Upland Plover: early south 5-1 Wilkin VL; 5-2 Carver OJ; 5-4 Watonwan EK; early north 5-1 Clay KH; 5-6 Duluth MMC.

Spotted Sandpiper: early south 4-11 Lyon HK; 4-18 Hennepin OJ; 4-20 Ramsey JAB; early north 5-5 Duluth MMC; 5-9 Pennington KE, RR.

Solitary Sandpiper: early south 4-24 Hennepin CH and Goodhue DB; 4-25 Mower JLJ and Cottonwood LF and Carver ES; early north 4-19 Aitkin JB; 5-12 Mille Lacs MI; late 5-20 Duluth MMC and Clearwater RCD; 5-21 Lake RK.

Willet: early south 4-25 Stearns AMB; 5-1 Lyon PE; 5-2 Blue Earth EK; early north 5-1 Mille Lacs MI; 5-11 Duluth JG; late 5-26 Duluth JG; 5-29 Lyon PE.

Greater Yellowlegs: early south 4-11 Lac Qui Parle RBJ; 4-12 Watonwan EK; 4-12 Wabasha WDM; early north 4-11 Clearwater RCD; 4-13 Ottertail AMB; late 5-7 Beltrami KE, RR; 5-16 Jackson HW.

Lesser Yellowlegs: early south 4-9 Nobles HH and Sibley DB; 4-11 Lac Qui Parle RBJ; early north 4-11 Clearwater RCD; 4-16 Marshall AR; late 5-26 Sherburne RLD; 5-30 Lyon PE.

Knot: 4 reports: 5-25 (7), 5-26 (6), 5-29 (3) Duluth KE, RR, JG, MMC, CH; 5-22 Pennington (3) MS, one of the few inland reports for this species.

Pectoral Sandpiper: early south 4-8 Watonwan EK; 4-11 Hennepin OJ; 4-16 Lyon HK and Washington VL; early north 4-9 Wilkin DB; 4-16 Clay LW; late 5-30 Lyon PE and Clay LW; 6-7 Duluth MMC; peak 4-21 Wabasha (500) WDM.

White-rumped Sandpiper: early south 5-12 Lyon HK; 5-15 Lyon, many observers; only reports north: 5-25 and 5-26 Duluth KE, RR, JG; late 5-30 Lyon PE; 6-6 Lyon HK; peak 5-22 Lyon (200) HK, BDC.

Baird's Sandpiper: early south 4-9 Lac Qui Parle DB and Hennepin OJ; 4-10 Lyon PE; only reports north: 4-16 Clay LW; 5-25 Duluth JG; late 5-30 Clay LW and Lyon PE; 6-6 Lyon HK; peak 5-18 Lyon (90) HK.

Least Sandpiper: early south 4-24 Hennepin CH; 4-25 Lyon HK; 4-27 McLeod BDC; early north 5-7 Clay LW; 5-8 Polk KE, RR; late 5-25 Lyon HK; 5-30 Clay LW.

Dunlin: early south 4-18 Lac Qui Parle KJG; 4-27 McLeod BDC; 5-2 Lyon HK; early north 5-14 Clay LW; 5-15 Morrison LR; late 5-30 Clay LW and Lyon PE; peak 5-25 Duluth (300) KE, JG, RR.

Short-billed Dowitcher: 6 reports with call-note data: 4-25 Lyon HK; 5-15, 16, Lyon, many observers; 5-20, 5-25, 5-26 Duluth KE, RR, JG; 5-30 Lyon PE.

Long-billed Dowitcher: only 2 reports with call-note data: 5-13 Lyon HK; 5-15 Lyon KE, PE, RR.

Dowitcher, sp.: 12 reports from 4-29 to 5-25 from Duluth, Marshall, Clay, Morrison, Hennepin, Carver, Sibley, McLeod, Lyon, and Jackson (peak of 60 on 5-15 by TV).

Stilt Sandpiper: only 5 reports: 5-15, 16 Lyon, many observers; 5-15 Jackson, many observers; 5-18 Lyon (100) HK; 5-30 Lyon PE; 6-6 Lyon HK.

Semipalmated Sandpiper: early south 4-18 Lac Qui Parle KJG; 4-20 Lyon HK; 5-1 Lyon PE and Lac Qui Parle BH and Sibley BL, ES; early north 5-8 Polk KE, RR; 5-14 Ottertail RR; late 5-30 Lyon PE; 6-7 Duluth MMC; peak 5-22 Lyon (200) BDC.

WESTERN SANDPIPER: 3 reports from Marshall, Lyon Co.: 4-25 (4) HK; 5-16 (1) DB; 5-28 (1) PE; this species is probably overlooked and not that rare in Minnesota.

BUFF-BREASTED SANDPIPER: 2 reports of this rare spring migrant: 5-12 Marshall, Lyon Co. (2) HK; 5-15 Stevens (2) KE, PE, RR.

Marbled Godwit: early south 4-28 Sibley MHM, ES; 4-29 Sibley WKE, FN and McLeod BDC; early north 4-17 Wilkin KJG; 5-8 Roseau KE, RR; peak 5-1 Wilkin (42) KH.

Hudsonian Godwit: many reports: early south 4-25 Stearns NMH; 4-28, 29 Sibley, many observers; 4-29 McLeod BDC; 4 reports north: 5-1 Wilkin KH; 5-8 to 5-15 Clay LW; 5-21 Becker KE, RR; 5-23, 25, 26 Duluth KE, RR, JG, MMC; also reported from Jackson, Lyon, Lac Qui Parle, Wabasha, and Sherburne.

RUFF: an adult male was discovered on 4-26 by F. Kedney 7 mi. W. of Green Isle, Sibley Co.; the bird was seen by 21 observers and remained until 5-2; second state record.

Sanderling: early south 5-1 Lyon PE; 5-2 Cottonwood LF; 5-12 Lac Qui Parle RR; early north 5-20 Duluth KE, RR, JG; 5-22 Duluth MMC; late 5-29 Swift BH and Duluth JG, CH, RBJ; 5-30 Lyon PE.

American Avocet: 4 reports: 4-17 Lac Qui Parle VL; 5-1 Sibley (15) ES; 5-15 Lac Qui Parle (4) KE, PE, RR; 4-27, 5-2 (a peak of 30 by HK), 5-15 5-16, 5-18 Marshall, Lyon Co., many observers.

Wilson's Phalarope: early south 4-25 Lyon HK; 4-27 McLeod BDC; 4-29 Sibley WKE, FN; 4-29 Carver BL; early north 5-7 Beltrami KE, RR; 5-9 Aitkin JB; peak 5-2 Lyon (200) HK.

Northern Phalarope: 8 reports: 5-16 (12) many observers; 5-18 (75) HK, 5-21 (35) FN, 5-22 (9) HK, 5-27 (8) DB, 5-30 (15) PE Marshall, Lyon Co.; 5-22 Lac Qui Parle (200) BDC; 5-30 Clay (6) LW.

Glaucous Gull: 2 reports from Lake Co.: 4-4 (5) RK; 4-5 (1 ad, 8 imm) JG; 6 reports from Duluth: 3-20 and 4-13 (1) MMC; 4-30, 5-1, 5-2, 5-5 (2 imm) KE, RR.

ICELAND GULL: 4-5 Two Harbors, Lake Co. (1 imm) JG, good details.

Herring Gull: early south 3-14 Wabasha KE, PE and Dakota KJG; 3-28 Houston FL; early north 3-31 Crow Wing JB; 4-4 St. Louis NJH.

Ring-billed Gull: early south 3-28 Nobles HH and Houston FL; 3-30 Wabasha WDM; early north 3-31 Mille Lacs MI; 4-10 Duluth KE, JG and Crow Wing JB.

Franklin's Gull: early south 3-14 Yellow Medicine HK (earliest date on record); 3-30 Nobles HH; 4-8 Wabasha WDM; early north 4-10 Marshall AR; 4-16 Clay LW; peak in May of 15,000 at Agassiz Refuge, Marshall Co., AR.

Bonaparte's Gull: early south 4-12 Washington BL; 4-17 Wright BH; 4-22 Hennepin ES; early north 4-20 Traverse LW; 5-9 Beltrami KE, RR; late 5-27 Red Lake ES; 5-29 Duluth JG, CH; peak 5-10 Duluth (4000) KE, RR.

IVORY GULL: 1 adult reported at Knife River, Lake Co. on 3-14 by J. Brandenburg; good details; a very rare species south of the Arctic.

Forster's Tern: early south 4-17 Nicollet RBJ; 4-19 Hennepin PE; 4-20 Lyon HK and Hennepin VL, ES, FN; early north; 5-6 Marshall AR; 5-9 Pennington KE, RR.

Tern sp: 4-10 Marshall AR.

Common Tern: early south 4-15 Hennepin CH; 4-17 Carver DB; 4-19 Scott PE and Carver KH; early north 5-7 Crow Wing JB; 5-8 Duluth, H. Roberts; peak 5-20 Duluth (14,000) KE, RR.

Caspian Tern: early south 5-15 Cottonwood HK and Jackson KJG, DB and Lyon BL. RBJ and Pope KE, PE, RR and Goodhue TV; early north 5-16 Duluth MMC; 5-18 Duluth JG; late 5-29 Pope BH; peak 5-22 Cass (40) KE, RR.

Black Tern: early south 4-30 Lyon HK and Hennepin OJ; 5-3 Nobles HH; early north 5-9 Marshall KE, RR; 5-13 Morrison LR; peak 5-22 Marshall (1000's) AR.

Mourning Dove: early north 3-29 Mille Lacs MI; 4-8 Marshall AR.

Yellow-billed Cuckoo: only reported from Hennepin: 5-18, 20, 31, many observers.

Black-billed Cuckoo: early south 5-1 Hennepin JAB (good details); 5-15 Dakota FL; 5-17 Hennepin DB; only report north 5-28 Crow Wing JB.

BARN OWL: one reported on 4-12 at Worthington, Nobles Co. by J. Brandenburg; one of the very few reports for this species in recent years.

Screach Owl: reported from Stearns, Lyon, Hennepin, Wright, Nobles, Rice, Ramsey, and Washington.

Great Horned Owl: reported from St. Louis, Lake of the Woods, Stearns, Mille Lacs, Hennepin, Wabasha, Sherburne, Carver, Winona, Freeborn, Nobles, Rice and Olmsted.

Snowy Owl: 7 reports: 3-4 Marshall AR; 3-23 Cook JP; 4-4 Mille Lacs MI; 4-8 Duluth KE; 4-16 Duluth JG; 4-26 Duluth MMC 5-16 Duluth, D. Sheer.

BURROWING OWL: one reported on 5-15 and 5-27 near St. Leo, Yellow Medicine Co. by DB and RG; in recent years this owl has become scarce in western Minn. where it was formerly regular.

Barred Owl: reported from Ramsey, Wabasha, Hennepin, Morrison, Marshall, Winona, Stearns, St. Louis, Anoka, Carver, McLeod, and Washington.

GREAT GRAY OWL: after last year's nesting of this species in Roseau Co., a few birds apparently returned to this area this spring; KE and RR observed one in flight about 10 miles ENE of last year's nesting site along highway 12 in Manitoba on 5-8; they also were told by a U.S. customs official at the station near last year's site that Great Gray's had been seen earlier that spring in the immediate area, but he was not specific as to numbers of owls or dates.

Long-eared Owl: 4 reports: 4-10 St. Louis KE, JG; 4-11 Duluth KE; 5-9 Lyon HK; 5-15 Stearns KE, PE, RR.

Short-eared Owl: only 3 reports: 4-9 Nobles; 4-9 Hennepin OJ; 4-13 Marshall AR.

BOREAL OWL: one was observed by RK on 4-4 at Two Harbors, Lake Co.

Saw-whet Owl: no less than 10 reports: 3-9 St. Louis JG; 3-16 Ramsey DM; 3-27 Hennepin FN; 4-4 Clay LW; 5-13 Clearwater RCD. 5 reports from Duluth from 3-11 to 4-5 by many observers.

Whip-poor-will: 7 reports: 5-4 Washington, Liz Campbell; 5-7 Lake of the Woods KE, RR; 5-9 Murray AD; 5-12 Washington WL and Sherburne RLD; 5-17 Washington BDC; 5-20 Lyon HK.

Common Nighthawk: early south 4-24 Carver MJM; 5-10 Winona TV and Lyon HK; early north 5-8 Crow Wing JB; 5-16 Mille Lacs MI.

Chimney Swift: early south 4-24 Goodhue KE; 4-29 Hennepin MHM and Winona TV; early north 5-2 Morrison KH; 5-10 Crow Wing JB and Duluth MMC and Morrison LR.

Ruby-throated Hummingbird: early south 5-7 Washington WL; 5-15 Stearns KE, PE, RR; early north 5-13 Crow Wing JB; 5-14 Lake RK; 5-16 Morrison LR and Mille Lacs MI.

Belted Kingfisher: early south 3-10 Sherburne RLD; 3-14 Wabasha and Winona KE, PE; 3-20 Winona KJG; early north 4-8 Marshall AR; 4-10 Duluth MMC.

Yellow-shafted Flicker: early north 3-17 Duluth KE; 4-4 Crow Wing JB; 4-7 Mille Lacs MI; peak 5-2 Duluth (70) KE, RR.

Pileated Woodpecker: reported from Nicollet, Stearns, Marshall, Mille Lacs, St. Louis, Ottertail, Clearwater, Carver, Sibley, Goodhue, Sherburne, Wabasha, Winona, Washington, Hennepin, Rice, Wright, Meeker, and Cook.

Red-bellied Woodpecker: reported from Goodhue, Stearns, Morrison, Aitkin, Lake (5-20, M.E. Penner), Winona, Hennepin, Carver, Dakota, Wabasha, Olmsted, Rice, Nobles, Murray, Wright, and Washington.

Red-headed Woodpecker: early north 4-15 Clearwater RCD; 4-17 Crow Wing JB; 3-28 Mille Lacs MI.

Yellow-bellied Sapsucker: early south 4-2 Hennepin DB; 4-3 Hennepin CH and Washington BL; early north 4-2 Lake, M. E. Penner; 4-10 Crow Wing JB.

Eastern Kingbird: early south 5-2 Jackson HH; 5-7 Redwood PE; 5-8 Sibley ES; early north 4-10 Crow Wing JB (no details); 5-16 Hubbard MS and Duluth MMC and Mille Lacs MI.

Western Kingbird: early south 5-11 Stearns MLC; 5-11 Murray AD; 5-12 Stearns RR; early north 5-29 Douglas DB; 5-30 St. Louis RBJ.

Great Crested Flycatcher: early south 5-11 Hennepin FN, ES and Carver KH and Winona TV; early north 5-6 Ottertail AMB; 5-13 Clay LW.

Eastern Phoebe: early south 3-20 Winona RBJ, TV; 3-31 Hennepin ES, VL and Sherburne RLD; early north 3-21 Ottertail AMB; 4-8 Crow Wing JB.

Yellow-bellied Flycatcher: early south 5-18 Hennepin BDC; 5-22 Hennepin CH; earliest in north: 5-12 Duluth MMC; 5-17 Ottertail AMB and Crow Wing JB; late 5-29 Duluth KJG; 5-31 Hennepin FN, WKE, BDC.

Trall's Flycatcher: early south 5-6 Hennepin ES; 5-11 Hennepin WKE, VL; 5-12 Lyon HK; early north 4-30 Marshall AR; 5-21 Duluth MMC.

Least Flycatcher: early south 4-21 Hennepin OJ (no details); 5-1 Carver KH; 5-5 Scott PE; early north 5-12 Itasca MS; 5-13 Morrison LR.

Eastern Wood Pewee: early south 5-6 Stearns MLC; 5-15 Goodhue KH; 5-16 Cottonwood HK and Hennepin BL; early north 5-27 Duluth MMC; 6-1 Ottertail AMB; very late arriving this year.

Olive-sided Flycatcher: early south 5-8 Hennepin OJ; 5-15 Goodhue KH and Jackson ES and Hennepin CH, VL and Cottonwood TV; early north 5-16 Itasca MS; 5-17 Mille Lacs MI; late south 5-31 Hennepin DB, WKE, BDC.

Horned Lark: early north 2-18 Clearwater RCD; 3-14 Morrison LR; 3-21 Crow Wing JB.

Tree Swallow: early south 3-28 Houston FL; 3-31 Wright ED 4-9 Carver KH; early north 4-10 Duluth KE, JG and Beltrami MS and Crow Wing JB.

Bank Swallow: early south 4-17 Goodhue BL; 4-20 Lyon HK; 4-24 Goodhue KE, PE, DB; early north 4-26 Ottertail AMB; 5-1 Crow Wing JB.

Rough-winged Swallow: early south 4-16 Washington BL; 4-17 Winona TV; 4-18 Cottonwood LF; early north 5-5 Duluth KE, RR; 5-11 Morrison LR.

Barn Swallow: early south 4-14 Winona TV; 4-18 Stearns MLC; 4-21 Murray AD; early north 4-17 Duluth KE; 5-2 Crow Wing JB.

Cliff Swallow: early south 5-5 Sherburne RLD and Lyon HK; early north 5-2 Crow Wing JB; 5-6 Marshall AR and St. Louis NJH; peak 5-9 Marshall (500) KE, RR.

Purple Martin: early south 3-31 Cottonwood LF; 4-7 Lyon HK; 4-10 Hennepin WDM and Lyon PE; early north 4-13 Crow Wing JB; 4-16 St. Louis NJH.

Gray Jay: 6 reports from Cook, Lake, Duluth Aitkin, and Itasca.

Blue Jay: peak 5-22 Duluth (100's) MMC.

Black-billed Magpie: 3-13 Poplar, Cass Co., BL; 4-21 rural Duluth, St. Louis KE; 5-8 Kittson KE, RR; 5-9 Agassiz Refuge, Marshall Co. (same spot as where a nest was found later), KE, RR; 5-27 Bagley, Clearwater Co., ES.

Common Raven: reported from Lake, St. Louis, Carlton, Pine, Aitkin, Clearwater.

Boreal Chickadee: all winter until 4-5 Duluth, M. Hesse; all winter until 3-31 Lake KE.

Tufted Titmouse: only 5 reports from 3-20 to 5-16 in Hennepin and Winona.

Red-breasted Nuthatch: 13 reports throughout the period from Hennepin, St. Louis, Stearns, Itasca, Clearwater, Crow Wing, and Cook.

Brown Creeper: early south 3-9 Hennepin BL; 3-17 Wabasha WDM; 3-27 Hennepin CH, KJG; early north 3-1 Crow Wing JB; 4-3 Duluth JG.

House Wren: early south 4-20 Winona TV; 4-22 Nobles HH; 4-24 Dakota DB; early north 5-2 JG; 5-7 Morrison LR and Mille Lacs MI.

Winter Wren: early south 4-3 Hennepin BH; 4-11 Hennepin DB; 4-13 Hennepin WKE; early north 4-10 Duluth JG; 4-25 St. Louis NJH; late south 5-11 Hennepin ES; 5-13 Goodhue FN.

Long-billed Marsh Wren: early south 5-11 Hennepin KJG; 5-12 Goodhue WKE; 5-13 Goodhue TV; early north 5-13 Clearwater RCD; 5-17 Crow Wing JB.

Short-billed Marsh Wren: early south 5-5 Scott PE; 5-8 Goodhue DB, KJG and Sherburne RLD; early north 5-13 Clearwater RCD; 5-15 St. Louis NJH.

Mockingbird: 6 reports: 5-9 Carlton MMC; 5-19 to 5-23 Duluth, K. Sundquist; 5-23, 5-24 Crow Wing JB; 5-27 Nobles, J. Brandenberg; 5-28 Olmsted HW; 5-29, 30 Duluth JG, RBJ, KJG.

Catbird: early south 5-2 Nobles HH; 5-4 Olmsted HW; 5-6 Murray AD and Mower JHJ and Rice OR;

early north 5-16 Itasca MS; 5-18 Mille Lacs MI and Crow Wing JB.

Brown Thrasher: early south 4-18 Scott PE; 4-20 Carver MHM and Winona TV and Cottonwood LF; early north 4-25 Morrison LR; 5-3 Hubbard AP.

Robin: early north 3-19 Duluth MMC; 3-21 Clay DM; 3-26 Duluth JG.

VARIED THRUSH: one adult female or immature male was at a feeder in Two Harbors, Lake Co. from 3-9 to 4-9; on 3-31 the bird was seen by KE and RK.

Wood Thrush: early south 5-10 Winona TV; 5-11 Carver KH; 5-13 Hennepin DB and Sherburne RLD; 4 reports north: 5-15 Crow Wing JB; 5-20 Duluth JG; 5-21 and 5-27 Lake RK; 5-22 Itasca MS; this species has been spreading north in recent years.

Hermit Thrush: early south 4-2 Hennepin DB; 4-3 Hennepin CH; 4-6 Hennepin WKE; early north 4-24 Crow Wing JB; 5-1 Marshall AR; late south 5-16 Stearns MLC; 5-17 Olmsted HW.

Swainson's Thrush: early south 4-23 Scott PE; 5-1 Carver MHM; 5-4 Hennepin DB, ES, CH; early north 5-5 Morrison LR; 5-13 Crow Wing JB; late south 5-29 Cottonwood LF; 5-31 Hennepin WKE, OJ.

Gray-cheeked Thrush: early south 5-1 Hennepin BDC; 5-4 Hennepin DB and Cottonwood LF; early north 5-16 Morrison LR; 5-23 Red Lake MS; late south 5-23 Hennepin VL; 5-27 Stearns MLC.

Veery: early south 5-6 Washington WL; 5-9 Murray AD; early north 4-27 Ottertail AMB; 5-9 St. Louis NJH and Crow Wing JB.

Eastern Bluebird: early south 3-13 Lyon HK; 3-28 Hennepin OJ; 3-30 Wabasha WDM; early north 3-31 Ottertail AMB and Clearwater RCD.

Blue-gray Gnatcatcher: early south 4-24 Goodhue KE, PE; 5-2 Houston FL; 5-4 Goodhue JAB.

Golden-crowned Kinglet: early south 3-17 Stearns MLC; 3-29 Hennepin VL; 3-31 Hennepin ES, CH and Murray AD; early north 4-2 Duluth JG; 4-4 Crow Wing JB.

Ruby-crowned Kinglet: early south 3-29 Hennepin VL; 3-31 Hennepin ES and Murray AD and Cottonwood LF; early north 4-9 Duluth JG and Mille Lacs MI; late south 5-15 Stearns KE, PE, RR; 5-16 Hennepin VL.

Water Pipit: 6 reports: 4-27 Lyon HK; 5-1 Lyon PE and Mille Lacs MI and Lake KE, RR; 5-24 Lake JG; 5-27 Lyon DB.

Sprague's Pipit: 5-14 Felton, Clay Co. (1) RR; 5-1 5 mi. se Nimrod, Wadena Co. (1 adult male collected), R. Oehlenschlaeger.

