

The LOON

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Wickland

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COVER: Photo of a captive Sparrow Hawk ("Candy Kestral") by Murry Olyphant. See article on page 5.

PURPOSE OF THE M.O.U.

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 M.O.U. officers wish to point out to those interested in bird conservation that any or all phases of the M.O.U. program could be expanded significantly with gifts, memorials or bequests willed to the organization.

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The President Writes . . .

BAD TIMES AHEAD FOR MAN AND WILDLIFE

For five years during the 1950's I was a ranger-naturalist in Yellowstone Park, and it was my job to interpret the natural wonders for visitors. One day an old timer came up to me and asked, "Where are all your Sage Hens?"

"There aren't any Sage Hens in Yellowstone, and they're pretty scarce almost everywhere nowadays," I told him.

"How can that be?" he said. "Why, in the old days we used to drive a big wagon across the prairie when we went hunting. It never took us long to shoot a wagonload of Sage Hens."

I nodded. "And that's why Sage Hens are scarce today."

It probably is true that relentless hunting had a lot to do with killing off Sage Hens and certain other species. But the principal threat to all species nowadays—even to man himself—is the despoilation of the natural environment. And why are we ruining our world? Because we still have outmoded ideas about "limitless resources", and because of man's unprecedented population explosion.

We are pouring so many noxious substances into the environment that Rachel Carson called this an "age of poisons." In the central Pacific thousands of miles from civilization sea birds are having trouble reproducing because of DDT in their tissues and eggs. Scientists have found surprising amounts of DDT even on the polar ice caps. How can any living thing escape?

Meanwhile Lake Erie has become an open cesspool practically devoid of life, and many of our other lakes and streams are on the way to the same tragic fate. As Lyndon Johnson wrote in 1967, "The air and water grow heavier with the debris of our spectacular civilization."

Scientific American magazine for March, 1969, sounds the alarm about thermal pollution of our surface waters, which is far more dangerous than I had realized. And that same issue points out that we are poisoning our planet with excessive tonnages of nitrates, which have even polluted our ground water, and which change into deadly nitrites.

The direst predictions that Thomas Malthus made in 1798 are coming true, for the population explosion is picking up speed. Experts estimate that worldwide starvation, which has already begun, will kill many millions of people within the next ten years. The newest miracles in agricultural production can't keep pace with the new mouths to be fed. And in a topsy-turvy sort of natural selection, the people least qualified to inherit the earth are doing most of the overbreeding.

Thoreau wrote, "In wilderness is the preservation of the world." But our wilderness is disappearing rapidly. I fear that, in a futile attempt to avert human catastrophe, men will "put to use" the last remaining natural areas on earth.

As LaMont Cole of Cornell University wrote, "Man, in the process of seeking a 'better way of life,' is destroying the natural environment that is essential to any kind of human life at all. . . . And there is too little indication that man has any intention of mending his ways."

If the genus Homo truly possesses any sapience, he must reverse the present trends. And those of us who see the value of a quality environment must do everything in our power to maintain its quality.

Robert E. Turner

A MOST UNUSUAL & UNIQUE SPARROW HAWK

Mrs. Murray Olyphant, Jr.

On Sunday morning, June 23, 1968, a "Hatching Year" (born in Spring, 1968), female Kestral was delivered to our licensed bird hospital by a young friend of ours, Mrs. William Zick. Mrs. Zick had rescued the bird from beneath a towering elm tree near her driveway on State Highway No. 36, just west of the junction of the Lake Elmo Road, in Washington County.

Upon examining the Kestral, my husband cried "Siamese!, this bird has probably never flown in its life". What caused Murray's exclamation were the falcon's very freakish wings. Growing on the right wing were 8 extra primaries, 3 extra secondaries, and several extra underwing coverts. The left wing was abnormal also with 5 extra partially grown primaries, extra underwing coverts, in addition to a double set of alulae and alular coverts. This condition made it impossible for the young falcon to fly at the time of arrival. All of the above described feathers faced "right side down" as the pictures of the Kestral's wings show.