Bohemian Waxwing: 4-5 Vineland, Mille Lacs Co. (20) MI, only report.

Cedar Waxwing: very late arriving; only 6 reports before May; earliest 3-10 Cook JP; 3-13 Ramsey JAB; most observers did not report birds until late May.

Northern Shrike: no less than 22 reports; late south 4-6 Sherburne RLD; 4-4 Cottonwood LF; 4-1 Wabasha WDM; late north 4-10 Lake RK and Crow Wing JB; 4-11 Cook JP; peak 4-5 Duluth (5) MMC.

Loggerhead Shrike: 16 reports, therefore a total of 38 shrike observations; however many of these still seem to be misidentified: early south (4 were reported in March with no details and were probably Northerns) 4-21 Scott VL; early north 4-5 Ottertail ES; 4-17 Wilkin KJG; 5-15 Duluth MMC and Morrison JB.

Bell's Vireo: 2 reports: 5-13 Winona TV; 5-23 Marshall, Lyon Co. HK.

Yellow-throated Vireo: early south 5-8 Goodhue KJG and Winona TV; 5-9 Washington WL; early north 5-20 Crow Wing JB and Morrison LR.

Solitary Vireo: early south 5-5 Hennepin CH; 5-9 Goodhue DB; 5-10 Hennepin VL; early north 5-9 St. Louis NJH; 5-22 Crow Wing JB and Lake RK; late south 5-20 Lyon HK and Hennepin ES.

Red-eyed Vireo: early south 5-8 Winona TV and Goodhue DB, KJG; 5-12 Lyon HK; early north 5-15 Itasca MS; 5-21 Duluth MMC.

Philadelphia Vireo: early south 5-6 Hennepin OJ; 5-11 Hennepin CH; 5-12 Hennepin PE; early north 5-13 Crow Wing JB; 5-16 Duluth MMC; late 5-26 Mower JLG; 5-31 Crow Wing JB.

Warbling Vireo: early south 5-4 Goodhue JAB; 5-5 Cottonwood LF; 5-6 Winona TV; early north 5-7 Morrison LR; 5-10 Mille Lacs MI.

Black and White Warbler: early south 5-1 Niccollet BL and Hennepin BDC; 5-2 Murray HH and Scott PE; early north 5-4 Ottertail AMB; 5-5 Morrison LR and Mille Lacs MI; late south 5-27 Cottonwood LF; 5-31 Hennepin BDC.

Prothonotary Warbler: only 3 reports: this species has become uncommon in recent years: 5-11 Hennepin EJ; 5-13 Houston FL; 5-17 Goodhue FN.

Golden-winged Warbler: early south 5-10 Hennepin VL; 5-12 Hennepin ES; 5-14 Goodhue BDC; only reports north 5-27 Duluth MMC; 5-29 Clearwater RCD.

Blue-winged Warbler: 6 reports: 5-10 Hennepin VL; 5-13 Goodhue FN, DB; 5-14 Goodhue BDC; 5-15 Dakota FL; 5-17 Winona TV and Washington BDC.

Brewster's Warbler: 2 reported on 5-21 at Frontenac, Goodhue Co. by MHM and VL; good details.

Tennessee Warbler: early south 5-2 Lyon HK; 5-3 Ramsey JAB; 5-4 Olmsted HW; early north 5-15 St. Louis NJH and Clearwater RCD; late south 5-30 Washington WL; 5-31 Hennepin BDC, FN, WKE.

Orange-crowned Warbler: early south 4-20 Lyon HK; 4-21 Carver MHM; 4-23 Hennepin VL; early north 5-5 Morrison LR; 5-11 Marshall AR and Lake RK and Duluth JG; late 5-30 Hennepin OJ; 5-31 Wright BH.

Nashville Warbler: early south 4-19 Washington WL; 5-5 Mower JLG and Hennepin RBJ, VL, CH, PF, PE and Carver MHM; early north 5-7 St. Louis NJH and Morrison LR; late south 5-25 Hennepin WKE; 5-31 Hennepin BDC.

Parula Warbler: early south 5-6 Winona TV; 5-15 Stearns KE, PE, RR; 5-21 Goodhue BL; early north 5-16 St. Louis NJH and Itasca MS; late south 5-25 Hennepin WKE.

Yellow Warbler: early south 4-24 Carver KH; 5-6 Scott PE; 5-8 Goodhue KJG and Winona HW, TV and Jackson HH; early north 5-7 Itasca MS; 4 reports on 5-10.

Magnolia Warbler: early south 5-4 Carver KH; 5-10 Hennepin VL; 5-11 Hennepin OJ; early north 5-12 Crow Wing JB; 5-15 Duluth MMC; late south 5-31 Hennepin WKE, BDC and Wright BH.

Cape May Warbler: only 8 reports; earliest in north 5-13 Duluth JG; 5-15 Duluth MMC; 5-16 Mille Lacs MI; early south 5-12 Winona TV; 5-15 Sherburne RLD.

Black-throated Blue Warbler: 2 reports: 5-15 Clearwater RCD; 5-17 Frontenac, Goodhue Co. FN.

Myrtle Warbler: early south 4-10 Jackson HH; 4-12 Hennepin BDC; earliest in north 4-2 and 4-3 Duluth JG, MMC; 4-9 Mille Lacs MI; late south 5-22 Sherburne RLD; 5-24 Washington WL.

Black-throated Green Warbler: early south 5-7 Lyon HK; 5-8 Dakota KJG, DB; 5-9 Hennepin VL; early north 5-14 Lake RK; 5-15 Itasca MS and Clearwater RCD and St. Louis NJH; late south 5-23 Washington WL; 5-27 Carver KH.

Cerulean Warbler: early south 5-13 Winona TV and Houston FL and Goodhue DB, FN, WKE; 5-15 Stearns KE, PE, RR; peak 5-17 Goodhue (10) FN.

Blackburnian Warbler: early south 5-11 Hennepin VL, ES, WKE; 5-14 Goodhue BDC and Stearns MLC; early north 5-16 St. Louis NJH and Itasca MS; late south 5-25 Hennepin CH; 5-27 Hennepin WKE, FN.

Chestnut-sided Warbler: early south 5-11 Hennepin FN, WKE, ES, VL and Washington WL; 5-12 Hennepin DB; early north 5-15 Aitkin JH; 4 reports on 5-16; late south 5-26 Hennepin WKE; 5-31 Wright BH.

Bay-breasted Warbler: early south 5-10 Hennepin CH; 5-11 Hennepin ES; 5-15 Lyon RBJ, BL and Stearns KE, PE, RR; early north 5-22 St. Louis NJH; 5-23 Crow Wing JB; late south 5-22 Wabasha WDM; 5-27 Hennepin WKE, FN.

Blackpoll Warbler: early south 5-12 Ramsey DM; 5-13 Washington WL and Goodhue WKE, FN, BDC; early north 5-8 Mille Lacs MI; 5-18 Duluth JG; late 5-29 Washington WL; 6-1 Itasca MS.

Pine Warbler: early south 5-1 Hennepin DB; 5-4 Winona TV; 5-9 Pipestone HK; early north 5-4 Crow Wing JB; 5-13 Duluth KE; late south 5-23 Lyon HK.

Palm Warbler: early south 4-24 Hennepin CH; 4-25 Hennepin ES; 4 reports on 5-1 early north 5-2 Duluth MMC; Crow Wing JB and Morrison LR; late south 5-19 Hennepin PT; 5-23 Lyon HK.

Ovenbird: early south 5-5 Hennepin RBJ, VL; 5-8 Winona HW and Sherburne RLD and Hennepin DB; early north 5-12 Crow Wing JB; 5-14 Lake RK.

Northern Waterthrush: early south 4-27 Hennepin FN, ES; 5-1 Hennepin DB and Carver MHM; early north 5-2 Marshall KH, VL; 5-4 Morrison LR.

Louisiana Waterthrush: only 1 report: 4-23 Winona TV.

Connecticut Warbler: only 3 reports: 5-23 Hennepin VL; 5-29 Carlton (5) BL; 5-31 Hennepin DB, FN.

Mourning Warbler: early south 5-18 Hennepin FN; 5-19 Mower JLG; 5-20 Hennepin DB; early north 5-20 Morrison LR; 5-22 Crow Wing JB and Itasca MS ad Duluth KS; late south 5-25 Hennepin WKE, ES; 5-31 Hennepin FN, DB.

Yellowthroat: early south 5-6 Lyon HK; 5-8 Winona HW and Hennepin CH; early north 5-12 Itasca MS; 5-16 Lake RK and Morrison LR.

Yellow-breasted Chat: 1 report: 5-19 Worthington, Nobles Co. (1) HH; this bird has become rare in recent years.

Wilson's Warbler: early south 5-13 Goodhue FN, WKE; 5-14 Nobles HH; early north 5-20 Morrison LR; 5-21 Mille Lacs MI; late 5-31 Wright BH and Duluth JG and Cook JP.

Canada Warbler: early south 5-14 Carver MHM; 5-18 Hennepin BDC and Goodhue HW; early north 5-16 Itasca MS; 5-20 Crow Wing JB; late south 5-26 Houston LR and Hennepin ES; 5-31 Hennepin WKE.

American Redstart: early south 5-10 Hennepin VL; 5-11 Carver KH and Scott PE and Washington WL; early north 5-11 Morrison LR; 5-14 Mille Lacs MI.

Bobolink: early south 5-6 Lyon HK; 5-7 Watonwan EK; 5-8 Sherburne RLD and Dakota DB and Lyon PE; early north 5-9 Grant MS; 5-10 Clearwater RCD.

Eastern Meadowlark: early south 3-14 Wright BH and Wabasha WDM; 3-16 Sherburne RLD; early north 3-28 Mille Lacs MI; 3-30 Ottertail AMB.

Western Meadowlark: early south 3-10 Rice OR; 3-12 Murray AD; 3-13 Lyon HK and Nobles, Jackson HH; early north 3-13 Hubbard BL; 3-30 Marshall AR.

Yellow-headed Blackbird: early south 4-6 Hennepin JAB; 4-10 Lyon PE; 4-14 Nobles HH; early north 4-21 Ottertail AMB; 4-22 Marshall AR.

Redwinged Blackbird early south 3-14 Murray AD and Wabasha, Goodhue KE, PE; 3-13 Lyon HK and Rice OR; early north 3-30 Ottertail AMB; 3-30 Mille Lacs MI.

Orchard Oriole: 6 reports: 5-16 Lyon KE, PE, RR; 5-17 Murray (3) AD; 5-20 Wabasha WDM; 5-22 Jackson HH; 5-28 Lyon (12) PE; 5-30 Winona TV.

Baltimore Oriole: early south 5-2 Hennepin PF and Winona HW and Jackson HH; early north 5-6 Crow Wing JB; 5-10 Mille Lacs MI.

Brewer's Blackbird: early south 3-24 Nobles HH; 3-31 Murray AD; 4-4 Lyon HK; early north 4-8 Itasca MS; 4-11 Duluth KE; peak 5-2 Duluth (200) KE, RR.

Rusty Blackbird: early south 3-8 Nobles HH; 3-13 Rice OR and Lyon HK; early north 4-8 Itasca MS; 4-11 Crow Wing JB; late 5-2 Carver CH.

Common Grackle: early south 3-9 Carver KH; 3-14 Dakota VL; 3-15 Lyon HK; early north 3-7 Lake, M.E. Penner; 3-28 Mille Lacs MI.

Brown-headed Cowbird: early south 4-2 Washington BL; 4-3 Winona TV; 4-5 Murray AD; early north 4-10 Duluth KS; 4-10 Itasca MS; peak 5-2 Duluth (400) KE, RR.

Scarlet Tanager. early south 5-8 Wabasha HW; 5-11 Winona TV and Freeborn RHJ; early north 5-18 Crow Wing JB; 5-20 Cook JP.

Cardinal: 2 reports north: wintered until 4-1 at Duluth, H. Lease; 4-20 Lake RK.

Rose-breasted Grosbeak: early south 4-20 Winona TV; 5-3 Hennepin PF; 5-5 Hennepin WKE, CH; early north 5-11 Lake RK; 5-12 Crow Wing JB.

BLUE GROSBEAK: this species may be extending its range northeast; AD reports that this bird has been present since 1969 at Edgerton, Pipestone Co.; she saw one this year on 5-20.

Indigo Bunting: early south 5-12 Goodhue WKE, KJG, FN; 5-13 Goodhue DB, BDC and Mower JLJ; early north 5-12 Lake RK; 5-18 Crow Wing JB.

Dickcissel: early south 5-15 Jackson ES and Cottonwood HK; 5-16 Jackson DB and Nobles RBJ.

Evening Grosbeak: 6 reports: 3-10 Sherburne RLD; 3-19 Ramsey JAB; 4-1 Chisago FS; 4-20 Sherburne RLD and Duluth (400) KE; 5-15 Stearns KE, PE, RR.

Purple Finch: late South 5-2 Chisago FS and Hennepin PF; 5-6 Hennepin FN; 5-27 Stearns MLC; early north 3-9 Lake, M.E. Penner; 3-20 Cook JP; peak 5-10 Lake (100) RK.

Common Redpoll: only 2 reports: "present" in Beltrami MK; 4-18 Marshall (20) AR.

Pine Siskin: only 2 reports south: 4-24 Carver MHM; 5-13 Ramsey, Liz Campbell; only 5 reports north with the highest peak of only 10.

American Goldfinch: early north 3-8 Cook JP; 3-7 Crow Wing JB; 4-8 Hubbard AP.

Red Crossbill: only 3 reports: 3-14 Crow Wing (20) JB; 5-31 Clearwater RCD; in April in Wadena Co., R. Oehlenschlaeger collected a female with a fresh brood patch; he also reported numerous small flocks of this species from this area during winter and spring.

Rufous-sided Towhee: early south 4-12 Sherburne RLD; 4-20 Winona TV and Hennepin VL, WKE, FN; early north 4-17 Morrison LR; 5-6 Cook JP.

Lark Bunting: 5-16 Nobles (1) RBJ; 6-7 Nobles (1) HH; only reports.

Savannah Sparrow: early south 4-5 Lyon HK; 4-22 Washington WL; early north 4-17 Wilkin KJG; 4-21 Mille Lacs MI; 4-23 Crow Wing JB.

Grasshopper Sparrow: early south 4-17 Lyon HK; 4-22 Winona TV; 4-29 Sibley BDC; only reports north: 4-23 Ottertail AMB; 5-22 Clay (8) KE, RR; peak 5-10 Lyon (11) HK.

BAIRD'S SPARROW: one reported by Tim I. Mjos on 5-13 at Felton, Clay Co.; no details.

Le Conte's Sparrow: 4 reports: 5-8 Roseau KE, RR; 5-9 Marshall KE, RR; 5-22 Becker KE, RR; 5-29 Pine BL.

Henslow's Sparrow: 2 reports: 5-8 Winona (3) TV; 5-15 Jackson (1) HK.

Sharp-tailed Sparrow: 5-15 Lyon RBJ, JG; only report.

Vesper Sparrow: early south 4-3 Renville DB; 4-4 Lyon PE, KE; 4-7 Sherburne RLD; early north 4-14 Crow Wing JB; 4-19 Clay ES.

Lark Sparrow: early south 5-8 Wabasha TV; 5-9 Anoka, Ron Huber; 5-15 Sherburne RLD; only reports north: 5-8 Marshall KE, RR; 5-10 Duluth MMC.

Slate-colored Junco: late south 5-3 Hennepin VL; 5-9 Wright BH; 5-12 Winona TV; early north 3-14 Morrison LR and Crow Wing JB; peak 4-1 Washington (400) WL.

Oregon Junco: late south 4-5 Hennepin WKE; 4-15 Sherburne RLD; 4-16 Wabasha WDM; 3 reports north: 4-3 Crow Wing JB; 4-2, 4-8 Lake RK; 3-17, 4-9 Duluth MMC.

Tree Sparrow: early north 4-2 Lake, M.E. Penner; 4-5 Duluth MMC; 4-7 Crow Wing JB; late 5-10 Carver KH; 5-15 Stearns KE, PE, RR.

Chipping Sparrow: early south 4-3 Washington DM; 4-9 Winona TV; 4-12 Wabasha WDM; early north 4-17 Crow Wing JB; 4-23 Ottertail AMB; peak 5-7 Itasca (150) KE, RR.

Clay-colored Sparrow. early south 4-30 Murray AD; 5-1 Lyon PE; Washington WL; early north 5-5 Duluth JH; 5-7 Lake RK and Duluth JG.

Feld Sparrow: early 4-4 Lyon KE, PE; 4-4 Wabasha WDM; 4-4 Hennepin ES.

Harris' Sparrow: early south 5-1 Lyon PE and Carver KH; 5-2 Murray AD and Pope WH; early north 5-2 Marshall AR; 5-8 Clearwater RCD; late 5-19 Murray AD and Lake RK; 5-29 Ramsey JAB.

White-crowned Sparrow: early south 4-29 Lyon HK; 4-30 Stearns MLC; 5-1 Blue Earth EK; early north 5-7 Lake RK; 5-8 Duluth JG and Clearwater RCD; late 5-26 Lake RK and Duluth JG.

White-throated Sparrow: early south 4-9 Winona TV; 4-10 Lyon HK; 4-17 Chisago FS and Scott PE; early north 4-20 Morrison LR and Cook JP; late south 5-18 Hennepin BDC; 5-28 Winona HW.

Fox Sparrow: early south 3-12 Olmsted HW; 3-26 Rice OR; 3-27 Hennepin VL; early north 4-8 Crow Wing JB and Mille Lacs MI; late 5-9 Lyon HK.

Lincoln's Sparrow: early south 4-13 Hennepin VL; 4-16 Ramsey BDC; 4-20 Hennepin CH; early north 5-3 Duluth KE, RR; 5-8 Morrison LR; late 5-22 Lake RK; 5-25 Duluth JG, MMC; peak 5-21 Duluth (8) KE, RR.

Swamp Sparrow: early south 4-16 Winona TV; 4-17 Goodhue BL and Nicollet RBJ; early north 4-14 Lake RK; 4-20 Duluth JG.

Song Sparrow: early south 3-14 Goodhue KE, PE; 3-15 Wabasha WDM; 3-17 Rice OR; early north 3-31 Mille Lacs MI; 4-7 Crow Wing JB.

Lapland Longspur: early south 3-13 Lyon HK and Jackson HH; 3-29 Nobles HH; early north 4-11, 4-17, 4-18 Duluth KE; late 5-25 Duluth JG; peak 5-1 Wilkin and Clay (550) KH.

SMITH'S LONGSPUR: 2 reports of this rare but overlooked species: 3-13 Russell, Lyon Co. (6) HK; 4-10 Lynd, Lyon Co. (4) HK.

Chestnut-collared Longspur: 4 reports: 5-1 Felton, Clay Co. HK; 5-22 Felton, Clay Co. KE, RR (6); 5-1

Wilkin VL; 5-1 Wadena, 1 female collected by R. Oehlenschlaeger; there are few reports of the species away from Felton, and it is quite interesting that there were 3 reports in 3 different counties on the same day.

Snow Bunting: only 4 reports: 3-6 Carlton, Aitkin, Crow Wing (500), S. Gilbertson. 3-28 Lyon HK; 4-30 Marshall AR; 5-14 and 5-20 Duluth KE, RR.

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notes of interest

OUR DISAPPEARING KINGBIRDS — During the last few years I have noticed what I considered a great reduction in our kingbird populations. See Breckenridge, **The Loon**, June 1968, pp 56-57. General impressions not supported by figures are of little value in establishing population trends in birds. Fortunately during late June in 1926, Dr. T. S. Roberts, Mr. Wm. Kilgore, and I recorded the numbers of Western and Eastern Kingbirds seen between certain western Minnesota towns. These figures are compared with my recent observations in the accompanying table. I appreciate receiving Mr. J. Morton Smith's records for the Pipestone-Luverne route made on June 17, 1969. All recent records were made in favorable weather, avoiding freeways, and at speeds (30-45 miles per hour) comparable to our travel rates in 1926.

Route traveled	Miles	Date	E. Kingbird	W. Kingbird
Pipestone - Luverne	25	June 1926	40	27
Pipestone - Luverne	25	6/17/69	2	2
Ortonville - Clinton	11	June 1926	20	13
Ortonville - Clinton	11	6/29/71	1	0
Ortonville - Foster's Resort	15	June 1926	18	10
Ortonville - Brown's Valley (15 mi. beyond Foster's R)	30	6/29/71	6	1
Madison - Odessa	19	6/30/71	0	3
Madison - Ortonville (8 mi. beyond Odessa)	27	June 1926	17	7
Odessa - Appleton	13	6/30/71	1	0
Beardsley - Graceville - Clinton	30	6/29/71	1	0
Pipestone - Madison	70	June 1926	34	28

Willmar - Pipestone	123	June 1926	32	13
Ortonville - Olivia	81	June 1926	84	10
Fergus Falls - Ottertail Lake	13	6/27/71	0	0
Ottertail Lake - Ashby	30	6/27/71	0	0

Summary:

	1926	1971
Distance traveled	352 miles	182 miles
Eastern Kingbirds seen	245	11.
Western Kingbirds seen	108	6.
Miles per bird, Eastern Kingbird	1.44	16.54
Miles per bird, Western Kingbird	3.26	30.33
Miles per bird, both species	1.00	10.70

In other words, we found Eastern Kingbirds to be about 12 times as abundant in 1926 as in 1971, while Western Kingbirds were about 10 times as abundant in 1926 as in 1971. Evidently whatever the factors involved in this drastic reduction in these flycatcher populations were, they appear to affect both species about equally. **W. J. Breckenridge, 8840 W. River Road Minneapolis, Minnesota 55430**

FOUR KING EIDERS AT LOWER RED LAKE — On May 9, 1971 Bob Russell and I were birding our way across northern Minnesota heading for Duluth after a bird trip to northwest Minn. The day was warm and clear when we stopped early in the afternoon along the shore of Lower Red Lake to check for waterfowl. We were on the south shore of the lake in Beltrami County a few miles west of the town of Red Lake after having scanned the lake several times from other spots along the highway. We had seen few waterfowl and nothing of interest and we were commenting what a lousy day it was when I spotted four ducks flying parallel to shore coming from the west. I watched them almost without interest for a couple seconds when I suddenly realized I didn't know what they were. They were perhaps 200 or 300 yards out flying in a straight line, two of the ducks appearing all dark and the other two lighter with white wing patches on the front edge of the wing. I remember saying to Bob that he'd better take a look at these because they didn't look quite right to be widgeon. By this time the birds were straight out from us as we studied them as closely as we could with binoculars. They certainly weren't widgeon but heavy bodied, slow flying ducks that remained in their steady line during the whole time we saw them. The first and third birds looked the same: the head, neck and chest were whitish as were the patches on the front of the wing; the rest of the wings and body were all dark. The second and fourth birds appeared all dark with no pattern of any kind. We continued to watch them until they disappeared, trying to figure out what we were looking at. Neither of us had ever seen ducks with wing-patches like this except for American Widgeon, but these ducks were hardly widgeon. When the birds were gone we checked the field guides to find that the only other ducks with white fore-wings were the Common and King Eider! Finally we realized that our lighter colored birds had dark backs with two clearly separated wing patches, unlike the male Common Eider which has a white back connected to the wing patches forming one large white area. Our birds were therefore King Eiders, the first and third birds males, the second and fourth all-dark females! Even though there was a bright sun at our backs, we were not close enough to the birds to see the colorful head pattern of the adult male, so it is possible that these were sub-adult males (see illustration in Robbins' field guide). But we feel that these were full adult birds because their plumage seemed

well-marked and cleancut and because they were accompanied by two females.

This observation is quite unusual for several reasons. It represents only the third state record, and this from inland Minnesota and not from Lake Superior where an eider is much more likely. Also a stray eider record is usually of a lone immature bird, but we saw no less than four birds which appeared to be in adult plumage. Also as its name implies the Common Eider is more widespread and more likely to appear in the state before a King Eider, though it is interesting that this past winter there was an influx of King Eiders on the east coast which may have a connection with our record. Finally, the birds were seen on a very beautiful and calm un-eider-like day, and this only two days after we had found another sea duck, a Common Scoter, at another inland location in Beltrami County. **Kim R. Eckert, Ashby, Minnesota 56309.**

166 SPECIES ON 1971 MAY BIG DAY — In May of 1970 Paul Egeland and I planned and conducted a "big day" in an effort to see as many species as we could in one day in Minnesota. We found 153 species which was probably the highest count ever in the state, though there were probably have not been any serious attempt to run up a list as we did. On May 15, 1971 Paul and I were joined by Bob Russell in an attempt to better last year's big day. We used basically the same itinerary as last year with a few minor changes and managed to find 166 species. The weather this year was warm and windy, similar to last year, but we birded for about three extra hours, from 2 a.m. to 10 p.m. In addition to having an extra observer we also had the advantage of a tape recorder which we used with great success to call up owls and rails. While in 1970 we had no owls, before dawn this year we found no less than four species. After it got light we birded St. John's campus for woodland species and like last year many species had not yet arrived. But we left campus and headed west to the prairies with 110 species which was 8 more than last year. Besides 4 owls we found all 7 woodpeckers, all 5 vireos, but only 17 warblers. And we missed such common birds as the Crested Flycatcher (2nd year in a row), Pewee, Magnolia and Chestnut-sided Warblers, and White-crowned Sparrow. On the other hand, a loon, Wood Thrush, Cerulean Warblers, Evening Grosbeak and a Tree Sparrow were unexpected finds. As last year we were pressed for time as we covered the Glenwood and Frog Lake areas but we found 8 gulls and terns, 18 ducks and geese, and two rare Buff-breasted Sandpipers. Next was Salt Lake and we left there with over 20 species of shorebirds and a hard to find Swainson's Hawk. Our final stops were the now famous Marshall sewage ponds and the marshes of Lyon County. At Marshall we found Avocets, Hudsonian Godwits, Piping Plover, and both Dowitchers to run up our shorebird list to a staggering 27 species! Three Eared Grebes and a Virginia Rail brought our list to an end though we continued to look in vain until 10 p.m. for a Dickcissel, Cliff Swallow, or even the common Marsh Hawk which had not been seen all day. We mercifully called it quits at 166 species after more than 20 hours of continuous birding.

We hope that next year we can talk one or two others into helping us out to get 167 or even more. A friend in Chicago after 20 years of May big days claims 167 species as his best count, which is said to be the best big day count in the northern U.S. I think we can top that total with our itinerary, and I think some birders with another route in the state could do as well or better. Our combined list for our two big days is 186 species: we missed 20 species in 1971 that we had in 1970, and in 1970 we missed 33 birds that we saw this year. We think that in another year or two our aggregate list will

reach 200. One final note to give an idea of how well we did with 166: on the same day about 160 M.O.U. members participating in the annual spring field trip in southwest Minn. ran up an all-day total of 162 species, 4 less than our total which we had while remaining in one party. **Kim R. Eckert, Ashby, Minnesota 56309**

BALD EAGLE FOUND NESTING IN MILLE LACS COUNTY — On May 3, 1971 Forest Ranger Andy Holzemer found a pair of Bald Eagles close to their nest in the northwestern part of Mille Lacs County. On May 15 one of the eagles was sitting on the nest and did not leave it though A. Holzemer stayed for awhile close to the nest. On June 16 he took M.O.U. members Mr. and Mrs. T. R. Campbell and me to the nest. One young eagle was inside. Both adults were soaring above their nesting ground. The nest (diameter 5-6 feet) was built in the crown of a nearly 60 foot tall living white pine, about 40 feet off the ground. On August 2 I was there with A. Holzemer. The nest was empty but one young Bald Eagle was sitting a couple of yards from the nest on a dead limb. He was full grown, without any traces of down. While we stayed close to the nest for nearly an hour the eagle remained motionless, like a statue. But the adults were making wide circles high in the air, uttering continuously a squeaky cackle. One of them was already moulting. Several of his primaries were missing. We found them and several body feathers on the ground under the nest. **M. Ivanovs, Onamia, Minnesota 56359**

WESTERN SANDPIPER AT WHITEWATER REFUGE — Paul Egeland and I were birding in southeast Minnesota on July 17, 1971 when we stopped to check the Dorer Pools in the Whitewater Refuge in Wabasha County. We turned off the gravel highway and onto a dirt road leading to one of the pools, but we stopped almost immediately because there were two large water-filled chuckholes blocking our way. We got out of the car to see if we could get through when I noticed a small shorebird standing in one of the chuckholes no more than twenty feet away! We were surprised to find a shorebird at this time and place since shorebird migration had barely begun and we were in far southeast Minn. in a wooded area with no more habitat than a flooded dirt road. We had no trouble seeing that the bird was a "peep" and as we looked closer we saw that we had a Western Sandpiper, a rare and overlooked migrant in the state. We approached within ten feet of the bird and noticed a trace of rusty on the scapulars and the bill which was longer and thicker than a Semi or Least Sandpiper and which drooped a bit at the tip. The legs were black and we felt that the bird was the size of a Semi or Least, too small to be a Baird's or White-rumped. Finally the bird flushed and we saw it had a dark rump. As it flew it called three times: a two-syllabled soft "jee-ip", similar to the call of the White-rumped. After the bird disappeared we checked Peterson's field guide on the call and other markings and were convinced the bird was a Western Sandpiper. **Kim R. Eckert, Ashby, Minnesota. 56309.**

COMMON EGRETS IN MILLE LACS CO. — On May 18, 1970 I saw a Common Egret crossing the Onamia Lake in the direction N-S. It passed me at about 40 yd at 4 p.m. My 6 x 30 binocular showed me perfectly the egret's black legs and feet and yellow bill. During the previous years I heard from several Onamia people about "white or maybe albino herons". All reports were about single birds seen in summer. The observers are: Al Mohler, August 1965 in Onamia; Jens Pederson, August 1967, 6 mi. SE; O. B. Hanson, in summer 1967 at Mille Lacs Lk., 5 mi NW; L. Norine, "a white heron stayed in summer 1967 at Fort Mille Lacs" near the So. shore of Mille Lacs Lk.; Mr.

& Mrs. L. Gossen, at the Rum River near Ogeche Lk. in summer 1963, 6 mi. NW. The miles and directions are from Onamia. **M. Ivanovs, Onamia, Minnesota 56359.**

SECOND RUFF RECORD FOR MINNESOTA — On Monday, April 26, 1971, I was driving East on Sibley County Road 15 through one of my favorite spring bird-watching areas. On the north side of the road, immediately after a right angle turn from N. to E., and about a half mile before the junction with Co. 13, there was a flooded field. I stopped for a look at some ducks sitting there, and found that there were also some shore birds, mainly Lesser Yellowlegs and Pectorals. Soon (about 2:30 P.M.) I saw a very unusual shore bird. The back and wings were a bit browner in hue than the Yellowlegs nearby, and the head, neck and breast were black. The bird was preening and scratching much of the time I watched it, but even when it was hunting and feeding the feathers, including the back, never seemed to be completely flat and smooth. I turned to the Ruff in my Robbins and Singer and was quite certain that was the bird, even though that particular color phase was not the one illustrated. The book mentions 2 white oval marks on the rump, and after watching the bird a while longer I managed to see these by flushing the bird on foot. I persuaded Doug Campbell and Becky Rockwell to return with me the following afternoon and we were able to find the bird again. Beginning with Bob Janssen and Ray Glassel on April 28, a number of other people, I'm told, saw him during the week. I returned the following Monday with Rob and Wendy Goble and the field was nearly dry, and after looking for some time we concluded the bird was gone. I learned later, however, that Charles Horn had seen him the day before - making a full week he was observed. **Fred Kedney, 4225 East Lake Harriet Blvd., Minneapolis, Minnesota 55405.**

SECOND SIGHT RECORD FOR THE LOUISIANA HERON IN MINNESOTA — On June 12, 1971 while on a three-day birdwatching tour of northwestern Minnesota, Ray Glassel, Allan Keith, and I had the opportunity to stop at the Thief Lake Wildlife Area in eastern Marshall County. We stopped at the headquarters and I talked with the area manager and received a map of the refuge. Just east of the headquarters we noted a public access to the lake on the map. We drove to this area, and as we were slowing down a Great Blue Heron flushed from the shore to the right of us. At the same time another smaller heron flew up directly in front of us. Both Allan and Ray observed the bird in flight and thought it was a Louisiana Heron. The bird disappeared behind some cattails about 100 yards away. Allan then walked over to the area and observed the bird and flushed it out where Ray and I could view it. For approximately 5 minutes all three of us viewed the bird as it stood in the open along the marshy shore of the lake. We noted the slender form size smaller than a Great Blue Heron, white belly, bluish-purple head, neck, and breast with a sharp cutoff between the white of the belly and bluish purple of the breast, The breeding plume on the head was also noted. The back and wings were a dull bluish color. The legs were light green and the bill was bluish. The only other record for the state is of a single bird seen from May 10 to 24, 1963, at the Agassiz National Wildlife Refuge, Marshall County, approximately 20 miles from our observation. **Robert B. Janssen, 14321 Prince Place, Hopkins, Minnesota 55343.**

BROWN THRASHER LOSES TAIL FEATHERS, BEAK — One Brown Thrasher, sex and age unknown, remained at the Carver Nature Center, Carver Co., all winter, feeding on bird seeds and whatever else it could find. On Feb. 11, 1971, we captured the bird in a mist net and banded it (742-97037). Upon

examination some tail feathers showed possible damage (scratched and torn). Each feather was measured and all were varying lengths, which seemed to indicate that the bird may have lost its tail earlier and was regrowing it. In early April we noticed that 3/4 of the bird's upper mandible had been broken off, and it ate by scooping in seeds as it swung its head from side to side. After April 29, 1971, we did not see the bird again. **Kathy Heidel, Route 1, Box 690 Excelsior, Minnesota 55331.**

CASPIAN TERNS IN MILLE LACS CO. — Caspian Terns used to be unusual birds here. But in spring 1970 they became abundant after two wild rice ponds were built across the SE edge of Onamia. For over a month the southern pond was not filled up completely with water and there were several mud flats, On one of them I saw the first four Caspian Terns on May 2 and 3. Later every day since May 9 through June 5. On June 6 the pond became flooded; the mud flats disappeared and no terns were in sight. Next day a lonely Caspian Tern circled over the pond looking in vain for a landing place and took off. I watched the pond every day until late June and did not see any Caspian Terns again. The greatest number, 37, was there on May 26. On other days 1 to 22 (May 28). Except for 1 or 2 immatures, all were adults. I used to stay at the pond for 1 to 3 hours every day. During that time I saw Caspian Terns taking off towards Onamia Lake and later coming back to the pond. Returning from the lake they carried often in their bills small bullheads. After alighting on a mud flat they tried to swallow them whole, but without any success. Then, often for nearly half an hour, a tern would squeeze the fish with its bills. It looked to me as if they were breaking off the bullheads' spines. And even so they had a hard time to swallow their quarry without taking several sips of water. When resting at the pond the terns stayed mostly apart from the Ring-billed Gulls but did not mind several Common Terns that were loafing there for several days. On my two trips to Mille Lacs Lake I saw on June 15, one Caspian Tern at the Spirit Island among a crowd of nesting Common Terns; and on June 26 at the Hennepin Island not one; only Ring-billed Gulls and Common Terns were nesting there. **M. Ivanovs, Onamia, Minnesota 56359.**

UPLAND PLOVER WITH YOUNG, ITASCA COUNTY — On July 17, 1971, I observed an adult Upland Plover with two young in Itasca County about 6 miles SE of Grand Rapids (T.54 R.25 Sec.13). On July 15 Matt Minerich, Conservation Officer at Grand Rapids, saw the adult first. I saw the two young when he asked me to identify the adult.

The adult bird displayed all the behavior characteristics (fence post and telephone pole sitting) and was easily identified both with the naked eye and binoculars. The chicks, easily seen through binoculars, were about 2/3 the size of the adult.

At the edge of a small pasture bordering a hard-top road the birds were moving back and forth from the grassy unmowed road ditch to the grassy clumps in the partially grazed pasture. The adult did not appear overly alarmed at my presence and would fly only a short distance when I approached the young closer than 50 feet. The young did not attempt to fly at any time, but would try to conceal themselves in the grass. The adult bird would occasionally land on the ground near the young. It would appear that this is an unusual nesting record for NE Minnesota. **Jerome Janecek, 111 Golf Course Road, Grand Rapids, Minnesota 55744.**

FIRST POMARINE JAEGER OBSERVATION FOR MINNESOTA — October 11, 1970 was a dull, heavily overcast day with little wind. On that day I had been watching a large group of shorebirds and gulls that were scattered over the ball field at the Recreation Center on Minnesota Point at Duluth. The field was soggy from recent rains and had several large puddles which had attracted the shorebirds. Using the car as a blind, I had counted 95 Black-bellied Plover, 25 Golden Plover, 60 Dunlin, 30 Pectoral Sandpipers, 15 Sanderlings and 2 Long-billed Dowitchers. There was also a congregation of about 50 gulls - mostly Ring-billed Gulls with a few Herring Gulls. In the resting group of gulls I had located one adult Franklin's Gull in winter plumage. I had studied it with the spotting scope and was now sitting in the car, glancing at it now and then with the binoculars, waiting for it to preen or flap its wings so I could study the wing pattern since I don't get a chance to observe Franklin's Gulls very often.

Suddenly all the gulls and most of the shorebirds took off in a panic flight. I jumped out of the car and searched the mass of whirling birds with the binoculars looking for the predator that had frightened them (I thought at least it must be a Peregrine Falcon!) and trying to find the Franklin's Gull. That I could not do but I did spot what I thought were two gulls chasing each other, circling over the dunes at the corner of the ball field farthest from me. The birds were 500 yards away and were silhouetted against the sky. After a second it dawned on me that the bird that was doing the chasing was not a gull although its wing span was about the same as the gull it was chasing (I do not know the species of gull nor am I sure whether the other bird's wing span was the same or slightly less than the gull). My mind registered the fact that the bird doing the chasing was not the same shape as the gull and was dark except for a patch of white in the primaries before the chase ended and the birds flew away toward the southeast.

I kept my binoculars on the jaeger (I knew then that it must be one and it finally circled around and came back toward the Recreation Center. It's flight was steady and heavy, more like the gulls than like the other jaegers that I have seen which had a more erratic, nighthawk-like flight (I have seen four other jaegers, presumably Parasitic, all on Minnesota Point over a span of ten years). The jaeger finally flew over me, heading northwest, and about that time put on a burst of speed to overtake some gulls ahead of it. It was all dark underneath except for the large white patch in the primaries. I noticed that it had a long, wedged shaped tail, but I did not see any elongated central retrices which I think I would have seen, had the bird possessed them, when it was right over head.

Because of the large size and steady, heavy flight of this jaeger, I am convinced that it was a Pomarine Jaeger in the dark phase. The lack of long central retrices indicates that it was an immature bird. This is the first time that anyone has claimed to have seen a Pomarine Jaeger in Minnesota. Although I am as sure of my observation as a person can be of a species that one has never seen before, it was a sight observation and I was alone. So although the species will be added to the Minnesota list it will be in the hypothetical category. **Janet C. Green, 9773 N. Shore Dr., Duluth, Minn. 55804.**

SHY BLACK DUCKS — For a number of years there has been an annual concentration of ducks on Lake Harriet in Minneapolis. I have been observing these concentrations since 1966. This concentration apparently started with the practice of a lake shore resident putting out feed. This concentration begins in late September or early October and continues until early December. It is located in the extreme southwest corner of the lake with most of the ducks spread along some 250 yards of the shore. About 20 yards west of the eastern end of the concentration area is a large storm drain outfall.

Almost all of the ducks in these concentrations are Mallards but there are Black Ducks usually present. The Black Ducks account for perhaps two or three percent of this duck population.

What particularly has interested me is that the Black Ducks are always found in the extreme eastern part of the concentration area and I can not recall seeing a Black Duck more than 20 yards west of the storm drain outfall. Actually, they are usually east of the outfall.

I have often wondered why the Black Ducks stay in this particular part of the area. My explanation is that the Black Ducks are shyer than the Mallards. In the area where the Black Ducks stay the banks of the shore are slightly higher. Also, although there is a road which runs very close to the entire concentration area, near the Black Duck area, it is a single lane road which is less frequently traveled. Immediately beyond this single lane road is a wooded bank. To a human observer there is almost no difference in the habitat, but it appears to be sufficiently "wilder" so that the Black Ducks almost invariably seek out and remain in the area opposite it. **Charles L. Horn, Jr. 5100 Juanita Avenue, Edina, Minnesota 55424.**

CATTLE EGRET OBSERVATION — While traveling east of Fergus Falls, Minnesota, August 21, 1970, we noted a flock of eight white birds in a small almost dry pothole beside Highway 94. The area is located about four miles south of the southern edge of Ottertail County in Grant County. The water was almost dried up and the pond area was very weedy. We had seen a number of Common Egrets, but these were always in singles. We then noted the group of white birds in the pond which were smaller and shaped differently from egrets. They were shaped more like Black-crowned Night Herons.

Three of the birds had rusty color on the head and back, and one had the rusty color spot on his breast. The birds had yellow bills. After considerable study with a 20-power spotting scope, we decided they were Cattle Egrets. We watched them for some time. At first they were on the near side of the pond, but all flew to the far side of the one-to-two-acre pond. I took both 16mm movies and 35 mm slides. I then tried to move in closer for better pictures by sneaking through the corn field at the edge of the pond. The birds apparently saw me as I moved through the not-too-tall corn. They flew up as I reached the outer rows of corn. The birds then landed in a herd of 15 cows which were lying at the edge of the pond area. One landed on top of a cow. Again, both movies and slides were taken. **Louis M. Moos, President, Sacajawea Audubon Society, Bozeman, Montana 59715.**

OBSERVATION OF A DYING GREEN HERON AT LAKE PULASKI, WRIGHT CO. — On August 1, 1971, I found a dying adult Green Heron in a willow swamp edge at Lake Pulaski. It was accompanied by two more adults which scolded me quite loudly. The sick bird walked with great difficulty, occasionally spreading its wings to balance itself. As I moved closer to get a better look, it would move on farther into the swamp. I decided to leave the bird a while and continue my hike. An hour or so, later, I walked by the same spot and the bird was still there but in a more weakened condition. This time the bird was nearly immersed in water and was unable to raise its head

or walk. I was able to pick up the bird which gave no struggle. At home, the bird grew progressively worse, It would stretch its neck occasionally giving out a loud skewk. It died about one hour from the time I picked it up.

Since the bird appeared to have died under suspicious circumstances. I decided to call several state and federal offices. After several phone calls, I contacted Dr. Elders in the Bureau of Sport Fisheries and Wildlife at Fort Snelling. That same day it just so happened he was sending two Great Blue Herons which had died under similar circumstances to the Warf Institute in Madison, Wisconsin. This institute does analysis of organs for pesticide poisoning. He would dissect the brain out and send it in for analysis, which would be ready in three or four months. **Bruce A. Hitman, 7483 Brklyn. Blvd. #4, Mpls., Minn. 55443.**

TREE SWALLOW NESTING — On April 26, 1971 a pair of Tree Swallows laid claim to a hanging bird box in our yard near Excelsior, Minn., where daily observations could be made. This pair was antisocial as far as allowing a colony or even another pair to use the acre plus area. They chased every other Tree Swallow out. By May 5th, building was started in earnest. On both May 9th and 10th the pair was observed mating on the wires. At that time the male on approaching the female gave a short series of "clacks." The beak opened and closed, but I don't know if the sound was uttered, caused by snapping the beak shut, or a combination.

The clutch of 6 eggs laid on a layer of white feathers was complete by May 26th. Hatch occurred June 10th. The male, determined by behavior and larger size was still shagging all other Tree Swallows out, and he often called the female to aid him. By June 22 he was plagued with groups of 4 to 6 Tree Swallows passing overhead, and his patrols of soaring high increased. Besides these transient flocks, he now started swooping on our dog if he got near the box. The bird swooped on the dog, giving both the distress call, which brought the female off the nest, and that "clack" sound at the lowest part of his dive.

So far, the male had endured my presence with merely giving warning, but that changed on June 25th. When I checked the six fully feathered young, I was swooped on (never touched) and watched the beak open and close while he emitted the "clack" rapidly. Two young fledged on the 26th but returned to the box in the evening. At that time I removed the 6 young and banded them outside. Both adults started swooping, but I do not know if both used that sound. Their distress calls attracted three more Tree Swallows and one Barn Swallow and they joined in. When the young were banded (78-03099 through 78-03104) I returned them to the box (two promptly left.) The four birds that had joined the protest were gone. The next morning the young left the nest with the parents for good. **Marlyn Mauritz, Excelsior, Minnesota.**

CANVASBACK ADOPTS YOUNG WOOD DUCK? — On August 14, 1971, I was looking over the duck broods on Lake Oliver in western Swift Co. There were many nearly full grown Redhead, Ruddy Duck and Blue-winged Teal broods. I also counted one Canvasback brood which had ten nearly full grown young. There was a small group of ducks by the roadside which I examined and included a female Canvasback, two immature Redheads, and a young Wood Duck about three-fourths grown. The female Canvasback was very concerned over the young Wood Duck since my presence apparently disturbed them. The young Wood Duck would make alarm calls and the Canvasback would swim over to it quickly. The two Redheads could have been hatched by the Canvasback since Redheads do lay eggs in other ducks nests. I didn't see any young Canvasbacks in the immediate vicinity. The Canvasback appeared to have adopted the young Wood Duck who possibly became orphaned or separated from its true parent. **Bruce A. Hitman, 7483 Brklyn. Blvd. #4, Mpls., Minn. 55443.**

A WOODCOCK ON THE MALL — On October 28, 1971 at a few minutes past noon I was waiting on the Northeast corner of Nicollet Mall and Seventh Street in downtown Minneapolis for a green light so that I might walk to the west side of the Mall. Just as the light turned I became aware that some kind of bird had flown by me going in the opposite direction. Turning to look, I saw a tan-colored bird huddled on the sidewalk in front of one of the display windows of Donaldson's Department Store about twenty feet from me. My first response was to invoke the Diety aloud, adding, "It's a Woodcock."