In putting the pieces of her rescue by Mrs. Zick (Candy), together, we figured that she was probably born in that above mentioned elm tree, fed and cared for by her parents, and during a violent wind storm on Wednesday night, June 19th, she was knocked to the ground where Candy found her on the morning of June 20th.

In our hospital the author takes pleasure in naming our various patients. What better name than "Candy Kestral" in gratitude to her benefactor Mrs. Candy Zick? So the adventure of Candy began. She was in our care from June 23, 1968, until August 11, 1968.

The first order of business was to take her to Dr. Walter Breckenridge, Director, James Ford Bell Museum of Natural History, to get an expert's opinion of her condition. What Murray and I wanted to know, was there possibly some scientist who would be interested in studying Candy's freakish wings in more detail? This we hoped Dr. Breckenridge could answer. His immediate remark when examining Candy was "I have never seen anything like this before in my life! Let me think for awhile on who the best man would be to study her further". I could tell that Dr. Breckenridge was excited about this unusual little falcon. We were asked to care for her until further notification.

Candy's routine diet while in our home consisted of two or three very young mice (almost hairless) every morning and one or two of the same in the late afternoon. If by mistake I caught some large flying insect in my mist nets, such as a dragon fly, she ate them with gusto.

She spent most of her time on a large perch (about 5½ feet above the floor) which was situated in front of some large south facing windows. From here she could view any and all of the wild, normal birds' activities around some of our feeders and bird baths in the back yard.

She made friends (maybe it was the other way around) with a very young orphaned Blue Jay that we were caring for at the time of her arrival. When "L.B.J." learned to fly it would land on Candy's perch and try to nestle as close as possible to her. The Blue Jay would gape at the falcon as if it expected to be fed. There were several clumsy attempts by the Blue

Jay to claim Candy as a parent which did not appear to disturb the falcon at all. On no occasion during the Blue Jay's presence near the falcon was there any attempt on the falcon's part to harm or grab the young jay.

After we had had the Kestral for about 3½ weeks we were amazed and very pleased to find that she could fly — not very well but considering all those extra feathers which she had, this was a real accomplishment. She liked to sit on the basement stairs. One morning when startled by Murray charging down the stairs on his way to work, she managed to fly across the basement for the first time and ascended to a window sill about 25 feet from the stairs. From that moment in the middle of July, she took short flights about the basement, and was able to fly up to her perch 5½ feet off of the floor.

During this same week when she started to fly, Dr. Breckenridge notified me that he had informed Dr. Robert N. Shoffner, Professor of Animal Science, University of Minnesota, of our unusual Kestral. I learned that one research project of Dr. Shoffner's was a chromosome study of raptors. On Friday, July 26th, Dr. Shoffner examined Candy and explained that he wanted to do a Chromosome Karyotype study on the Kestral. To set this study up, it was necessary to pull several feathers along certain feather tracts from Candy's body, in order to stimulate the growth of brand new feathers which would assure a successful outcome to this particular study. To quote Dr. Shoffner, "A Chromosome Karyotype study is a photographic description of Chromosomes, their morphology and numbers". These new feathers needed for the study would be developing and ready for examination in two weeks.

In discussing the unusual feather development of Candy's wings with Dr. Shoffner, I learned that his ultimate wish for Candy was for her to be thoroughly studied further by Dr. Patricia Sarvella, a Research Geneticist with the Department of Agriculture

at Beltsville, Maryland. The problem of transportation for the Kestral was mentioned, and I told Dr. Shoffner that Murray and I could help get her to Beltsville, but it would be in a rather circuitous fashion.

My family and I were scheduled to leave for Houghton, Michigan on August 9, where I was going to attend the annual Inland Bird Banding Association conference at Michigan Technological Institute. At this conference, I would see Mr. Larry Hood, a Biologist with the Bird Banding Laboratory at Laurel, Maryland. If arrangements were made in advance, perhaps Larry could take Candy back with him to Laurel, where Dr. Sarvella could arrange to have her brought to Beltsville.