I went over to the Woodcock which was huddled on the sidewalk seeming to be both confused and seeking to avoid detection and picked it up without a struggle.

As I now had a live and apparently uninjured Woodcock in hand, I needed a container for it and a means to take it to a proper release area. The container, in the form of a two foot square box without a lid but with an open seam on the bottom, was procured at a small store nearby. The bird was placed in the box and the open top covered with a sheet of brown paper which was taped down. I then took the box to my brother's office in the Foshay Tower where I could get a ride to the release point. While at his office we lifted the paper cover at one end and observed the Woodcock huddled in the box. I secured a ride to Theodore Wirth Park and released the Woodcock about twenty-five minutes after capture in an area which appeared to be good habitat for it. It is interesting that all the time the bird was in the box I neither heard nor felt anything which suggested any movement by it.

When the bird was released, it moved about six feet from me and then put on a display which consisted of erecting and spreading its tail while pointing its bill downward. This display pretty much tallies with the display described by Bent in **Life Histories of American Shore Birds** as either a prelude or to substitute for the more famous "song flight." The display rather surprised me because it was carried on with two persons standing very near and at what seemed to be the wrong season of the year. There was no attempt by the bird to crouch in concealment, although this seems to have been tried when it was on the sidewalk. I speculate that the confinement in the dark box may have stimulated the display.

I then went to the Woodcock to determine if it could fly. This it could, and it flew off into an alder thicket. The entire episode lasted not much more than thirty minutes from capture to flight and was certainly a different way to spend the lunch hour. **Charles L. Horn, Jr. 5100 Juanita Avenue, Edina, Minnesota 55424**

LATE SORA — A single bird was seen on November 21, 1971 at 9:45 A.M. in an open park near 38th Street and Zenith Avenue South in Minneapolis. The place where it was seen was about 400 yards from Lake Calhoun. There was no question of identification of the bird as a Sora. It was like looking at a stuffed bird in a glass case. I was only 15 feet away. The bird flew into an ornamental spruce tree and perched on one of the lower limbs. The date seems to be about a month later than normal for the Minneapolis area. **Charles L. Horn, Jr., 5100 Juanita Avenue, Edina, Minnesota 55424.**

REQUEST FOR INFORMATION: SANDERLING

During the autumn migration of 1971, the Long Point Bird Observatory hopes to band and colour-mark several hundred Sanderlings at Long Point, Ontario. Information on the movement of these birds away from Long Point will facilitate research presently underway on the energy requirements of their migration. We would appreciate it if everyone sighting these birds would report their observations to:

Long Point Bird Observatory,
269 Beta Street,
Toronto 14, Ontario, Canada.

The following information would be appreciated:

Date and time of observation

Location, including nearest city or town

Colours: note—birds will be coloured on the breast and the abdomen with two of the following colours: red, orange, pink, purple, yellow, green, blue, brown, black, and white (no colour).

Leg that has been banded: this will tell if the bird is an adult or an immature.

Any other information on what other birds are with the marked individuals would be very useful.

ANNOUNCEMENTS

REPORTING COLOR-MARKED BALD EAGLES — Throughout 1971 summer field work, 12 nestling Bald Eagles were banded and color-marked in conjunction with ecological studies being conducted on this species on the Bena District of the Chippewa National Forest in Minnesota. Movement data have been recorded for certain of these birds since fledging after mid July. Radio telemetry technics have been employed with four of these birds.

Our interest is in obtaining any information on marked birds and your assistance in this is urgently needed. Secondary wing feathers were color-marked on upper and lower surfaces as follows:

Bird No.	Wing Marked	Color(s)
22-1	Right	White
22-2	Left	White
22-3	Both	White
34	Right	Orange - White - Orange
41	Left	Orange - White - Orange
17	Left	White - Orange - White
16	Right	White - Orange - White
53-1	Right	Blue
53-2*	Left	Blue
53-3*	Left	Orange - Blue
5-1*	Right	Orange - Blue
5-2*	Right	White - Blue

*Radio-marked

Please report data, time, and location of observation of any of these birds with any additional information; i.e., with other birds, marked or unmarked, activity, etc. If a radio-equipped bird is sighted, a telephone call to Dan Frenzel at (612) 373-1715 or 644-0348, collect if necessary would be extremely helpful.

Your cooperation in this matter is appreciated.

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 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.



SUGGESTIONS TO AUTHORS

The editors of **The Loon** need articles, shorter "Notes of Interest" and black/white photos. Photos should be preferably 5x7 in size. Manuscripts should be typewritten, double-spaced and on one side of the sheet with generous margins. Notes of interest should be generally less than two typewritten pages double-spaced. If reprints are desired the author should so specify indicating number

required. A price quotation on reprints will be sent upon receipt of information.

Club information and 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, August and November to Mrs. Janet Green. See inside front cover.

TABLE OF CONTENTS

Young Ring-billed Gull - Painted by David F. Parmalee	Front Cover
The President Writes	71
Nesting of Ring-billed Gulls on Leech Lake, Cass County, Minnesota by David F. Parmalee	72
The 1971 Spring Migration at the Cold Spring Heron Colony by Max Partch	75
Black-billed Magpie: New Breeding Records in Minnesota by Joanna Burger and Marshall Howe	78
The Spring Season by Kim R. Eckert and Paul Egeland	80
Notes of Interest	89

The **LOON**

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MEMBERSHIPS AND SUBSCRIPTIONS: Mrs. Elizabeth Campbell, 5267 W. Bald Eagle Blvd., Saint Paul, Mn. 55110. To join the MOU and receive both MOU publications, send Mrs. Campbell \$4 for a regular yearly subscription. Or other classes of membership that you may choose are: Family \$5 yearly; Sustaining \$25 yearly. Life \$100. Also available from Mrs. Campbell: back issues of **The Loon** (\$1 each ppd.) and MOU checklists of Minnesota birds (\$2 for \$1 ppd.). Gifts, bequests, and contributions to the MOU Endowment Fund should also be sent to Mrs. Campbell.

EDITOR OF THE LOON: Robert B. Janssen, 14321 Prince Place, Hopkins, Mn. 55343. (phone 938-7464). The editor solicits articles, short notes, and black/white illustrations about birds and nature. See back cover for details. Associate Editors, Kim R. Eckert and Paul Egeland.

"The Season" section of **The Loon** publishes reports of bird sightings throughout Minnesota. We particularly desire 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 forms from the **EDITOR OF "THE SEASON," Mrs. Janet Green, 9773 North Shore Drive, Duluth, Mn. 55804. (area 218, phone 525-5654).**

EDITOR OF THE MOU NEWSLETTER: Robert Jefferson, 10315 Thomas Ave. S., Bloomington, Mn. 55431 (phone 881-8925). Publishes announcements and reports about activities of the MOU and its affiliated clubs. (Club officers should keep both MOU editors informed.)

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The Loon

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SUMMER BIRDS OF THE SUPERIOR NATIONAL FOREST, MINNESOTA

Check-list compiled by Janet C. Green



Because of the wide variety of different habitats (lake, marsh, bog, many forest types) within the Superior National Forest there is a rich variety of birds that occur there during the summer. Most of them nest there (the peak of the nesting season is from June 1st through July 15th) but there are some species that are visitors to the forest either as late spring or early fall migrants or as non-breeding wanderers into the area. The status for each species is indicated in a column in the list below. For a few species the status is uncertain, and this uncertainty will be expressed by a question mark. There are some birds whose geographical

range within the Superior National Forest is very restricted and that is indicated in the list. For the purpose of this list the boundaries of the Superior National Forest are those shown on the standard Forest Service map; there are several small towns and local agriculture areas within the boundaries.

It is always difficult to define the abundance of birds because it varies so from different seasons of the year and from different habitats during the nesting season. Since this list just considers the birds during the summer (June, July, August) the habitat differences are the most important, but

since some species begin their migration during the summer (as early as mid-July for a few), seasonal concentrations also are significant. For example, an observer standing near a cattail marsh would find Red-winged Blackbirds common since this is their favorite habitat, but one walking through heavy forest would find them rare. Also, Redwings congregate after the nesting season so an observer finding a large flock feeding in a grassy clearing would think they were abundant. At the same time an observer might not find them in the marshes where they had nested and would think them very rare.

It is beyond the scope of this list to discuss habitat preferences and quantity of habitat available for each species, but some indication of abundance is desirable. Therefore, a series of definitions based on how often a knowledgeable birder would see or hear a bird if he were actively looking for birds over a wide range of area within the Forest for every day of the summer has been devised as follows:

abundant—found every day
 common—found every few days
 uncommon—found once a week to ten days

rare—found one to four times a summer

very rare—not found every year

A person unfamiliar with the breeding behavior of song birds will probably think that these definitions as applied to many species are very generous. It is possible to walk through the woods during the summer when the heavy foliage obscures most bird movement and rarely see a small bird, especially if the walk occurs in the middle of the day when birds are least active. The techniques for determining the presence and abundance of birds during the summer are different (and more difficult) than those used during the migration when birds congregate in flocks at a time when there are few leaves on the trees. Therefore some hints for studying birds in the summer are given below.

1. Identification by song. This technique is more difficult to master than

sight identification but the use of recordings of bird song are a great help as is a knowledgeable companion. During the breeding season an observer might easily identify ten to twenty species by just standing in one spot without seeing a bird. After early July the volume of bird song gradually dies down although the birds may still be present.

2. Observe at the time of greatest bird activity. The first two to three hours after dawn are when birds are most active and hence most conspicuous. In the summer this is distressingly early for most people, but experiencing the dawn chorus of song at the height of the nesting season by walking through the woods is well worth the effort.

3. Observe during good weather. Most birds are very inactive and quiet during rainy or windy weather.

4. "Squeaking" to arouse the curiosity of the birds: It is often possible to attract nesting birds by standing or sitting still and making a squeaking sound by sucking in through closed lips or on the back of the hand (the National Audubon Society sells a bird call device that accomplishes the same thing). It is helpful if the squeaking arouses a common bird like a White-throated or Song Sparrow who scolds the observer who is in its territory. This scolding also attracts many other birds who fly in from their adjacent territories to see what is going on. The squeaking technique is most fruitful when the birds are feeding young. It will soon be found beneficial to protect one's exposed skin with insect repellent to enable one to sit still during this operation.

Loons

Common Loon	common	breeds
Red-throated Loon	very rare	migrant

Grebes

Red-necked Grebe	rare	migrant
Horned Grebe	rare	migrant
Pied-billed Grebe	rare	breeds?

Cormorants

Double-crested Cormorant	very rare	visitant
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Hérons					
Great Blue Heron	uncommon	breeds	American Coot	rare	visitant
Black-crowned Night Heron	very rare	migrant	Plovers, Turnstones		
American Bittern	uncommon	breeds	Semipalmated Plover	rare	migrant
Ducks			Killdeer	rare	breeds
Mallard	uncommon	breeds	Ruddy Turnstone	rare (North Shore)	migrant
Black Duck	uncommon	breeds	Woodcock, Snipe, Sandpipers		
Blue-winged Teal	rare	breeds	American Woodcock	uncommon	breeds
American Widgeon	rare	breeds	Common Snipe	rare	breeds
Wood Duck	rare	breeds?	Whimbrel	very rare (North Shore)	migrant
Ring-necked Duck	uncommon	breeds	Spotted Sandpiper	common	breeds
Lesser Scaup	rare	migrant	Solitary Sandpiper	rare	migrant
Common Goldeneye	uncommon	breeds	Greater Yellowlegs	rare	migrant
Hooded Merganser	rare	breeds	Lesser Yellowlegs	rare	migrant
Common Merganser	uncommon	breeds	Pectoral Sandpiper	rare	migrant
Red-breasted Merganser	uncommon	breeds	Baird's Sandpiper	rare	migrant
Vultures			Least Sandpiper	rare	migrant
Turkey Vulture	uncommon	breeds	Dunlin	rare (North Shore)	migrant
Hawks			Semipalmated Sandpiper	rare	migrant
Goshawk	rare	breeds	Sanderling	rare (North Shore)	migrant
Sharp-shinned	rare	breeds	Phalaropes		
Cooper's Hawk	very rare	breeds	Northern Phalarope	very rare (North Shore)	migrant
Red-tailed Hawk	uncommon	breeds	Gulls, Terns		
Broad-winged Hawk	common	breeds	Herring Gull	common	breeds
Bald Eagle	rare	breeds	Ring-billed Gull	rare	visitant
Marsh Hawk	rare	breeds	Bonaparte's Gull	very rare	visitant
Ospreys			Common Tern	very rare	visitant
Osprey	uncommon	breeds	Caspian Tern	very rare (North Shore)	visitant
Falcons			Black Tern	rare	breeds
Peregrine Falcon	very rare	visitant?	Doves		
Pigeon Hawk	rare	breeds	Mourning Dove	very rare (settlements)	breeds?
Sparrow Hawk	rare	breeds	Cuckoos		
Grouse			Black-billed Cuckoo	uncommon	breeds
Spruce Grouse	rare	breeds	Owls		
Ruffed Grouse	common	breeds	Great Horned Owl	uncommon	breeds
Old World Partridges			Barred Owl	rare	breeds
Chukar	rare (Ely)	breeds	Great Gray Owl	very rare	visitant
Rails			Long-eared Owl	very rare	breeds?
Virginia Rail	very rare	breeds?	Short-eared Owl	very rare	visitant?
Sora	rare	breeds	Saw-whet Owl	rare	breeds

Philadelphia Vireo rare	breeds	Meadowlarks, Blackbirds, Orioles	
Warbling Vireo very rare	breeds	Bobolink rare (settlements)	breeds
Warblers		Eastern Meadowlark rare (settlements)	breeds
Black and White Warbler common	breeds	Yellow-headed Blackbird very rare	visitant
Tennessee Warbler common	breeds	Red-winged Blackbird common	breeds
Orange-crowned Warbler very rare	migrant	Baltimore Oriole rare (settlements)	breeds
Nashville Warbler abundant	breeds	Brewer's Blackbird rare (North Shore)	breeds
Parula Warbler uncommon	breeds	Common Grackle uncommon	breeds
Yellow Warbler rare	breeds	Brown-headed Cowbird common	breeds
Magnolia Warbler common	breeds	Tanagers	
Cape May Warbler uncommon	breeds	Scarlet Tanager uncommon	breeds
Black-throated Blue Warbler rare	breeds	Grosbeaks, Finches, Sparrows	
Myrtle Warbler common	breeds	Rose-breasted Grosbeak common	breeds
Black-throated Green Warbler uncommon	breeds	Indigo Bunting rare	breeds
Blackburnian Warbler common	breeds	Evening Grosbeak uncommon	breeds
Chestnut-sided Warbler abundant	breeds	Purple Finch abundant	breeds
Bay-breasted Warbler uncommon	breeds	Pine Siskin uncommon	breeds
Blackpoll Warbler very rare	migrant	American Goldfinch uncommon	breeds
Pine Warbler rare	breeds	Red Crossbill very rare	breeds
Palm Warbler rare	breeds	White-winged Crossbill very rare	visitant
Ovenbird abundant	breeds	Savannah Sparrow rare (settlements)	breeds
Northern Waterthrush uncommon	breeds	LeConte's Sparrow very rare	breeds
Connecticut Warbler rare	breeds	Vesper Sparrow very rare (settlements)	breeds
Mourning Warbler abundant	breeds	Slate-colored Junco uncommon	breeds
Yellowthroat common	breeds	Chipping Sparrow abundant	breeds
Wilson's Warbler very rare	migrant	Clay-colored Sparrow very rare	breeds?
Canada Warbler common	breeds	White-throated Sparrow abundant	breeds
American Redstart common	breeds	Lincoln's Sparrow rare	breeds
Weaver Finches		Swamp Sparrow common	breeds
House Sparrow rare (settlements)	breeds	Song Sparrow abundant	breeds

9773 North Shore Drive, Duluth, Minnesota 55804

The President writes ...

Bird Wondering

This column is written to further the cause of Bird Wondering as an adjunct to Bird Watching. It is particularly dedicated to bird sentimentalists who instinctively have a sympathetic understanding of bird behavior. At the outset, let us point out that these comments are non-scientific. However, they are intended to encourage questioning and observations that may lead to further serious studies.

For years, many of us who have felt a close kindredship with birds have welcomed their joyous spring songs and accepted them as nature's way of bubbling over with the joy of living. Then along came the spoil sports who re-interpreted the whole thing in unfriendly terms of bird territories and aggressive behavior. (These are the same kind of people who'll tell you that when a tiny baby smiles, he has gas on his stomach).

However, at this time of year, we sentimentalists are not to be confused with facts. So to add to your spring birding fun, join me in a more pleasant and nobler interpretation of spring bird behavior. When that beautiful Red-winged Blackbird swings on a reed some distance from where his lady is secretly nesting, and he says, "Look-at-meeeee", he means it. His song, his bright wing flash and his movements provide a decoy to lure predators and invaders from the hidden nest. His cousin, the Yellow-headed Blackbird sings far into the dark when such song would have very little territorial purpose. Yet, it assures his mate that he is sitting there bravely on guard with himself as the distracting lure for a predator. The more brightly-colored a male species may be, or the more noticeable their song, the more likelihood of this decoy protective behavior.

In the birds courting and singing, we sentimentalists are quick to note the color flashing and gesturing. This, of course, can be interpreted as a way of calling the female's attention to how effective and bold the male will be in luring invaders from the nesting site. Some of the decoy actions could be related to why birds so often sing more and flash about when people are in the area of a hen's nest, and has also seen a pheasant cock give repeated chucking calls to lure away a cat. This in turn raises the question of whether a shortage of males is important to reproductive factors other than mere egg fertilization.

So as the birds return this spring, let's take a closer look at the purpose of all that song and color. Let's not be too critical of the loafing songster. He may be the bravest of them all. What do you think?

MARV BORELL

AN ECOSYSTEM APPROACH TO THE STUDY OF MINNESOTA'S BALD EAGLES

by Thomas C. Dunstan



Fig. 1 Minnesota Bald Eagle nestling number 599-01998 on 19 June 1968. This bird was later recovered near Llano, Texas and was Minnesota's first banded eagle recovery.

This paper summarizes the status of research conducted on Bald Eagles breeding in the state of Minnesota at a period of the century that has seen Bald Eagles fall from the sky and breeding populations drop drastically in size as a result of confrontations with "super species"—modern man.

In 1962 Bald Eagle research in Minnesota received major attention from two researchers who initiated independent studies on breeding eagles in and adjacent to the Chippewa National Forest in northcentral Minnesota. Alfred H. Grewe, Jr., then conducting research for the Ph. D. degree from the University of South Dakota, and John E. Mathisen, Wildlife Biologist on the Chippewa, laid the foundation for our present research projects. During these early years major attention was

given to locating nest sites and documenting the success of active nests. The task was monumental and never ending. National and state foresters and biologists, resort and private land owners, and others provided leads to locating the better known nests in the state. Additional surveys were conducted with the aid of U. S. Sport Fisheries and Wildlife Service personnel including aerial surveys flown during the early and late phases of the breeding seasons.

In 1966 this author initiated a study about the breeding ecology of Ospreys in and adjacent to the Chippewa National Forest and Itasca County, Minnesota (Dunstan, 1968). While I conducted the Osprey study I noted breeding activity at Bald Eagle nest sites and also collected prey items from be-

low three nests. Similar studies were still being done by Grewe and Mathisen including the banding of nestling eagles. In 1968 the first Minnesota Bald Eagle banded as a nestling was found dead 1,185 miles away near Llano, Texas on 10 October. This bird was one of two that I banded as nestlings near Grand Rapids, Minnesota on 10 June of the same year (Fig. 1). By 1971 approximately 77 nestling Bald Eagles have been banded in the study area and the banding program is being continued.

In order to eliminate harm to the young or the bander, banding is done on a strict schedule depending on the growth stage of the developing young. Mathisen (1970) described the band-

The data indicates that even though no extremely sharp crash has occurred the annual recruitment is low and a stable population cannot be maintained (Mathisen 1970). In an attempt to discover the reasons for the low productivity and also to compare how the Minnesota eagle population complies with other populations in North America in regard to pesticide contamination of eggs and nestlings a number of experimental techniques were developed. In 1969 Mathisen and I collected addled eggs and took tissue biopsies from nestlings in nests at specific locations in or adjacent to the Chippewa. Pesticide analyses were conducted at the Pesticide Laboratory at South Dakota State University and at



Fig. 2 Nestling Bald Eagle with secondaries color-marked with a yellow acrylic paint which lasts for approximately four months. Care must be taken to prevent damage to the developing flight feathers.

ing process in detail. The combined data of the previously mentioned persons in regard to banding nestling Bald Eagles shows that if it is done at the proper time of the life cycle banding does not endanger reproductive success or nest occupancy.

Bald Eagle reproductive success on the Chippewa has been documented and published annually by Mathisen.

the U. S. Fish and Wildlife Service's Patuxent Wildlife Research Center in Maryland. Eggs contained various amounts of chlorinated hydrocarbons and polychlorinated biphenyls (PCB's) along with traces of the heavy metal mercury. The breast muscle of sixteen nestlings contained various amounts of the chlorinated hydrocarbon DDT and its derivatives DDD and DDE, the

latter compound primarily responsible for egg-shell thinning in many fish-eating birds. This datum along with the information about an adult Bald Eagle found dead on the Chippewa with a lethal level of 9.5 parts per million wet weight of dieldrin in the brain tissue (Mathisen, 1970) emphasized the immediate need for additional data on other aspects of Bald Eagle breeding ecology.

It was apparent that in order to thoroughly understand the total situation we had to know several unknown questions mainly: 1) from where did



Fig. 3 Radio-tagged Bald Eagle photographed on a night roost four weeks after fledging from the nest. Radio tag is completely hidden by feathers except for the 12-inch trailing whip antenna.

the young eagles get the contaminants (from the food or from the adult female via the egg?), 2) where do the adults forage during the breeding season, 3) what prey is utilized for food, 4) to where do the young disperse, and 5) where do the adults winter. The task was and still is to know where our Minnesota breeding eagles are for 365 days of the year!

By 1969 I had already collected a large amount of prey material from in and below nests, proved the importance of specific prey items, and clarified which species should be empha-

sized in the sampling portion of the total study. Additional prey species (fish) primarily northern pike and yellow perch were sampled from lakes that the adults fished upon. These samples were analyzed for pesticide contamination by the U. S. Fish Pesticide Laboratory at Columbia, Missouri, and the related hydrocarbons with only DDE and three different PCB's present.

In order to determine where the fledgings disperse to I initiated a color-marking study. In 1969 in conjunction with Mathisen I color-marked nine nestlings with turquoise and yellow acrylic paints (RamCote). Wing and tail feathers were color-coded in combination for field identification (Fig. 2) and post-fledging activities were studied. In 1970 the study was continued and radio-telemetric techniques were developed in order to facilitate monitoring the dispersal of the young after they leave the parental home range (Fig 3). In 1971 further radio-telemetric techniques were developed and activity at four nest sites was monitored. Additional remote sensing techniques were developed and minute details of daily ac-



Fig. 4 Hand-held portable receiving system used for monitoring the activity of radio-tagged birds at distances of three miles. This instrument is sensitive enough to enable the investigator to locate tagged birds in the dark when they are roosting 70 feet up in trees.

tivities at the nest and within the home ranges were recorded. Fledgings were tracked daily throughout the home range and methods of foraging studied. Additional data was gathered on circadian rhythms in relation to various environmental factors for both adult and young eagles.

Radio-telemetric and other remote sensing techniques have provided invaluable information toward answering the previously mentioned questions. Various tracking systems were set up throughout the home ranges in order to maintain continuous monitoring of radio-tagged subjects. Hand-held receivers were used when on foot, in the canoe or boat, and during 24-

Citizen band radios kept base and field personnel in communication when necessary. During the writing of this paper an attempt is being made to determine the dispersal activities and migration routes of the radio-tagged young.

In 1970 graduate students Joel Kussman and Greg Junemann of the University of Minnesota under the direction of L. D. Frenzel, Jr., initiated pilot studies on the basic breeding ecology of Bald Eagles in a portion of the Chippewa and hopefully their studies will provide additional information to complement and support the previously gathered data. With the recent addition of these persons to the major



Fig. 5 Base station located on hill near territory of one pair of birds being studied. Visual observations were made at distances of five miles with spotting scope and base and field personnel worked together using citizen band radios and tracking receivers located throughout the study area. Working range from base was approximately 22 miles.

hour watches near the nest (Fig. 4). Temporary non-mobile receiving stations were set up on points of high elevation such as forest watch towers, tree tops, and hills (Fig. 5) and were used for continuous recording and in conjunction with hand-held, and automobile and airplane mobile systems.

study our man power has greatly increased. The cooperative effort of all those concerned has made an ecosystem approach to Minnesota's Bald Eagle problem possible.

The ecological studies conducted on the breeding ranges in Minnesota will be combined with six years of Bald

Eagle studies which I have done on wintering populations along the Mississippi and Missouri Rivers in Minnesota, South Dakota, and Illinois. At least one-thousand adult and immature Bald Eagles winter along these rivers and their tributaries between November and March of each year. We must know what additional stresses are being placed on birds of breeding age during the pre-breeding season and also what lethal and sub-lethal factors endanger the wintering birds. To protect eagles on the breeding grounds only, when they spend almost one-half of the year in another area is of questionable value.

The future of Minnesota's Bald Eagles is still in question. However, through the efforts of dedicated biologists and through the support of interested persons and organizations there may still be a chance to preserve this magnificent species. The increased use of public waters to which the Bald Eagle is so closely associated during both winter and summer seasons, the shooting of adults and young, the indiscriminate habitat destruction, and the chemical warfare in the form of pesticide and heavy metal pollution are present and future problems that must be solved and guarded against. These problems must be solved on a national level.

Persons sighting color-marked eagles or finding newly built nests within the state of Minnesota are asked to contact this author and to aid in this portion of the study. I would also ap-

preciate knowing the location of birds wintering within the state in order to increase the efficiency of the winter survey.

Acknowledgments

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THE SUMMER SEASON (June 1, to July 31, 1971)

Kim R. Eckert

A total of 42 reports (probably the lowest ever for summer) was received, recording data on 227 species (excluding migrant shorebirds and nesting evidence for no less than 156 species. More than likely this is the highest number of species ever recorded, especially for those found nesting. But while these totals are certainly impressive, coverage still remains minimal in all of these seasonal reports, especially in the summer season for which we have the most incomplete data on the status of Minnesota birds. But besides observers, we have need of compilers for the summer and winter reports. After 2 years Bob Russell gave up his fine work on this report, and while Janet Green continues to compile the winter report, she should be relieved of this responsibility since the M. O. U. already demands too much of her time and talent. I already have my hands full with the spring and fall reports, and only decided to compile this report because no one else was immediately available, and we are in a hurry to get the **Loon** back on schedule after the editorship has changed hands. (And because of the pressures of time, I have been unable to give a thorough treatment to the species accounts, weather data, or this summary). If you have the time and interest to devote to either the summer or winter report on a more or less permanent basis, please contact Editor Bob Janssen or Secretary Janet Green and they will be glad to get you started.

But getting back to this seasonal report, we see that it was a good one from the standpoint of quality as well as quantity. Several highlights were noteworthy, but most significant were the appearance of nesting Cattle Egrets, Little Blue Herons, and Snowy Egrets all in Pope Co., all of them new nesting species for the state. Closely associated with their appearances and only slightly overshadowed was Minne-

sota's second Louisiana Heron in Marshall Co. Introduced Trumpeter Swans and Wild Turkeys again bred and promise to soon be added to many listers' lists. A few species such as Bobwhite and Red-shouldered Hawk seem to be increasing their range, while others such as Prothonotary Warbler and Louisiana Waterthrush seem to be on the decline. Also of interest were those non-breeding species such as a few shorebirds that appeared in late June or early July, leaving us in doubt as to whether they are spring or fall migrants or even summer residents. The Black-billed Magpie was discovered breeding for only the 2nd time in the state in Marshall Co. An adult male Western Tanager at Agassiz is certainly worthy of note, as was a possible nesting Harris' Sparrow near Duluth, a bird known only to breed near Hudson Bay. Finches made a good showing, and most noteworthy of these was a possible House Finch in Hennepin Co. that may have been nothing more than an escape. Finally there were those inevitable "common" species that were missed altogether: Goshawk, Swainson's Hawk, Bell's Vireo, Black-throated Blue Warbler, Louisiana Waterthrush and Lark Bunting.

Common Loon: nested in Wright, St. Louis, Lake, Ramsey, Washington, Crow Wing and Morrison; also reported from 10 other counties.

Red-necked Grebe: reported from Anoka, St. Louis, Marshall, Clearwater and Stevens.

Horned Grebe: nested in Roseau; also reported from Marshall and Clearwater.

Eared Grebe: BH observed 8 adults on nests and 1 young on 7-25 at Salt Lake, Lac Qui Parle Co.; also reported from Marshall.

Western Grebe: nested in Stearns, Kandiyohi and Nicollet; also reported from Marshall, Clearwater, Roseau, Kittson and Pope.

Pied-billed Grebe: nested in Kandiyohi, Wright, Stevens, Swift, Pope, Sherburne, Hennepin, Carver, Lyon, Scott, Morrison and Houston; also reported from 8 other counties.

White Pelican: reported from 5 areas: 6-8, 6-26 6-27, and 8-21 Jackson (up to 25 including 3 imm.) HH, JAB, MHM; all summer, Marshall JBMH; 6-20 Clearwater (15) RD; 7-25 Lac Qui Parle (12) BH and Stevens (23) OJ; this species has only nested once previously in the state (1968), but the multitude of observations each summer suggest that the bird may breed regularly here (the 3 imm. birds in Jackson Co. did not appear until August which suggests nesting).

Double-crested Cormorant: nested in Pope, Wadena and Marshall; also reported from Clearwater, Nobles, Kandiyohi, Swift, Lac Qui Parle and Stevens.

Great Blue Heron: nested in Pope, Hennepin, Carver and Rice; also reported from 29 other counties.

Green Heron: nested in Pope, Nobles, Mille Lacs, Carver, Lyon and Wright; also reported from 18 other counties.

LITTLE BLUE HERON: BH reported an adult nesting at Lake Johanna, Pope Co.; only one bird was present for sure, but 1 young bird was fledged probably as a result of hybridization with a Snowy Egret which was also present! Both species are casual in Minn. and have never nested here. A complete account of this amazing record (and the one that follows) is forthcoming in **The Loon**.

CATTLE EGRET: BH also found at the same location Minnesota's first nesting record for this species! Full details will be published. Also 2 other reports: 6-28 Agassiz Refuge, Marshall Co. (1) MMC; 6-10 to 6-13 Houston Co., fide FL.

Common Egret: nested in Pope; also reported from 17 other counties.

SNOWY EGRET: see account under Little Blue Heron.

LOUISIANA HERON: RBJ and others observed an adult at Thief Lake Wildlife Area, Marshall Co. on 6-12; only the second state record; could this be the same bird that was seen at Agassiz Refuge only a few miles away in the 1960's? (see Notes Of Interest **The Loon** 43:93)

Black-crowned Night Heron: nested in Pope and Jackson; also reported from 14 other counties.

Yellow-crowned Night Heron: nested in the usual area near LaCrescent, Houston Co.; one was also photographed on 6-15 in Anoka Co. by J. Larson.

Least Bittern: more reports than usual: reported from Hennepin, Crow Wing, Nicollet (on 7-4 BDC counted 10), Pope, Marshall, Carver, Wright, Sherburne, Rice and Wabasha.

American Bittern: nested in Mille Lacs; also reported from 17 other counties.

TRUMPETER SWAN: KH reports that 2 pairs from the Carver Park flock nested and successfully raised 2 young.

Canada Goose: nested in Hennepin, Sherburne, Aitkin, Carver, Winona and Marshall; also reported from St. Louis and Jackson.

SNOW/BLUE GOOSE: one injured remained all summer at Indian Lake, Nobles Co., HH.

Mallard: nested in Hennepin, St. Louis, Sherburne, Carver, Stevens, Ramsey, Pope, Wright, Wabasha, Nobles, McLeod, Cottonwood and Rice; also reported from 13 other counties.

Black Duck: nested in Washington (see Spring Report); also reported from St. Louis, Cook and Marshall.

Gadwall: nested in Lyon and Crow Wing; also reported from Aitkin, Marshall and Roseau.

Pintail: nested in Hennepin and Pope; also reported from Aitkin, Marshall, Beltrami, Clearwater, Nobles and Mahnomen.

Green-winged Teal: nested in Crow Wing and Aitkin; also reported from Mille Lacs, Lyon, Sherburne, Clay, Hennepin and Meeker.

Blue-winged Teal: nested in Sherburne, Pope, Swift, Wright, Ramsey, Hennepin, Cottonwood and Rice; also reported from 20 other counties.

American Widgeon: reported from McLeod, St. Louis, Aitkin, Marshall, Mille Lacs, Clearwater, Lyon, Hennepin, Kittson, Lake of the Woods and Roseau.

Shoveler: nested in Lyon; also reported from Hennepin, Meeker, Marshall, Mille Lacs, Clearwater, Jackson, Sherburne and Roseau.

Wood Duck: nested in Sherburne, Chisago, Lincoln, Ramsey, Stearns, Hennepin, Pope, Nobles, Goodhue, Carver, Dakota, Wright, Rice and Clay; also reported from 9 other counties.

Redhead: nested in Pope, Kandiyohi, Hennepin and Douglas; also reported from Marshall, Jackson, Lyon, Stevens, Swift and Kittson.

Ring-necked Duck: nested in Hennepin and Sherburne; also reported from Crow Wing, Aitkin, Marshall, Beltrami, Clearwater, Pope and Kittson.

Canvasback: nested in Stearns, Swift, Kandiyohi, Hennepin, Lyon and Sherburne, also reported from Marshall.

Lesser Scaup: 6 reports: 6-1, 6-7 Duluth MMC (reported as scaup, sp. and may have been Greater); 6-3 to 7-18 Hennepin OJ; 6-4 Aitkin TS; "common" Marshall JBMH; 6-12 Roseau RBJ; 7-3, 7-19 Duluth JAB.

Common Goldeneye: nested in Crow Wing; also reported from Itasca, Aitkin and Anoka (7-10 CH).

Bufflehead: no date, Pope Co., OJ; no details, only report.

Oldsquaw: 6-1 Duluth MMC; probably a late migrant.

White-winged Scoter: 7-11 Lake (3) OJ; early migrants or non-breeding summer residents?

Ruddy Duck: nested in Pope, Swift, Kandiyohi, Hennepin, McLeod, Lyon and Jackson; also reported from Nicollet, Marshall, Clearwater, Stevens, Wright and Kittson.

Hooded Merganser: nested in Crow Wing; also reported from Carver, Cook, Aitkin, Marshall and Hennepin.

Common Merganser: nested in St. Louis; also reported from Cook and Itasca.

Red-breasted Merganser: nested in Aitkin and St. Louis; also reported from Hennepin (6-8 OJ); late migrant?

Turkey Vulture: reported from Cook, Itasca, Crow Wing, Mille Lacs, Beltrami, Houston, Carver, Wabasha and Hennepin; more reports than usual, especially in the south.

Sharp-shinned Hawk: reported from St. Louis, Crow Wing, Morrison, Marshall, Clearwater, Washington, Dakota and Lake of the Woods.

Cooper's Hawk: nested in Crow Wing; also reported from Carlton, Marshall, Wabasha and Sherburne.

Red-tailed Hawk: nested in Sherburne and Carver; also reported from 24 other counties.

Red-shouldered Hawk: reported from Crow Wing, Anoka and Wabasha; though this species is not getting any more common, it seems to be spreading its range north in recent years.

Broad-winged Hawk: nested in St. Louis and Hennepin; also reported from 14 other counties.

Bald Eagle: nested in St. Louis (2 nests and 3 young raised) and Mille Lacs (1 nest and 1 young); also reported from Itasca and Beltrami.

Marsh Hawk: no nests found but reported from 19 counties throughout the state, north to Kittson and St. Louis, south to Nobles and Rice.

Osprey: nested in Pine, Crow Wing and Aitkin; also reported from Cook, St. Louis, Mille Lacs and Clearwater.

Peregrine Falcon: 7-1 Dakota FN, only report.

Pigeon Hawk: 8-20 Clearwater RD, only report.

Sparrow Hawk: nested in Sherburne, St. Louis, Carver, Ramsey, Morrison and Washington; also reported from 28 other counties.

Spruce Grouse: nested in St. Louis (10 young seen on the Ash River Trail on 6-26 by D. Casper); also seen in Cook (6-8 Bingschick Lake, JG).

Ruffed Grouse: nested in Pine, St. Louis and Benton; also reported from 12 other counties.

Greater Prairie Chicken: 2 reports: "June" Marshall (1) JBMH; 6-11 Clay (15) RBJ.

Sharp-tailed Grouse: 4 reports: 6-2 St. Louis (1) MMC; 6-4 and 7-22 Aitkin (3) TS; 7-15 Beltrami (1) RD; "present" Marshall JBMH.

BOBWHITE: no less than 4 reports of this now rare resident: 6-4 St. Bonifacius, Hennepin Co. (7) FN; 6-16 Houston (1) FL; "July" Worthington, Nobles Co. (2) HH; 7-28 Mt. Lake, Cottonwood Co. (2), E. Duerksen.

Ring-necked Pheasant: nested in Pope, Carver, Dakota, Hennepin, Lyon, Scott, Yellow Medicine and Wright; also reported from 8 other counties.

Gray Partridge: nested in Dodge, Pope and Rice; also reported from Dakota, Nobles, Clay and Norman.

TURKEY: OJ again reports that several pairs of Wild Turkeys nested this summer on P. Deutsch's farm near Battle Lake, Ottertail Co.

Sandhill Crane: 2 reports: 6-12 Kittson (2) RBJ; 6-28 Agassiz Refuge, Marshall Co., MMC; this species may nest in small numbers in northwest Minnesota's bogs.

Virginia Rail: nested in Wright, Hennepin and Houston; also reported from Marshall, Carver and Lyon.

Sora: nested in Wabasha, Hennepin and Wright; also reported from 11 other counties.

Yellow Rail: 6-12, usual spot near Waubun, 1 seen and several heard, RBJ.

Common Gallinule: nested in Stearns and Hennepin; only reports.

American Coot: nested in Swift, Brown, Wright, Pope, Kandiyohi, Lyon, Scott, Sherburne, Lac Qui Parle, Stevens and Hennepin; also reported from 12 other counties.

Piping Plover: nested at Duluth (J. P. Perkins counted 5 adults with "many" young on 7-9).

Killdeer: nested in Ramsey, Swift, Aitkin, St. Louis, Rice, Carver, Scott, Dakota, Lyon, Nobles, Jackson, Hennepin and Clay; also reported from 22 other counties.

American Woodcock: nested in Wright and Mille Lacs; also reported from Carver, Crow Wing, Clearwater, St. Louis and Hennepin.

Common Snipe: no nests found but reported from 18 counties throughout the state, north to Kittson and St. Louis, south to Stevens and Scott; also on 6-6 OJ reported seeing one sitting on telephone wires!?

Upland Plover: nested in St. Louis, Aitkin, Clearwater and Scott; also reported from Marshall, Sherburne, Anoka, Washington, Red Lake, Roseau and Clay.

Spotted Sandpiper: nested in St. Louis, Crow Wing, Mille Lacs, Carver, Lyon and Washington; also reported from 13 other counties.

Willet: 2 reports: 6-5 McLeod VL (probably a late migrant); 6-28 Agassiz Refuge, Marshall Co., MMC (migrant or summer resident?).

Marbled Godwit: nested in Clay; also reported from Stearns, Marshall, Kittson and Roseau.

Wilson's Phalarope: nested in Aitkin and Mahanomeno; also reported from Marshall, Hennepin, Crow Wing, Lyon, Clay, Roseau and Meeker.

Herring Gull: nested in Cook; also reported from St. Louis, Pope, Marshall, Beltrami, Wright, Houston and Roseau.

Ring-billed Gull: nested at Leech Lake, Cass Co. (6 pairs) D. Parmelee; also reported from Carver Crow Wing, Mille Lacs, Hennepin, Wright, Cottonwood, Roseau, Lac Qui Parle, Stearns, Douglas and Stevens.

Franklin's Gull: no nests found but reported from 15 counties, east to Nicollet, Stearns and Clearwater.

Bonaparte's Gull: 2 reports: 6-5 Duluth (200), J. P. Perkins (late migrants?); 6-25 Duluth (a few), H. Roberts (still migrating?).

Forster's Tern: nested in Hennepin; also reported from Itasca, Nicollet, Marshall, Clearwater, McLeod, Carver, Lyon, Wright and Stevens.

Black Tern: nested in Hennepin and Lyon; also reported from 31 other counties.

Common Tern: nested in St. Louis; also reported from Crow Wing, Aitkin, Pope, Morrison, Marshall, Mille Lacs, Beltrami Carver and Roseau.

Caspian Tern: 6-3 Itasca MMC; 7-29 Wright ES; both probably migrants.

Mourning Dove: nested in Wright, Carver, Ottertail, Sherburne, Wabasha, Stearns, Hennepin and Rice; also reported from 25 other counties.

Yellow-billed Cuckoo: reported from Morrison, Freeborn, Carlton, Clearwater, Hennepin, Wabasha, Winona, Rice and Clay.

Black-billed Cuckoo: nested in Wright, Aitkin and Hennepin; also reported from 19 other counties.

Screech Owl: nested in Lyon; also reported from Nobles, Rice and Wright.

Great Horned Owl: nested in Sherburne and Hennepin; also reported from Cook, Aitkin, Marshall, Mille Lacs, Dakota, Morrison, Wright, Wabasha, Rice and Clay.

Barred Owl: nested in Winona; also reported from Crow Wing, Carver, Wabasha and Rice.

Long-eared Owl: nested in Sherburne (6-28 to 7-6, Blue Hill Twp., 3 young, BD).

Short-eared Owl: reported from Marshall, St. Louis, Martin, Wright and Todd.

Saw-whet Owl: 6-5 Brant Lake, Cook Co., JG; only report.

Whip-poor-will: reported from Crow Wing, Cass, St. Louis, Marshall, Sherburne, Pine and Goodhue.

Common Nighthawk: no nests found but reported from 19 counties throughout the state, north to Marshall and Cook, south to Cottonwood and Freeborn.

Chimney Swift: nested in Hennepin; also reported from 25 other counties.

Ruby-throated Hummingbird: nested in Carver and Crow Wing; also reported from 18 other counties.

Belted Kingfisher: nested in Carver and Hennepin; also reported from 24 other counties.

Yellow-shafted Flicker: nested in Carver, Hennepin, Nobles and Stearns; also reported from 27 other counties.

Pileated Woodpecker: nested in Koochiching, Aitkin and Carver; also reported from Hennepin, Crow Wing, Mille Lacs, Clearwater, St. Louis, Sherburne, Rice, Lake of the Woods, Ramsey and Wabasha.

Red-bellied Woodpecker: nested in Ramsey and Carver; also reported from Rice, Wabasha, Aitkin (at 2 feeders, JB), Benton, Hennepin, Dakota and Wright.

Red-headed Woodpecker: nested in Carver, Lac Qui Parle, Wright, Hennepin, Lyon and McLeod; also reported from 23 other counties.

Yellow-bellied Sapsucker: reported from St. Louis, Cook, Crow Wing, Aitkin, Marshall, Mille Lacs, Clearwater, Wabasha, Pope, Sherburne, and Lake of the Woods.

Hairy Woodpecker: nested in St. Louis, Swift, Wabasha and Wright; also reported from 17 other counties.

Downy Woodpecker: nested in Carver, Ramsey, Swift and Wright; also reported from 18 other counties.

Black-backed 3-toed Woodpecker: 6-5 to 6-9 Cook (11) JG, including a pair at Brant Lake building a nest on 6-6.

Eastern Kingbird: nested in Carver, Hennepin and Lyon; also reported from 33 other counties.

Western Kingbird: nested in Lyon; also reported from Marshall, Morrison, Wright, Pope, Hennepin, Aitkin, Yellow Medicine, Grant, Douglas, Mahnom and Kittson.

Great Crested Flycatcher: nested in Ramsey and Cass; also reported from 24 other counties.

Eastern Phoebe: nested in Pope, Hennepin, Sherburne, Carver, Pine, Yellow Medicine and Wright; also reported from 14 other counties.

Yellow-bellied Flycatcher: reported from St. Louis, Cook, Crow Wing, Aitkin, Clearwater, Lake of the Woods and Hennepin (6-3 ES, late migrant).

Acadian Flycatcher: still occurring at Beaver Creek Valley St. Pk.: 3 seen on 6-2 by FL, and 1 seen by KE, PE on 7-17 and 7-31 (still singing).