As is so often the case, this rather unusual transportation plan was not finalized until just the day before we left for the Banding Conference in Michigan. Mr. Larry Hood kindly agreed to take Candy with him on the plane provided we place her in a suitable container for travel by air. On this same day, August 8th, while on the phone with Larry, one of Dr. Shoffner's assistants collected the new growth of feathers from Candy for the Chromosome Karyotype study.

On August 9, with some misgivings on my part but not Murray's, Candy was placed in a parakeet cage and we took off at 9 a.m. for Michigan. I need not have been worried at all as she was very well behaved, being very interested and intent on what she saw as we drove along.

During the weekend, when we were in Houghton, Michigan, she quietly sat in her cage in our motel room or on top of the front seat of our car where she could get a good view of Michigan Tech. Institute's very attractive campus.

On August 11, at the conclusion of the Banding Conference, our personal adventure with Candy the Kestral came to a close. We headed for a campground near Houghton, Michigan for a few days of vacation, and Mr. Larry Hood with Candy in a proper

travelling box, returned by plane to Laurel, Maryland.

About two weeks later I received a letter from Larry saying that all went well on the plane and that Candy was delivered safely to Dr. Lucille Stickel, Pesticide Research Coordinator, Patuxent Research Center, Laurel, Maryland. Dr. Stickel very kindly cared for our Kestral until Dr. Patricia Sarvella arranged for her transportation to the U.S. Department of Agriculture Research Center at Beltsville, Maryland early in October.

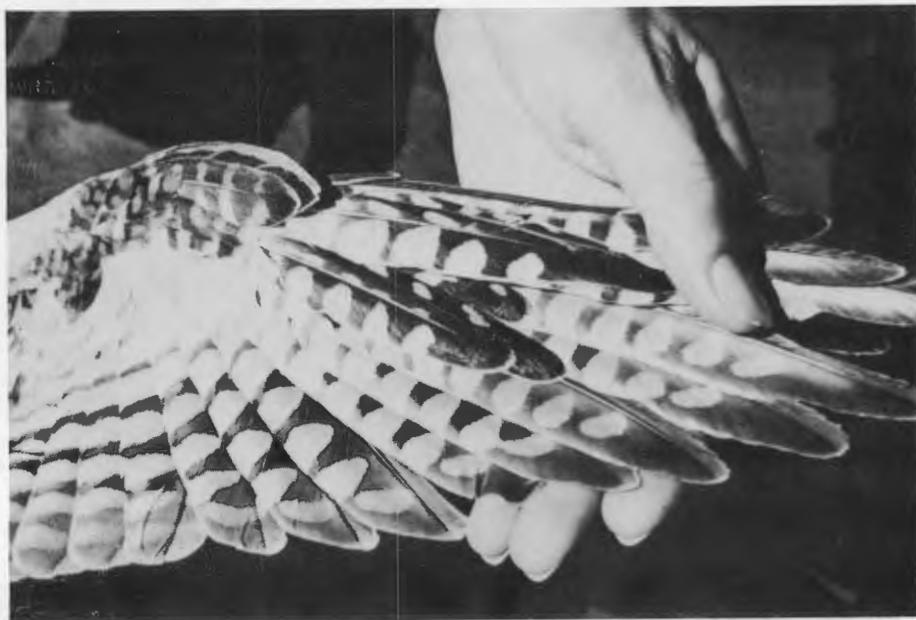
A letter dated October 21, 1968 arrived from Dr. Sarvella in which she stated, "Your Sparrow Hawk is very intriguing and is certainly worthy of further study. I unfortunately do not have the proper facilities to house the bird here. I assume that the bird will be returned to Dr. Breckenridge. Thank you very much for your interest"—Signed, Patricia Sarvella.

Was our Kestral's trip all in vain?

I asked myself when I read this letter. In a letter dated November 6, 1968, Dr. Sarvella wrote the following to Dr. Breckenridge: "Yesterday, I talked to the Curator of the National Zoological Gardens in Washington, D.C., Mr. Terry Mueller. I described the condition of the Sparrow Hawk and he expressed interest in it. He will house it temporarily, and will find a good home for it either at a University or a zoo. Hope Mrs. Olyphant is agreeable with this plan. Sincerely, Patricia Sarvella, Research Geneticist, Poultry Research Branch, Agriculture Research Service, Beltsville, Maryland."