Trail's Flycatcher: nested in Aitkin; also reported from St. Louis, Cook, Hennepin, Crow Wing, Morrison, Marshall, Winona, Wabasha, Murray and Roseau.

Least Flycatcher: nested in St. Louis and Houston; also reported from 17 other counties.

Eastern Wood Pewee: nested in Carver and Houston; also reported from 22 other counties.

Olive-sided Flycatcher: reported from Cook, Aitkin, Marshall and Lake of the Woods; migrants also reported from Hennepin (6-1 and 6-3, OJ and DG), Dakota (6-1 and 7-13, RC), Stevens (no date, OJ).

Horned Lark: nested in Hennepin, St. Louis Aitkin and Pope; also reported from 14 other counties.

Tree Swallow: nested in Wright, Rice, Cottonwood, St. Louis, Crow Wing, Hennepin, Cass, Lyon, Anoka and Swift; also reported from 21 other counties.

Bank Swallow: nested in Wright, Hennepin and Lyon; also reported from 17 other counties.

Rough-winged Swallow: nested in Lake; also reported from 13 other counties.

Barn Swallow: nested in Pope, Hennepin, Carver and Lyon; also reported from 29 other counties.

Cliff Swallow: nested in Kanabec, Hennepin, Lake, Aitkin, Cass and Crow Wing; also reported from 14 other counties.

Purple Martin: nested in Wright, Hennepin, Cass, Ramsey, Cottonwood, Rice and Pope; also reported from 21 other counties.

Gray Jay: nested in Crow Wing and Aitkin; also reported from Cook, Itasca and Lake of the Woods.

Blue Jay: nested in Wabasha, Wright, Swift, Ramsey, Hennepin, Carver and Cottonwood; also reported from 21 other counties.

BLACK-BILLED MAGPIE: nested this summer for the second time in Minn. at Agassiz Refuge, Marshall Co., JBMH; (The Loon 48:78-79).

Common Raven: nested in St. Louis; also reported from Cook, Carlton, Marshall, and Lake of the Woods.

Common Crow: no nests found but reported from 33 counties throughout the state.

Black-capped Chickadee: nested in Carver, Ramsey, Hennepin and Wright; also reported from 25 other counties.

Boreal Chickadee: 6-12 Lake of the Woods RBJ, only report.

Tufted Titmouse: nested in Ramsey; also reported from Hennepin and Crow Wing (6-15 Deerwood (2) TS).

White-breasted Nuthatch: nested in Wabasha; also reported from 19 other counties.

Red-breasted Nuthatch: nested in Crow Wing; also reported from St. Louis, Cook and Wright (7-31 ES).

Brown Creeper: reported from Lake, Crow Wing and Marshall.

House Wren: nested in Hennepin, Cottonwood, Rice, Beltrami, Wabasha, McLeod, Carver, Swift, Ramsey and Wright; also reported from 21 other counties.

Winter Wren: nested in Crow Wing; also reported from St. Louis, Cook, Aitkin and Lake of the Woods.

Long-billed Marsh Wren: nested in Hennepin and Lyon; also reported from 14 other counties.

Short-billed Marsh Wren: nested in Hennepin; also reported from 21 other counties.

Mockingbird: 6-1 White Bear, Ramsey Co., S. Cunningham; 6-30 Hutchinson, McLeod Co., J. Nubel.

Catbird: nested in Sherburne, Wright, Hennepin and Carver; also reported from 20 other counties.

Brown Thrasher: nested in Wright, Wabasha, St. Louis, Hennepin, Nobles and Carver; also reported from 21 other counties.

Robin: nested in Stearns, Hennepin, Ramsey, Wright, Wabasha, Cottonwood, Carver and Nobles; also reported from 24 other counties.

Wood Thrush: reported from Washington, Carver, Wright, Winona, Wabasha, Hennepin, Houston, St. Louis (2 from Duluth, 1 from Crane Lake), Crow Wing, Rice, Beltrami (6-28 to 7-18, ME) and Cook (Heartbreak Ridge, JG); this species has been spreading north in recent years.

Hermit Thrush: nested in Crow Wing; also reported from St. Louis, Cook, Aitkin, Roseau, Lake of the Woods and Carlton.

Swainson's Thrush: nested in Cook; also reported from St. Louis and Hennepin (6-1 and 6-2, WKE, ES, OJ, late migrant).

Veery: no nests found but reported from 19 counties throughout the state, north to Kittson and Cook, south to Carver and Rice.

Eastern Bluebird: nested in Rice, Wabasha, McLeod, Carver and Sherburne; also reported from 23 other counties.

Blue-gray Gnatcatcher: nested in Carver and Winona; also reported from Hennepin, Goodhue and Houston.

Golden-crowned Kinglet: reported from St. Louis, Cook and Lake of the Woods.

Ruby-crowned Kinglet: reported from St. Louis, Cook and Lake of the Woods.

Cedar Waxwing: nested in Carver, Washington, Beltrami, Carlton, Hennepin, Cass, Sherburne and Chisago; also reported from 18 other counties.

Loggerhead Shrike: nested in Olmsted; also reported from Stearns, Marshall, Dakota, Wright, Morrison, Rice, Hennepin and Clay.

Yellow-throated Vireo: nested in Carver and Wright; also reported from Crow Wing, Aitkin, Marshall, Hennepin, Winona, Sherburne and Wabasha.

Solitary Vireo: nested in Crow Wing; also reported from Cook, St. Louis, Aitkin, Pine, Clearwater, Lake of the Woods and Carver (6-4 and 6-11, KH, late migrant?).

Red-eyed Vireo: nested in Wright, Hennepin and St. Louis; also reported from 20 other counties.

Philadelphia Vireo: 6-2 Hennepin ES; 6-2 and 6-3 Itasca MMC; both probably late migrants.

Warbling Vireo: nested in Carver; also reported from 17 other counties.

Black-and-White Warbler: reported from St. Louis, Cook, Itasca, Crow Wing, Lake, Aitkin, Beltrami, Clearwater, Carlton and Sherburne (6-23 BD).

Prothonotary Warbler: 6-19 Wabasha WDM, only report; this species seems to be decreasing in numbers lately.

Golden-winged Warbler: nested in Mille Lacs; also reported from St. Louis, Crow Wing, Aitkin, Sherburne, Chisago, Clearwater and Washington.

Blue-winged Warbler: nested in Washington; also reported from Goodhue and Houston.

Tennessee Warbler: reported from Cook, Crow Wing, Lake, St. Louis, Marshall, Clearwater, Carlton, Hennepin (6-1 and 6-2 WKE, late migrant) and Morrison (7-16 LR, early migrant or summer resident)?

Nashville Warbler: nested in Crow Wing; also reported from St. Louis, Cook, Aitkin, Marshall, Clearwater, Carlton, Roseau, Lake of the Woods and Morrison (7-12 LR, migrant or resident?).

Parula Warbler: reported from St. Louis, Cook, Aitkin and Hennepin (7-1 OJ).

Yellow Warbler: nested in Wright; also reported from 22 other counties.

Magnolia Warbler: reported from St. Louis, Cook, Crow Wing and Lake; late migrants reported on 6-2 Hennepin ES and 6-3 Cottonwood LF.

Cape May Warbler: reported from Cook and St. Louis.

Myrtle Warbler: nested in St. Louis; also reported from Cook, Lake, Crow Wing, Aitkin, Clearwater, Carlton, Roseau and Lake of the Woods.

Black-throated Green Warbler: nested in Cook and Crow Wing; also reported from St. Louis, Pine, Beltrami and Lake of the Woods.

Cerulean Warbler: reported from Goodhue, Chisago and Pope (6-6 Starbuck, J. Hart).

Blackburnian Warbler: nested in St. Louis, Hubbard and Crow Wing; also reported from Cook, Aitkin and Lake of the Woods.

Chestnut-sided Warbler: nested in Mille Lacs; also reported from St. Louis, Cook, Crow Wing, Aitkin, Lake of the Woods, Morrison, Clearwater, Marshall and Washington (6-27 JG, EC).

Bay-breasted Warbler: reported from St. Louis only.

Blackpoll Warbler: 6-3 Goodhue, D. Casper (late migrant); 7-25 Baptism River, Lake Co. JB (probably an early migrant).

Pine Warbler: reported from Cook, Itasca, Crow Wing, Lake, Aitkin, Beltrami and Lake of the Woods.

Palm Warbler: reported from St. Louis only.

Ovenbird: nested in Sherburne; also reported from 14 other counties.

Northern Waterthrush: reported from Cook and St. Louis.

Connecticut Warbler: nested in Hubbard (6-27, 5 young, D. Parmelee and R. Oehlenschlaeger); also reported from Aitkin, Wadena, Lake of the Woods and Clearwater; more reports than usual.

Mourning Warbler: nested in Cook; also reported from St. Louis, Crow Wing, Beltrami, Clearwater, Roseau, Lake of the Woods, Kittson, Aitkin and Washington (6-27 JG, EC).

Yellowthroat: nested in Wright and Hennepin; also reported from 28 other counties.

Canada Warbler: nested in Cook; also reported from St. Louis, Beltrami, Aitkin and Hennepin (6-2 ES, late migrant).

American Redstart: nested in Carver and Goodhue; also reported from 20 other counties.

Bobolink: nested in Sherburne; also reported from 28 other counties.

Eastern Meadowlark: nested in St. Louis; also reported from 14 other counties.

Western Meadowlark: nested in Carver and Hennepin; also reported from 24 other counties.

Yellow-headed Blackbird: nested in Hennepin, Lyon and Scott; also reported from 26 other counties.

Red-winged Blackbird: nested in Wabasha, Carver, Wright, Hennepin and Douglas; also reported from 27 other counties.

Orchard Oriole: nested in Wright and Lyon; also reported from Dakota, Wabasha and Cottonwood.

Baltimore Oriole: nested in Wabasha, Cottonwood, Carver, Wright, Sherburne, Hennepin, Lyon, Ramsey and Douglas; also reported from 19 other counties.

Brewer's Blackbird: nested in St. Louis, Scott and Dakota; also reported from 15 other counties.

Common Grackle: nested in Anoka, Wright, Pope, Wabasha, Stearns, Hennepin, Carver, Cottonwood and Dakota; also reported from 17 other counties.

Brown-headed Cowbird: nested in Wright (parasitized Red-eyed Vireo, Red-winged Blackbird, Robin, Song Sparrow), Rice (Indigo Bunting), Wabasha (Baltimore Oriole), Swift (Chipping Sparrow), Carver (Song Sparrow), Crow Wing (Red-eyed Vireo, Yellow and Myrtle Warblers, Chipping Sparrow), St. Louis (Evening Grosbeak), Hennepin (Song Sparrow, Rose-breasted Grosbeak) and Mille Lacs (Red-winged Blackbird); also reported from 21 other counties.

WESTERN Tanager: 6-28 Agassiz Refuge, Marshall Co., 1 adult male, MMC; good details. (See Notes of Interest).

Scarlet Tanager: nested in Crow Wing; also reported from 13 other counties.

Cardinal: nested in Hennepin, McLeod and Ramsey; also reported from Carver, Dakota, Wright, Wabasha, Rice, Chisago, Duluth and Marshall (present all summer at Agassiz, "rare," JBMH).

Rose-breasted Grosbeak: nested in Wright, Hennepin, McLeod, Houston, Carver and Ramsey; also reported from 18 other counties.

Indigo Bunting: nested in Rice and Carver; also reported from 20 other counties.

Blue Grosbeak: 6-20 Manley, Rock Co., 1 singing male, KE.

Dickcissel: no nests found but reported from 21 counties north to Pope, Crow Wing and Pine.

Evening Grosbeak: nested in Clearwater, St. Louis and Crow Wing; also reported from Cook and Aitkin.

Purple Finch: nested in Crow Wing; also reported from St. Louis, Cook, Aitkin, Stearns, Hennepin, Marshall, Beltrami, Mille Lacs, Clearwater and Lake of the Woods.

HOUSE FINCH: 1 male may have been seen on 6-17 in Excelsior, Hennepin Co. by D. Freeland, an experienced birder from Pennsylvania; Freeland had never seen this species before, but his details were excellent and will be published here in full.

PINE GROSBEAK: 1 male was seen at Burntside Lake, St. Louis Co. on 6-16 and 6-24 by BDC; this species is not known to nest in Minn.

Pine Siskin: nested in Crow Wing (8-2 Deerwood, 2 ad and 5 y, M. Carlson); also reported from St. Louis, Cook, Lake, Aitkin and Clearwater.

American Goldfinch: nested in Wright, Nobles and Houston; also reported from 31 other counties.

Red Crossbill: 7-24 and 7-28 Duluth (1 imm. and 1 female) MMC; 6-6, 7-26 and 7-29 Crow Wing (5) TS; "sporadic individuals" reported in Clearwater, RD.

White-winged Crossbill: 7-18 Tait Lake, Cook Co. (5) JG; 7-10 Lake Co., V. Morrison; early fall migrants?

Rufous-sided Towhee: reported from Crow Wing, Pine, Marshall, Beltrami, Clearwater, Fillmore, Washington, Sherburne, Dakota and Kittson.

Savannah Sparrow: no nests found but reported from 14 counties throughout the state, north to Kittson and Cook, south to Nobles and Winona.

Grasshopper Sparrow: reported from Hennepin, Clearwater, Wright, Scott, Dakota, Lyon, Nobles, Rice, Clay, Roseau, Cottonwood and Winona.

LeConte's Sparrow: nested in Aitkin (7-22 and 8-3, 1 ad and 1 y, JB, TS); also reported from Crow Wing, Roseau, Becker, Marshall and Clay.

Henlow's Sparrow: 1 report: 7-31 Winona (2) KE, PE; birds still singing.

Sharp-tailed Sparrow: 6-12 usual spot near Waubun, DB, RBJ; "present" Agassiz Refuge, Marshall Co., JBMH.

Vesper Sparrow: nested in Dakota, Hennepin and Sherburne; also reported from 22 other counties.

Lark Sparrow: nested in Sherburne; no other reports.

Slate-colored Junco: reported from Cook, St. Louis and Clearwater.

Chipping Sparrow: nested in Wright, Ramsey, Swift, Carver, Stearns, Sherburne and Hennepin; also reported from 23 other counties.

Clay-colored Sparrow: nested in St. Louis; also reported from 18 other counties.

Field Sparrow: nested in McLeod and Sherburne; also reported from Hennepin, Dakota, Nicollet, Sibley, Scott, Washington, Wabasha, Rice, Anoka and Winona.

HARRIS' SPARROW: on 6-18 and 6-16 JG heard clearly a singing male in a bog near Duluth; the bird was not seen well, but it looked larger than a House Sparrow; was this a very late migrant or a possible nesting bird?

White-throated Sparrow: nested in Cook and Crow Wing; also reported from St. Louis, Aitkin, Hennepin (7-28, D. Paul; early migrant?), Marshall, Beltrami, Clearwater, Lake of the Woods and Roseau.

Lincoln's Sparrow: reported from St. Louis and Wright (7-19 ES; very early migrant?).

Swamp Sparrow: no nests found but reported from 20 counties throughout the state, north to Lake of the Woods and Cook, south to Scott and Wabasha.

Song Sparrow: nested in Wright, St. Louis, Carver and Hennepin; also reported from 25 other counties.

Chestnut-collared Longspur: 6-11 and 6-13 Felton, Clay Co. (5), DB, RBJ; also reported from 2 other locations: 6-13 Averill, Clay Co. (10), RBJ; present all summer at Agassiz Refuge, Marshall Co., JBMH (no details); this species may be more widespread than generally believed.

SPRING MIGRANT SHOREBIRDS:

Semipalmated Plover: 6-3 to 6-14 Aitkin TS.

American Golden Plover: 6-3 to 6-10 Aitkin TS, JB; 6-6 Lyon, L. Paynter.

Black-bellied Plover: 6-3 to 6-12 Aitkin TS, JB.

Ruddy Turnstone: 6-3 Aitkin TS, JB.

Greater Yellowlegs: 7-1 Wabasha DWM (spring or fall migrant?).

Lesser Yellowlegs: 6-6 Lyon, L. Paynter; also a yellowlegs, sp. was reported on 6-27 in Martin Co. by HH (spring or fall migrant?).

Pectoral Sandpiper: 6-4 Carver FN, WKE; 6-6 Lyon, L. Paynter; 6-7 Duluth, J. P. Perkins; 6-3 to 6-12 Aitkin TS, JB.

White-rumped Sandpiper: 6-6 Lyon, L. Paynter; 6-7 to 6-12 Aitkin TS; 6-12 Roseau RBJ.

Baird's Sandpiper: 6-4 Carver FN, WKE; 6-10 Hennepin VL.

Least Sandpiper: 6-14 Aitkin TS.

Dunlin: 6-5 Duluth, J. P. Perkins; 6-3 to 6-12 Aitkin TS, JB.

Stilt Sandpiper: 6-13 Clay RBJ.

Semipalmated Sandpiper: 6-4 Carver FN, WKE; 6-6 Lyon, L. Paynter; 6-7 Duluth MMC; 6-3 to 6-9 Aitkin TS, JB; 6-12 Roseau RBJ; 6-15 Crow Wing TS.

Western Sandpiper: 6-4 Chanhassen, Carver Co., FN, WKE; 6-6 Marshall, Lyon Co., L. Paynter.

Sanderling: 6-3 Aitkin TS, JB; 6-6 Lyon L. Paynter.

Northern Phalarope: 6-6 Lyon, L. Paynter.

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THE CHRISTMAS BIRD COUNT AND THE HUNTING OF THE WREN

by Charles L. Horn Jr.

By now the Christmas Bird Count has become a fixed tradition in the lives of thousands of American birders. Beginning modestly in 1900 it has grown to 903 separate counts made by thousands of individuals in every state. Aside from the ornithological interest, the Count, as any one who has ever participated knows, is a prime social event for many, involving both fellowship and no small amount of competition. What is not generally realized is that the Count is the substituted continuation of a practice or custom that can be traced to the Europe of the Middle Ages.

The survival of customs and rites in altered or substituted forms is an occurrence of which most people having some interest in cultural anthropology are aware. Probably this has occurred most frequently where a new religion has superseded an older one. Perhaps the most famous substitution of this kind took place when the early Christian Church substituted the celebration of the birth of Christ on December 25 for the pagan Saturnalia. Sometimes the substitution involves practices which have or appear to have become entirely secular; yet, not infrequently at the source there is an almost entirely forgotten magical or semi-religious origin. This writer believes that the Christmas Bird Count can trace its parentage to such an origin in the Medieval "Hunting of the Wren."

When the Christmas Count was instituted in 1900 one of the main purposes was to combat the practice of indiscriminate Christmas bird shoots. We are told that at that time it was the practice of many shooters to divide themselves into teams at Christmas and indiscriminately kill birds of every kind. The object of the competing teams was to see which could kill the greater number of birds. The Christ-

mas Count sought to publicize the appreciation and study of wild birds for their destruction. Probably the Christmas Count did not directly cause the demise of the Christmas bird shoots but it certainly did survive them. These Christmas bird shoots are the connecting link between the modern Christmas Count and the medieval Hunting of the Wren, for they were the degenerate descendant of the latter.

The Hunting of the Wren was a recognizable variation of a rite or practice common to primitive magic or religion - the slaying of the ruler, usually at some crucial point in the annual cycle, is a persistent event in primitive religions. The study of such practices in their numerous forms was the core of Sir James Frazer's monumental study, **The Golden Bough**, and it is from his accounts that much of what follows is drawn.

Although in the most primitive societies an actual ruler or chief was sometimes slain to insure the continued prosperity and safety of the people, in more advanced societies a suitable substitute was killed. In Europe during the Middle Ages such a substitute was the wren (our Winter Wren). To Americans it may seem surprising that such a small bird could represent a king or ruler, but in European legend the wren has been accepted as the king of birds. This is reflected in the fact that the wren's German name is "Zaunkonig" - Hedge King. To kill a wren was considered extremely unlucky, except at Christmas time when the Hunting of the Wren occurred.

In many parts of Western Europe until the 19th century it was the practice of the people (usually the common people) at the Christmas season to go abroad looking for wrens. When one was found, it was killed and then placed upon a pole in a cruciform

position. Thereafter, the practices varied but they usually involved carrying the dead wren around the neighborhood to the accompaniment of songs describing the dead wren as the king. Often gifts were solicited by the procession and the wren was ceremonially buried. In some places the wren's slayer was proclaimed king and became the ceremonial ruler of the Christmas revels which lasted to January 6.

The Hunting of the Wren clearly had religious or magical significance. The death of the symbolic ruler at the beginning of winter in earlier times probably was intended to insure or represent the return of the sun and eventually the growing season. The survival of the custom so long can be explained because it became a local celebration and because it had social import. At Christmas in Medieval Europe the existing social structure was often temporarily set aside both symbolically and actually. At that time symbolic slaying of a ruler was probably a safe and pleasant way for the com-

mon people to remind their own masters and rulers that too much should not be taken for granted.

In a much altered form the Day of the Wren still survives in parts of Western Ireland and recently one of the "wren songs" has been recorded and is even played on American radio. It is this writer's opinion that the Christmas Bird Count represents in substituted form the last vestige in America of the Hunting of the Wren. Except for the killing, there are surprising similarities between the Count and the Hunting - the processions through the countryside, the visits to those who stay at home to get their Count-Day lists, and the meetings at the end of the day when the results are reported and the champion birders are unofficially recognized. Many of our ancestors would immediately see the similarity.

By the way, did any one count a Winter Wren this year? **5100 Juanita Avenue, Edina, Minn. 55424.**

notes of interest

WESTERN GREBE CONCENTRATION — On Saturday, October 30, 1971, my son David and I were hunting ducks on Pomroy Lake in Kanabec County about 12 miles northeast of Mora. A steady rain had been falling since sunrise. Out of the rain a pair of waterfowl flew by that my son quickly identified as a pair of mergansers. I knew they weren't mergansers as they showed too much white on the bottom. Their appearance while flying reminded me of a bird that was half merganser and half loon. The birds landed in the lake and as it turned out they were the van guard of a flock of approximately 100 Western Grebes. While we were deciding what they were, my son observed that they resembled the loon in winter plummage. The white on the chest however is quite a bit lighter and the Western Grebes neck looks like a bird with a long pipe cleaner like neck. The birds came in, not in a close formation but spread out 50 to 75 yards apart landing in the middle of the lake. This is the first time I have ever seen a grebe do any amount of flying and I must say they fly very gracefully with a stiff winged loon type flight. We stopped duck hunting at this point and spent a couple of hours rowing our boat around the grebes for a better look. This did not bother them a bit and we were able to get quite close to them. They stayed all day and by Sunday morning there were still a few of them around. This seems to me

a little far east for what one would think of as the range of the Western Grebe. This is an unusual lake however and on that same weekend I took a hen and a drake Greater Scaup. Last year I also shot two White-winged Scoters and a drake Oldsquaw. **David R. Norling, 3425 Wilshire Place N.E., Minneapolis, Minnesota 55418.**

CATTLE EGRETS IN HOUSTON COUNTY — On June 13, 1971, John Ellenbecker, a LaCrosse **Tribune** reporter and photographer saw a group of 6 Cattle Egrets near the junction of Highway 26 and Houston County 7, three miles south of LaCrescent, Minnesota. He was able to photograph several of the birds. The photos accompanying this article were printed in the LaCrosse **Tribune**. When I got there several days later, the birds were gone. It is noteworthy that the Cattle Egrets have been seen at least twice before in past years at a pond several hundred yards north of where these birds were photographed. **Fred Lesh, 509 Winona Street, LaCrosse, Wisconsin 54601.**





WESTERN Tanager IN MARSHALL COUNTY — A Western Tanager was observed on June 28, 1971 at Agassiz Refuge, Marshall County, Minnesota. The bird flew from a bush to the ground, then to a clump of trees. At first, I thought it must be an oriole, but the mottled orange-red head, (not as solid as *Birds of No. America* shows) yellow breast and rump, black wings with white wingbars, and black tail, proved it to be a Western Tanager. I observed it for about two minutes. **Marjorie M. Carr, 1834 Vermillion Road, Duluth, Minnesota 55803.**

TWO OLDSQUAWS ON LAKE MINNEWASKA, POPE COUNTY — It was an overcast day, winds S. E. 15 mph. and around 40° (Nov. 13, 1971). The Oldsquaws were observed from 3:00 - 4:15 p.m. They were with four Ruddy Ducks at the edge of the ice which had pushed up against the east shore for a distance of 50 feet. Description of birds:

Immature female — size of a Ruddy, dusky head with a dark crown, two whitish spots on the head - one near bill base the other below and farther back from eye, bill dark. Breast dusky, white underparts, dark wings with no markings and the tail had white on the sides with dark in the middle (seen when diving).

Adult female — size of Ruddy, head with dark crown, dark cheek patch that extended from base of bill (not like in *Peterson's Field Guide*). Head white with dusky throat and breast. Underside white, dark wings with no markings, and white on back (under wings). The bill appeared to have some light color in it. **Bruce A. Hitman, 7843 Brooklyn Blvd., #4, Mpls., Minn. 55443.**

HAWK-OWL SEEN IN BELTRAMI COUNTY — On December 31, 1971 I was birding in Beltrami Co. as part of a 4-day bird trip through northern Minnesota. That morning I headed north out of Bemidji, around Lower Red Lake on highway 1, and turned off the main highway at the town of Fourtown in the northwest part of the county. By then it was around noon and it started to snow as we entered the Beltrami Island State Forest on a little-used gravel road. About 5 miles north off Fourtown I spotted a Crow-sized bird flying from the west fairly close to the ground about 100 yards away. Even

though I was driving slowly at the time it took awhile for me to stop so I wouldn't end up in the ditch. By the time I got my binoculars on the bird it was east of the road heading away from me, and because of the visibility I could only see that it was grayish, had long, narrow rounded wings and a long tail. It was flapping and gliding alternately and moving at a pretty good speed. Finally the bird set its wings at a slightly downward angle and glided for several hundred feet before disappearing behind a grove of poplars in the distance. Because of the size, shape, general coloration, and especially the manner of flight of the bird, I decided it had to be a Hawk-Owl, even though I could not see any markings on the bird. The only other possibility it could have been would be a Goshawk, but this bird seemed too small, had a different shape to the wings, and a distinctive gliding flight that was sustained longer than an accipiter's short glide. The habitat was open bog country with low willows and mostly devoid of trees, which is more Hawk-Owl habitat.

Ever since the invasions of the mid-1960's, there has been only one Hawk-Owl seen each winter on the average in the state. Most of these have been in northeast Minnesota where there are more observers. So this species may be due for an invasion this winter, though I could not locate any other owls on this trip, especially in the Sax-Zim area of St. Louis Co. two days later. However, visibility was again poor then due to snow as it was on December 31. **Kim R. Eckert Ashby, Mn. 56309.**

SCARLET Tanager IN LATE NOVEMBER — On November 26, 1971 I was walking uptown in Ashby, Grant Co. (where I now reside) to run some errands. As I passed a small tree, a bird suddenly landed in it only 6 or 8 feet from me. I paused to look at the bird and suddenly realized that I didn't have the slightest idea what it was, something that seldom happens to me. The bird was a bit larger than a House Sparrow with yellowish-green upperparts, dusky wings, and pale underparts. Its tail was somewhat short, and its bill was light-colored and of medium shape, not short and conical, nor long and pointed. I stood there for two or three minutes examining the bird until it finally flew off a short distance to an apple tree that still had fruit on its branches. As it flew it gave a soft but distinct "chu-wee" call. I continued on my way still not knowing what I saw until I returned home and figured out it had to be a female or immature Scarlet Tanager. This is certainly the latest fall date on record since this species normally departs by the first of October! The only thing that bothers me about this bird is the call note which fits the description of the Western Tanager's call, according to Pough's Audubon Field Guide. A November tanager in western Minnesota should be a Western I would think, but there is no doubt in my mind that the bird I saw had no trace of wing bars which a Western Tanager has in all plumages, as far as I know. However, if someone can correct me on this I would be glad to hear from them. The day before this bird appeared we had received our first significant snowfall of the season, and during this weekend temperatures dropped sharply, and there was a large influx of all the winter finches, including Bohemian Waxwing, Pine Grosbeak and Hoary Redpoll. So in a way conditions at this time were unusual enough to warrant the appearance of such a straggler. **Kim R. Eckert, Ashby, Mn., 56309.**

ODD PLUMAGED CARDINAL — During the fall of 1969 we noted a female Cardinal sitting in a honeysuckle shrub about 25 feet from our kitchen window. All of a sudden a large hawk or falcon came flying at the Cardinal. In her struggle to get away about six or seven tail feathers were pulled out by the hawk and allowing the Cardinal to escape. Since that time we have



had both male and female Cardinals in our yard. It wasn't until the fall of 1970 that we noticed a female Cardinal with pink tail and wing feathers. I wondered if this could have been the same Cardinal that was attacked by the hawk? If it was the same bird, was the pink color caused by an injury to the bird? The photo shows our odd-plumaged bird. **Mrs. Rollyn T. Lint, Sr., 15115 Wayzata Blvd. Wayzata, Minnesota 55391.**

CAROLINA WREN IN DOWNTOWN MINNEAPOLIS — This bird landed in front of me on the sidewalk on 9th Street near Marquette Avenue in Minneapolis at 8:30 A. M. on September 30, 1971. I observed the bird from about eight feet away - looking down upon it. The bird was an obvious wren with a prominent white eye stripe. The underparts of this wren were of a "buffy color." The bird appeared to me to be somewhat larger than a House Wren with a slightly larger tail. Considering the matter of the white eye stripe, three species could be possible - Bewick's Wren, Carolina Wren, and Long-billed Marsh Wren. I saw Bewick's Wren in Washington in 1971 and discount this possibility because of the buffy underparts. I saw no "streaking" on the back, which should have been present in the case of a Long-billed Marsh Wren. Also, the bird was somewhat too large and the tail too long. It was also browner than the Long-billed Marsh Wren. (I saw quite a few of this species in 1971). By the process of elimination and the matters of the buffy underparts and apparent size and tail length, I conclude that I saw a Carolina Wren. No call was heard. The approach of other pedestrians caused the bird to take flight and it headed away to the southeast toward the Leamington Hotel. In any event, it was an odd place to see any kind of wren. **Charles L. Horn, Jr., 5100 Juanita Avenue, Minneapolis, Minnesota 55424.**

BALTIMORE ORIOLE ATTEMPTS TO WINTER IN ANOKA — On November 23, 1971, a male Baltimore Oriole was seen on our sunflower seed feeder following a snow fall. It could be approached within 10 feet. The following day it ate safflower seed on the ground and ate raw peanuts, clinging to the side of the feeder with its feet. It drank water from puddles on our tar drive way but ignored the apricot nectar, orange, half apple, and jello with fruit cocktail that we put out. At one point on November 25th it sat on our back steps. That night it snowed again and the following day the oriole ate heartily of jello and apple. On November 28th he ate orange for the first

time. During the next two weeks he could be seen almost constantly sitting on the various feeders and seeming to prefer peanuts, jello and sunflower seeds. He chased away other species, including Blue Jays, that tried to feed.

By December 11th he was spending an uncomfortably large amount of time on the ground (uncomfortable for us because of neighborhood cats,) huddling next to the garage facing southeast (getting heat from reflected sun?).

Four times between December 12th and December 16th he was caught in our squirrel trap and released. During that period he ceased feeding at the peanut feeder and we wondered whether his feet were frozen and unable to cling. He still bore weight on his feet however. December 17th he fed off and on all day but we felt something was wrong with his feet. That date was the last time we saw him. On December 18th a large cat was sniffing around where our oriole had huddled. **Bill and Ruth Andberg, 1055 Park, Anoka, Minnesota.**

FALL OBSERVATION OF A WHITE-FACED IBIS — On September 25, 1971 I was birding in extreme southern Traverse County looking for any water-birds I could find. Since moving to west central Minn. I have been exploring the area looking for good prairie and pothole habitat. Since my Traverse County map showed no small lakes or potholes at all except for a few along the southern border, I decided that this would be a favorable birding location since there was no other suitable waterfowl habitat in the area. I was about 6 miles east of Browns Valley along county road 2 when I came upon a good-sized pothole with some tall marsh grass in the middle. As I stopped the car to look it over, a blackish heron-like bird flushed from the marsh grass and flew directly away from me. The bird was so dark that at first I thought it was a cormorant, but it was too small. The only other thing I could think of was Green Heron, though this bird was larger than that and too dark. But finally the bird turned to the side when it was about 200 feet away to reveal a deeply decurved bill that left no doubt to its identity. At no time did I see a white face patch, but this mark is present only in the breeding season. Therefore, there is a slight possibility of it being a Glossy Ibis, but this is highly unlikely because of the location of this observation and the comparative ranges of the two ibis. The bird landed on the shore about a hundred yards away, but when I walked out to get a better look, it flew back to the dense weeds in the middle of the pothole, and I never got another look at it.

As far as I know this is the latest fall record in the state for this species (if there are any fall records), and also the farthest north. There had been in 1971 an influx of this species with 2 spring reports and one in the summer, all in southwest Minn. But most interesting perhaps is the fact that the location where I saw this bird is only about 60 miles east of Sand Lake N. W. R. in South Dakota where this ibis is said to be regular. Because of the proximity of Sand Lake, ibis may visit the Browns Valley area regularly after breeding. **Kim R. Eckert, Ashby, Mn., 56309.**

FALL OBSERVATIONS OF SMITH'S LONGSPURS — Since longspurs as a rule are shy and hard to observe, and since there are few observers in western Minnesota, the status of the Smith's Longspur in the state has been uncertain. Most birders have agreed that this species is over-looked as thousands of Lapland Longspurs pass through in migration, and recent observations suggest that the Smith's may even be a regular migrant. I observed this species twice in Wilkin and Grant Counties in Fall 1971, which leads me to believe that the Smith's is indeed regular in migration. On October 10 I was birding at Rothsay Wildlife Area in Wilkin Co., an area with good field and prairie

habitat. In the northwest part of the refuge I got out of the car to walk an area that looked good for longspurs, and within a few minutes I could hear longspurs calling, and I counted about 50 flying around the area. The birds were very shy and I could not get a good look at any of them for several minutes, though several times I saw white wing patches which is the Smith's field mark. Finally, one longspur flew low within a few yards of me, and I clearly saw its rich buffy underparts and white wing patches. I continued to study these birds for several minutes and was surprised to hear them repeatedly give a soft "buzz" call similar to that of the Snow Bunting. I wonder if that call might be diagnostic of the Smith's since I have never heard a Lapland give that call. At no time at Rothsay did I positively identify a Lapland, and it is possible that all of these birds were Smith's though I could identify only 3 or 4 positively.

Four weeks later on November 7 there were hundreds of longspurs migrating through Grant Co. after a sharp cold snap. In Lawrence Twp., which is in northwest Grant Co., I studied a flock of about 1000 longspurs for about a half an hour and finally had a good look at a Smith's among all the Laplands. This probably is the latest fall date for this species, though I am sure that this bird can occur regularly in small numbers as late or as early as Laplands occur. **Kim R. Eckert, Ashby, Mn., 56309.**

HOUSE FINCH RECORD FOR MINNESOTA — While attending a conference in Minneapolis June 14-18, 1971, one of the social events included a bus trip to the Old Log Theater on Lake Minnetonka. The trip enabled me to walk through the town of Excelsior, where I noticed a male House Finch. The date was June 17. While I had not been familiar with the species in life prior to this occasion, the quite bright red front of the bird and brown back with reddish rump were obvious. It certainly was not a Purple Finch or a Red Crossbill. It was not until I returned to Pittsburgh and checked various publications that I found the House Finch does not occur in Minnesota. It does not occur in Pittsburgh either, to be sure, but the species is making rapid advancement through our state and elsewhere in the East as I am sure you know. It has reached Central Pennsylvania and can only be a matter of a few years, perhaps only months, from reaching Pittsburgh. Had I recognized that the House Finch is not a bird of Minnesota, I would have made immediate notification. At it is, I would suspect this particular male to remain in Excelsior unless it is a vagrant vanguard of the species' movement into new territory. On June 17, I merely noted that I had seen my first House Finch and was not particularly surprised in view of the fact that the species could have been a common resident of your state for all I knew. Excelsior is a rather small town and, while I am not certain I can describe precisely where in the village I saw the House Finch, I believe I was slightly north of the crossroads in the center of town. It was in a residential yard. I have no way of determining whether the bird is truly wild or an escape and do not know of the status of House Finch in aviaries in Minneapolis. **David B. Freeland, Vice President and Editor, Audubon Society of Western Pennsylvania, 336 Earlwood Road, Pittsburgh, Pennsylvania 15235.**

Editor's Note: On June 28 and 29, 1971, I visited what I thought to be the above described area. I could not find the bird on either occasion. This observation represents the second record for Minnesota. The first observation is of a specimen taken in 1876 near Minneapolis and reported in Roberts *Birds of Minnesota* as a straggler or escaped cage bird.

INDEX TO VOLUME 43

- Andberg, Bill and Ruth, Baltimore Oriole attempts to winter in Anoka, 125-126
- Ani-Groove-billed, 47
- Avocet, American, 46, 84, 91
- Ball, Joe, nocturnal hunting by the Great Blue Heron, 57-58
- Barringer, Jerry N., report from Todd County, 60
- Baumhofer, James A., possible winter Mockingbird, St. Paul, 24; possible Smith's Longspur, Duluth, 56
- Bell, Thomas N., have you seen our gulls, 27
- Bittern, American, 11, 42, 82, 105, 115
Least, 11, 42, 82, 115
- Blackbird, 31
Brewer's, 18, 30, 53, 64, 88, 107, 118
Red-winged, 17, 52, 64, 88, 104, 107, 118
Rusty, 17, 53, 64, 88
Yellow-headed, 17, 52, 60, 87, 107, 118
- Bluebird, 20, 22
Eastern, 16, 20, 50, 64, 86, 106, 118
Mountain, 20, 50, 61, 64
- Bobolink, 17, 52, 87, 107
- Bobwhite, 10, 13, 44, 63, 114, 116, 118
- Bolduc, Donald, buteo hawks with unusual plumages, 22
- Borell, Marvin, the president writes, 3, 39, 71, 108
- Brant, 42
Black, 42
- Breckenridge, W. J., our disappearing kingbirds, 89-90.
- Bufflehead, 12, 21, 43, 62, 82, 115
- Bunting, Indigo, 18, 53, 88, 107, 118, 119
Lark, 53, 88, 114
Lazuli, 53
Painted, 53
Snow, 18, 54, 65, 89, 127
- Burger, Joanna, the Western Grebe in Minnesota, 4-9
- Burger, Joanna and Marshall Howe, Black-billed Magpie: new breeding records in Minnesota, 78-79
- Campbell, T.R., probable Oldsquaws near Mille Lacs, 21
- Canvasback, 12, 42, 62, 82, 97, 115
- Cardinal, 18, 24, 31, 53, 64, 88, 118, 124-125
- Carlson, Mark, unusual hawk migration, 25
- Carr, Marjorie M., Western Tanager in Marshall County, 123
- Catbird, 16, 50, 86, 106, 117
- Chat, Yellow-breasted, 52, 87
- Chickadee, 22, 106
Black-capped, 25, 49, 64, 106, 117
Boreal, 16, 49, 64, 86, 106, 117
- Chukar, 44, 63, 105
- Coot, American, 13, 31, 45, 63, 83, 105, 116
- Cormorant, Double-crested, 11, 41, 82, 104, 115, 126
- Cowbird, Brown-headed, 18, 53, 64, 88, 107, 118, 131
- Crane, Sandhill, 10, 13, 44, 63, 83, 116
Whooping, 44
- Creep, Brown, 16, 31, 49, 64, 86, 106, 117
- Crossbill, 61
Red, 18, 27, 53, 65, 81, 88, 107, 119, 127
White-winged, 10, 53, 81, 107, 119
- Crow, Common, 16, 25, 49, 64, 106, 117, 123
- Cuckoo, 105
Black-billed, 14, 47, 85, 105, 116
Yellow-billed, 14, 47, 85, 116
- Curlew, Eskimo, 45
Long-billed, 28, 45
- Dickcissel, 18, 53, 88, 91, 119
- Dipper, 49
- Dove, 105
Mourning, 14, 47, 63, 85, 105, 116
Rock, 46
Dovekie, 46
- Dowitcher, 14, 84, 91
Long-billed, 14, 45, 84, 95
Short-billed, 14, 45, 84
- Duck, 24, 31, 40, 57, 60, 80, 90, 91, 93, 96, 97, 105, 121
Black, 12, 31, 42, 62, 80, 82, 96, 105, 115
Fulvous Tree, 42
Harlequin, 10, 12, 43, 62, 80, 82
Ring-necked, front cover No. 1, 12, 42, 62, 82, 105, 115
Ruddy, 12, 43, 83, 97, 115, 123
Wood, 12, 29, 31, 39, 42, 62, 82, 97, 105, 115
- Dunlin, 14, 45, 84, 95, 105, 119
- Dunstan, Thomas C., an ecosystem approach to the study of Minnesota's Bald Eagles, 109-113
- Eagle, 28, 92
Bald, 13, 25, 28, 43, 62, 83, 92, 99, front cover No. 4, 105, 109-113, 115
Golden, 13, 43, 62, 81, 83
- Eastman, Karen and Whitney, Black-capped Chickadee nesting behavior, 25
- Eckert, Kim R. Buff-breasted Sandpiper, Stearns County, 20; Red-shafted or hybrid Flicker, Agassiz Refuge, 21; four King Eiders at Lower Red Lake, 90-91; 166 species on 1971 May big day, 91-92; Western Sandpiper at Whitewater Refuge, 92; the summer season, June 1 to July 31, 1971, 114-119; Hawk-Owl seen in Beltrami County, 123-124; Scarlet Tanager in late November, 124; fall observation of a White-faced Ibis, 126; fall observations of Smith's Longspurs, 126-127.
- Eckert, Kim R. and Paul Egeland, the fall season, 10-18; the spring season—March 1 to May 31, 1971, 80-89.
- Egeland, Paul, possible immature Least Tern in Lyon County, 25-26
- Egeland, Paul and Kim R. Eckert, the fall season, 10-18
- Egret, Cattle, 10, 11, 41, 80, 82, 96, 114, 115, 122-123
Common, 11, 41, 82, 92-93, 96, 115
Snowy, 41, 56-57, 80, 82, 114, 115
- Elder, 91
Common, 43, 90, 91
King, 43, 81, 82, 90-91
- Falcon, 105, 131
Peregrine, 13, 25, 44, 81, 83, 95, 105, 116
Prairie, 44
- Fearing, Percy, Band-tailed Pigeon, 57
- Finch, 31, 61, 107, 114
Gray-crowned Rosy, 53
House, 53, 114, 119, 127-128
Purple, 18, 31, 53, 61, 64, 88, 107, 119, 127
- Flicker, 21, 24, 25
Red-shafted, 10, 15, 21, 24, 48
Yellow-shafted, 15, 21, 48, 63, 85, 106, 116
- Flycatcher, 40, 106
Acadian, 48, 117
Great-crested, 15, 48, 85, 91, 106, 117
Least, 15, 48, 85, 106, 117
Olive-sided, 15, 48, 86, 106, 117
Scissor-tailed, 48
Traill's, 15, 48, 85, 106, 117
Yellow-bellied, 15, 48, 85, 106, 117
- Freeland, David B., House Finch record for Minnesota, 127-128
- Frydendall, Merrill J., Mourning and Prothonotary Warbler, 21, 23
- Gadwall, 12, 42, 62, 82, 115
- Gallinule, Common, 45, 83, 116
Purple, 10, 13, 44
- Gnatcatcher, Blue-gray, 16, 50, 55, 86, 118
- Godwit, Hudsonian, 45, 84, 91
Marbled, 10, 45, 84, 116
- Goldeneye, Barrow's, 43
Common, 12, 42, 62, 73, 82, 105, 115
- Goldfinch, American, 18, 53, 61, 64, 88, 107, 119
European, 53
- Goose, 31, 40, 91
Blue, 12, 42, 62, 82, 115
Canada, 12, 20, 30, 31, 42, 60, 62, 82, 115
Ross', 42
Snow, 12, 31, 42, 62, 82, 115
White-fronted, 12, 42, 82
- Goshawk, 12, 29, 43, 62, 81, 83, 105, 114, 124
- Grackle, Common, 10, 18, 25, 53, 64, 88, 107, 118
- Grebe, 4, 8, 30, 80, 104
Eared, 5, 8, 11, 41, 62, 80, 81, 91, 114
Horned, 7, 8, 11, 41, 62, 81, 104, 114
Least, 4
Pied-billed, 5, 8, 11, 41, 62, 81, 104, 114
Red-necked, 5, 8, 11, 41, 62, 81, 104, 114
Western, 4-9, 11, 24, 41, 80, 81, 114, 121-122
- Green, Janet C., Arctic Loon on Lake Superior, 19; Pine Siskins and Red Crossbills nesting outside usual range in 1970, 27; an annotated list of Minnesota birds, 40-54; the 1970-71 winter season, 61-64; Pomarine Jaeger observation for Minnesota, 95; summer birds of the Superior National Forest, Minnesota, 103-107.
- Gresser, Karol P., Mountain Bluebird during MOU winter trip, 20
- Grosbeak, 107
Black-headed, 53
Blue, 53, 64, 81, 88, 119
Evening, 18, 53, 61, 64, 88, 91, 107, 118, 119
Pine, 18, 31, 53, 61, 64, 81, 119, 124
Rose-breasted, 18, 53, 88, 107, 118, 119
- Grouse, 105
Ruffed, 13, 29, 44, 60, 63, 83, 105, 116
Sharp-tailed, 13, 29, 44, 63, 83, 116

- Spruce, 44, 83, 105, 116
 Gull, 27, 61, 72, 73, 74, 91, 95, 105
 Bonaparte's, 14, 46, 85, 105, 116
 Franklin's, 7, 9, 14, 46, 85, 95, 116
 Glaucous, 14, 46, 61, 63, 84
 Great Black-backed, 46
 Herring, 14, 26, 46, 58, 63, 84, 95, 105, 116
 Iceland, 46, 81, 84
 Ivory, 10, 14, 46, 61, 63, 81, 85
 Ring-billed, 14, 27, 46, 58-59, 61, 63, front cover No. 3
 72-74, 85, 94, 95, 105, 116
 Sabine's, 46
 Gyrfalcon, 10, 13, 32, 44, 61, 63
 Hale, John G. Tree Swallow, Broad-winged Hawk and Blue-winged Teal stay late in Duluth, 26
 Hatfield, Helen. Varied Thrush at Worthington, 22-23;
 Red-shafted Flicker, Nobles County, 24
 Hawk, 25, 26, 105, 124-125, 131
 Broad-winged, 12, 25, 26, 43, 83, 105, 115, 131
 Cooper's, 12, 25, 43, 62, 83, 105, 115
 Ferruginous, 43
 Harlan's, 43
 Marsh, 13, 25, 43, 63, 83, 91, 105, 115
 Pigeon, 13, 25, 31, 44, 83, 105, 116
 Red-shouldered, 12, 29, 43, 62, 81, 83, 114, 115
 Red-tailed, 12, 22, 25, 43, 62, 83, 105, 115, 131
 Rough-legged, 13, 43, 62, 81, 83
 Sharp-shinned, 12, 25, 43, 62, 83, 105, 115
 Sparrow, 13, 25, 39, 44, 63, 83, 105, 116
 Swainson's, 13, 43, 62, 83, 91, 114
 Heidell, Kathy, Brown Thrasher loses tail feathers, beak, 93-94
 Heron, 9, 75, 76, 77, 80, 93, 104
 Black-crowned Night, 7, 9, 11, 41, 56, 58, 61, 62, 82, 96, 105, 115
 Great Blue, 11, 41, 57-58, 62, 75-77, 82, 93, 97, 104, 115
 Green, 11, 41, 62, 82, 96-97, 115, 126
 Little Blue, 41, 58, 114, 115
 Louisiana, 41, 93, 114, 115
 Yellow-crowned Night, 11, 41, 80, 82, 115
 Hitman, Bruce, unusual Canadian Goose behavior, 20;
 observation of a dying Green Heron at Lake Pulaski,
 Wright County, 96-97; Canvasback adopts young Wood
 Duck, 97; two Oldsquaws on Lake Minnewaska, Pope
 County, 123
 Horn, Charles, shy Black Ducks, 96; a Woodcock on the
 Mall, 98; late Sora, 98; the Christmas bird count and
 the hunting of the wren, 120-121; Carolina Wren in
 downtown Minneapolis, 125
 Huber, Ronald L., possible wolverine sighting, 24
 Hummingbird, Ruby-throated, 15, 47, 85, 106, 116
 Ibis, 126
 Glossy, 126
 White-faced, 42, 80, 82, 126
 Ivanovs, M., Great Horned Owl nesting dates differ in
 Winona and Mille Lacs Counties, 55-56; nesting of
 Ring-billed and Herring Gulls on Mille Lacs Lake, 1970,
 58-59; Bald Eagle found nesting in Mille Lacs County,
 92; Common Egrets in Mille Lacs County, 92-93; Caspian
 Terns in Mille Lacs County, 94
 Jaeger, 95
 Long-tailed, 46
 Parasitic, 14, 46, 95
 Pomarine, 10, 14, 46, 95
 Janeczek, Jerome, Upland Plover with young, Itasca
 County, 94
 Janssen, Robert B., second sight record for the Louisiana
 Heron in Minnesota, 93
 Janssen, Robert B. and Janet C. Green, an annotated
 list of Minnesota birds, 40-54
 Jay, 106
 Blue, 25, 49, 57, 64, 86, 106, 117, 126
 Gray, 15, 31, 49, 64, 86, 106, 117
 Johnson, Oscar L., attempt to establish Wild Turkeys in
 Otter Tail County, 59; possible Trumpeter Swans from
 Carver Park captive flock, 59
 Junco
 Gray-headed, 54
 Oregon, 18, 31, 54, 65, 88
 Slate-colored, 18, 54, 65, 88, 107, 119
 Kedney, Fred, second Ruff record for Minnesota, 93
 Killdeer, 13, 20, 45, 63, 84, 105, 116
 Kingbird, 89
 Eastern, 15, 48, 85, 89-90, 106, 117
 Western, 15, 48, 85, 89-90, 117
 Kingfisher, Belted, 15, 48, 63, 85, 106, 116
 Kinglet, 106
 Golden-crowned, 16, 31, 50, 64, 86, 106, 118
 Ruby-crowned, 16, 50, 86, 106, 118
 Kite, Swallow-tailed, 28, 43
 Kittiwake, Black-legged, 46
 Knot, 14, 45, 81, 84
 Lark, Horned, 15, 40, 48, 63, 85, 117
 Leshner, Fred, Cattle Egrets in Houston County, 122-123
 Lint, Mrs. Rollyn T. Sr., odd plumaged Cardinal, 124-125
 Longspur, 29, 126, 127
 Chestnut-collared, 21, 54, 81, 88, 119
 Lapland, 18, 54, 56, 65, 88, 126, 127
 McCown's, 54
 Smith's, 10, 18, 54, 56, 81, 88, 126-127
 Loon, 19, 30, 91, 104, 121
 Arctic, 19, 41
 Common, 11, 19, 41, 81, 104, 114
 Red-throated, 19, 41, 81, 104
 Magpie, Black-billed, 16, 49, 60, 64, 78-79, 86, 114, 117
 Mallard, 12, 29, 31, 42, 62, 73, 82, 96, 105, 115
 Martin, Purple, 15, 39, 49, 86, 106, 117
 Mauritz, Marilyn, Blue-gray Gnatcatcher nest sighting, 55;
 Tree Swallow nesting, 97
 Meadowlark, 64
 Eastern, 17, 52, 87, 107, 118
 Western, 17, 52, 87, 118
 Merganser, 121
 Common, 12, 43, 62, 83, 105, 115
 Hooded, 12, 29, 43, 62, 83, 105, 115
 Red-breasted, 12, 43, 62, 83, 105, 115
 Mockingbird, 10, 24, 50, 86, 106, 117
 Moos, Louis M., Cattle Egret observation, 96
 Murrelet, Ancient, 46
 Nighthawk, Common, 15, 47, 85, 106, 116
 Norling, David R., Western Grebe concentration, 121-122
 Nubel, Fran, Black Rail in Goodhue County, 58
 Nutcracker, Clark's, 49
 Nuthatch, 106
 Red-breasted, 16, 31, 49, 64, 86, 106, 117
 White-breasted, 49, 64, 106, 117
 Oldsquaw, 12, 21, 43, 62, 82, 115, 122, 123
 Oriole, 123
 Baltimore, 17, 52, 88, 107, 118, 125-126
 Bullocks, 52
 Orchard, 52, 65, 88, 118
 Osprey, 13, 43, 83, 105, 109, 115
 Ovenbird, 17, 52, 87, 107, 118
 Owl, 31, 41, 81, 91, 105, 131
 Barn, 47, 81, 85
 Barred, 15, 47, 60, 63, 85, 105, 116
 Boreal, 47, 81, 85
 Burrowing, 47, 81, 85
 Great Gray, 47, 63, 81, 85, 105
 Great Horned, 10, 15, 22, 47, 55-56, 60, 63, 85,
 105, 116, 131
 Hawk, 47, 123-124
 Long-eared, 15, 47, 63, 85, 105, 116
 Saw-whet, 15, 47, 81, 85, 105, 116
 Screech, 10, 15, 29, 47, 63, 85, 116
 Short-eared, 15, 47, 63, 85, 105, 116
 Snowy, 15, 47, 60, 63, 85
 Parmelee, David F., nesting of Ring-billed Gulls on
 Leech Lake, Cass County, Minnesota, 72-74
 Partch, Max, the 1971 spring migration at the Cold
 Spring heron colony, 75-77
 Partridge, Gray, 10, 13, 44, 60, 63, 83, 116
 Pelican, White, 11, 41, 81, 114
 Pewee, Eastern Wood, 15, 48, 55, 86, 91, 106, 117
 Phalarope, 30, 105
 Northern, 14, 46, 84, 105, 119
 Red, 46
 Wilson's, 14, 46, 84, 116
 Pheasant, Ring-necked, 13, 29, 44, 60, 63, 83, 116
 Phoebe,
 Black, 48
 Eastern, 15, 48, 85, 106, 117
 Say's, 48
 Pigeon
 Band-tailed, 46, 57
 Passenger, 28, 47
 Pintail, 12, 21, 42, 62, 82, 115
 Pipit, 30
 Sprague's, 21, 50, 64, 81, 86
 Water, 16, 50, 64, 86
 Plover, 30
 American Golden, 13, 45, 84, 95, 119
 Black-bellied, 13, 45, 84, 95, 119
 Piping, 13, 45, 84, 91, 116
 Semipalmated, 13, 45, 84, 105
 Upland, 13, 45, 84, 94, 116
 Poor-Will, 47
 Prairie Chicken, Greater, 10, 29, 44, 83, 116
 Ptarmigan, Willow, 44
 Rail, 58, 81, 91, 105
 Black, 44, 58, 81, 83
 King, 44
 Virginia, 13, 44, 83, 91, 105, 116
 Yellow, 10, 13, 44, 81, 83, 116
 Raven, Common, 16, 49, 64, 86, 103, 106, 117
 Redhead, 12, 42, 82, 97, 115
 Redpoll, 29, 61, 81
 Common, 18, 53, 61, 64, 88
 Hoary, 31, 53, 124

- Redstart, American, 17, 52, 55, 87, 107, 118
Robin, 16, 22, 41, 50, 55, 64, 86, 106, 117, 118
Ruff, 45, 81, 84, 93
Russell, Robert P. Jr., birds of Stearns County, 28-31
Sanderling, 14, 45, 84, 95, 99, 105, 119
Sandpiper
 Baird's, 14, 45, 84, 92, 105, 119
 Buff-breasted, 10, 14, 20, 45, 81, 84, 91
 Least, 14, 45, 84, 92, 105, 119
 Pectoral, 14, 45, 84, 93, 95, 105, 119
 Purple, 45
 Semipalmated, 14, 45, 84, 92, 105, 119
 Solitary, 13, 45, 84, 105
 Spotted, 13, 45, 84, 105, 116
 Stilt, 14, 45, 84, 119
 Western, 45, 81, 84, 92, 119
 White-rumped, 14, 45, 84, 92, 119
Sapsucker, Yellow-bellied, 15, 48, 85, 106, 117
Scalp, 24
 Greater, 12, 42, 62, 82, 122
 Lesser, 12, 42, 62, 82, 105, 115
Schneider, Dean G., Western Grebe in Southeastern Minnesota, 24
Scoter, 80
 Common, 10, 12, 21, 43, 80, 83, 91
 Surf, 43, 83
 White-Winged, 12, 21, 43, 82, 115, 122
Shoveler, 12, 42, 82, 115
Shrike, 81
 Loggerhead, 10, 16, 51, 86, 118
 Northern, 16, 51, 64, 86
Siskin, Pine, 18, 27, 53, 64, 81, 88, 107, 119
Snipe, Common, 13, 20, 25, 45, 63, 84, 116
Solitaire, Townsend's, 22, 50, 61, 64
Sora, 13, 44, 83, 98, 105, 116
Sparrow, 31, 107
 Baird's, 21, 54, 81, 88
 Chipping, 18, 54, 88, 107, 118, 119
 Clay-colored, 18, 54, 88, 107, 119
 Field, 18, 54, 88, 119
 Fox, 18, 54, 65, 88
 Grasshopper, 10, 54, 88, 119
 Harris', 18, 54, 65, 88, 114, 119
 Henslow's, 54, 81, 88, 119
 House, 52, 107, 124
 Lark, 18, 54, 88, 119
 LeConte's, 18, 54, 88, 107, 119
 Lincoln's, 18, 54, 88, 107, 119
 Savannah, 18, 54, 88, 107, 119
 Sharp-tailed, 54, 88, 119
 Song, 18, 54, 65, 88, 104, 107, 118, 119
 Swamp, 18, 54, 65, 88, 107, 119
 Tree, 18, 54, 65, 88, 91
 Vesper, 18, 54, 88, 107, 119
 White-crowned, 18, 54, 65, 88, 91, 107
 White-throated, 18, 54, 88, 104, 119
Stanley, Evelyn, Townsend's Solitaire at Wirth Park, Minneapolis, 22; Willets on Sugar Lake, Wright County, 23
Starling, 39, 51, 106
Struthers, Dana R., gulls drown hawk in Lake Superior, 26
Swallow, 106
 Bank, 15, 49, 86, 106, 117
 Barn, 10, 15, 49, 86, 97, 106, 117
 Cliff, 15, 49, 86, 91, 106, 117
 Rough-winged, 15, 49, 86, 106, 117
 Tree, 10, 15, 26, 39, 49, 86, 97, 106, 117
 Violet-green, 49
Swan, 30, 59
 Trumpeter, 42, 59, 62, 82, 114, 115
 Whistling, 12, 42, 62, 82
Swedenborg, Alice, Snowy Egret in St. Paul suburb, 56-57
Swift, Chimney, 15, 47, 85, 106, 116
Tanager, 107
 Scarlet, 18, 53, 88, 107, 118, 124
 Summer, 53
 Western, 53, 114, 118, 123, 124
Teal
 Blue-winged, 12, 26, 42, 62, 82, 97, 105, 115
 Cinnamon, 42
 Green-winged, 12, 42, 82, 115
Tern, 85, 91, 105
 Black, 14, 25, 46, 85, 105, 116
 Caspian, 14, 25, 46, 58, 73, 85, 94, 105, 116
 Common, 10, 14, 46, 58, 59, 72, 73, 81, 85, 94, 105, 116
 Forsters, 10, 14, 46, 85, 116
 Least, 10, 14, 25-26, 46
Thrasher, Brown, 16, 24, 50, 64, 86, 93-94, 106, 117
Thrush, 40, 106
 Gray-cheeked, 10, 16, 50, 86, 106
 Hermit, 16, 50, 86, 106, 117
 Swainson's, 16, 50, 86, 106, 117
 Varied, 22-23, 50, 64, 81, 86
 Wood, 10, 16, 29, 50, 86, 91, 106, 117
Titmouse, Tufted, 16, 49, 64, 86, 117
Towhee, 30
 Green-tailed, 53
 Rufous-sided, 18, 22, 53, 61, 65, 88, 119
Turkey, 44, 59, 83, 114, 116
Turner, Garth K., owl and grouse seemingly try to outdo each other as noisemakers, 59-60
Turner, Robert E., book reviews, 33-35; 65-67
Turnstone, Ruddy, 13, 45, 84, 105, 119
Veery, 50, 86, 106, 117
Vireo, 10, 55, 91, 106
 Bell's, 51, 81, 86, 114
 Philadelphia, 16, 51, 87, 107, 118
 Red-eyed, 16, 51, 87, 106, 118
 Solitary, 16, 51, 87, 106, 118
 Warbling, 16, 51, 87, 107, 118
 White-eyed, 51
 Yellow-throated, 16, 30, 51, 86, 118
Vulture, Turkey, 12, 25, 43, 83, 105, 115
Warbler, 10, 29, 30, 40, 55, 81, 91, 107
 Audubon's, 52
 Bay-breasted, 17, 52, 87, 107, 118
 Black-and-White, 16, 51, 65, 87, 107, 118
 Blackburnian, 17, 52, 87, 107, 118
 Blackpoll, 17, 52, 87, 107, 118
 Black-throated Blue, 17, 51, 87, 107, 114
 Black-throated Gray, 52
 Black-throated Green, 17, 52, 87, 107, 118
 Blue-winged, 10, 51, 87, 118
 Brewster's, 87
 Canada, 17, 52, 87, 107, 118
 Cape May, 17, 30, 51, 87, 107, 118
 Carulean, 29, 30, 52, 87, 91, 118
 Chestnut-sided, 17, 52, 87, 91, 107, 118
 Connecticut, 17, 30, 52, 87, 107, 118
 Golden-winged, 16, 30, 51, 87, 118
 Hermit, 52
 Hooded, 52
 Kentucky, 52
 Kirtland's, 52
 MacGillivray's, 21, 23
 Magnolia, 17, 51, 87, 91, 107, 118
 Mourning, 17, 21, 23, 52, 87, 107, 118
 Myrtle, 17, 51, 87, 107, 118
 Nashville, 17, 51, 87, 107, 118
 Orange-crowned, 17, 51, 87, 107
 Palm, 17, 25, 52, 87, 107, 118
 Parula, 17, 30, 51, 87, 107, 118
 Pine, 17, 52, 87, 107, 118
 Prairie, 52
 Prothonotary, 21, 23, 30, 51, 87, 114, 118
 Tennessee, 17, 51, 87, 107, 118
 Vinson's, 17, 52, 87, 107
 Worm-eating, 51
 Yellow, 17, 51, 87, 107, 118
Waterthrush
 Louisiana, 17, 30, 52, 87, 114
 Northern, 17, 52, 65, 87, 107, 118
Waxwing, 61, 106
 Bohemian, 16, 51, 61, 64, 86, 124,
 Cedar, 16, 51, 64, 86, 106, 118
Whimbrel, 45, 81, 84, 105
Whip-Poor-Will, 10, 47, 85, 106, 116
Widgeon, 90
 American, 12, 42, 62, 82, 105, 115
 European, 42
Willard, John L., possible summer Mockingbird, Wash-
ington County, 24
Willet, 14, 23, 45, 84, 116
Wolverine, 24
Woodcock, American, 13, 29, 45, 60, 84, 98, 105, 116
Woodpecker, 91, 106
 Black-backed Three-toed, 15, 31, 48, 63, 106, 117
 Downy, 25, 48, 63, 106, 117
 Hair, 48, 63, 106, 117
 Northern Three-toed, 48, 81, 106
 Pileated, 15, 30, Front Cover No. 2, 48, 60, 63, 85,
 106, 117
 Red-bellied, 15, 31, Front Cover No. 2, 48, 60, 63,
 85, 117
 Red-headed, 15, 31, 48, 63, 85, 106, 117
Wren, 106, 120-121
 Bewick's, 10, 16, 50, 125
 Carolina, 50, 125
 House, 16, 25, 50, 86, 106, 117, 125
 Long-billed Marsh, 16, 50, 86, 106, 117, 125
 Rock, 50
 Short-billed Marsh, 16, 50, 86, 106, 117
 Winter, 16, 50, 64, 86, 106, 117, 120, 121
Yellowlegs, 20, 93
 Greater, 14, 23, 45, 84, 105, 119
 Lesser, 14, 45, 84, 93, 105, 119
Yellowthroat, 17, 52, 87, 107, 118

RAPTOR RESEARCH

I am a graduate student in the Department of Ecology and Behavioral Biology at the University of Minnesota and I am currently conducting research at the Cedar Creek Natural History Area. My study involves trapping raptors that use the Area, radio tagging them, and following their movements and behavior with the aid of the bio-telemetry system at Cedar Creek. In conjunction with this I am attempting to design a transmitter package that can be attached to the birds with the least amount of interference with their natural behavior. This work necessitates the use of captive birds so that I can refine techniques of attachment, determine the best design and observe the behavioral responses the birds make to the transmitter.

If you are notified of trapped or injured hawks, falcons and owls, or have an opportunity to obtain any of these birds I would greatly appreciate being notified in case I can use them in my research. Healthy birds are most desirable but I can use injured birds if they are not too seriously hurt. Thus far I have been able to work with the Broad-winged Hawk, Red-tailed Hawk and Great Horned Owl. I need to obtain all other species yet in order to make a complete study. Additionally Dr. Gary Duke and Dr. Vondenberg of the University of Minnesota are conducting research on the Great Horned Owl and I will turn over live or frozen specimens of this species to them. Some birds will also be used by Dr. Shoffner for chromosome analysis, and by veterinarian student Pat Redig for parasite research.

I have had experience in handling and coring for raptors and I have a state permit for keeping the birds. Injured birds will be referred to Mr. Fonsworth of the University Veterinary Hospital for treatment. I have several sources of food in order to provide the birds with a proper diet. Healthy raptors will be conditioned and released in appropriate areas of the state when I am done with them. Birds incapable of surviving in the wild will be put in captive breeding projects or turned over to Paul Van Molson for display at the Como Zoo or to the Carlos Avery Game Refuge for display there.

I can be contacted or a message can be left for me at one of the following telephone numbers:

434-5131 Cedar Creek Natural History Area

373-5969 Dr. Tester's Office at the Bell Museum of Natural History, University of Minnesota, Minneapolis

644-2079 Residence

Please feel free to write or call if you have any questions. Thank you for your cooperation.

Mark R. Fuller

NIH Research Fellow

REQUEST FOR COWBIRD DATA

I would like to obtain some assistance from MOU members. I'm interested in collecting some data on bird species which hatch and feed young Brown-headed Cowbirds.

The information I need is as follows:

Date of observation

Location of Observation (At least county)

Species feeding the cowbird

Number of cowbirds being fed

Were any of the young of the feeding species present?

Please send this information to:

Robert E. Hotlz
Assistant Professor, Biology
Concordia College
275 N. Syndicate Street
St. Paul, Minnesota 55104

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 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.



SUGGESTIONS TO AUTHORS

The editors of **The Loon** need articles, shorter "Notes of Interest" and black/white photos. Photos should be preferably 5x7 in size. Manuscripts should be typewritten, double-spaced and on one side of the sheet with generous margins. Notes of interest should be generally less than two typewritten pages double-spaced. If reprints are desired the author should so specify indicating number

required. A price quotation on reprints will be sent upon receipt of information.

Club information and 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, August and November to Mrs. Janet Green. See inside front cover.

TABLE OF CONTENTS

Bald Eagle - Photo by Thomas C. Dunstan	Front Cover
Summer Birds of The Superior National Forest, Minnesota by Janet C. Green	103
The Presidents Writes	108
An Ecosystem Approach to the Study of Minnesota's Bald Eagles by Thomas C. Dunstan	109
The Summer Season by Kim R. Eckert	114
The Christmas Bird Count and The Hunting of The Wren by Charles L. Horn, Jr.	120
Notes of Interest	121
Index to Volume 43	128