In conclusion, it is an obvious fact that "Candy the Kestral," because of her unusual wing feather condition and long captivity would probably never make it successfully in the wild. But through this very appealing and unusual young Kestral, several eminent research scientists have been enlightened by her. 4000 Hidden Bay Road, St. Paul, Minnesota 55109.

Underside of left wing.



Back view showing abnormal wings in "normal" resting position.



The author is very grateful to her husband, Murray, for taking these 3 pictures and the front cover.

Pictures taken July 30, 1968.

Underside of right wing.



THE 1969 METROPOLITAN BREEDING DUCK SURVEY

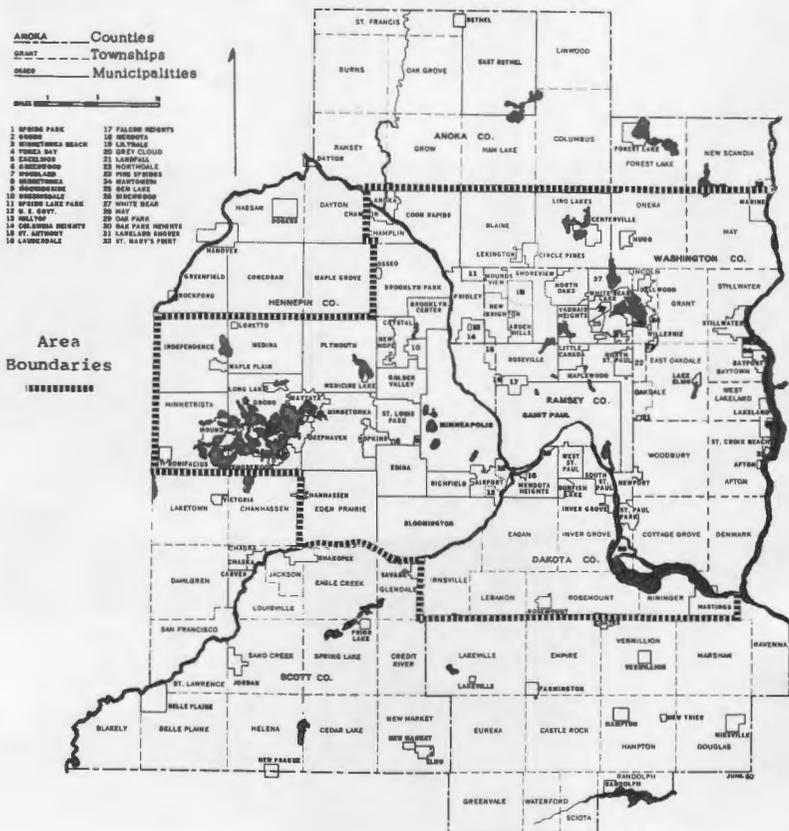
Don Beimborn and Dr. Dwain Warner

An ambitious project is suggested by the above title. It is hoped that we can make a count of the numbers of breeding ducks in the entire metropolitan Twin Cities area. (See map for boundaries of the area to be surveyed) To accomplish this aim the assistance of many birders in the Twin Cities will be required.

It is obvious to most birders in the Minneapolis-St. Paul area that there is a rich endowment of wetlands in and around the cities. The metropolitan area lies on the border between forest and prairie in the state of Minnesota. The prairie area to the west contains numerous depressions which have provided habitat for waterfowl and other wildlife. The rough topography of the once forested region of the

eastern portion similarly contains habitat in marshes and the edges of small lakes. It is obvious that many waterfowl use these areas as nesting grounds and the question occurs as to how the production of ducks here compares with those areas generally regarded as top waterfowl producing areas in the western part of the state.

We recognize that the metropolitan area is expanding in population and in area and that the pockets of wildlife habitat which remain are rapidly disappearing through landfill, drainage, and pollution. Perhaps if the general public were more aware of the potential of these large and small areas of wildlife habitat, the general attitude would be toward conservation rather than to further destruction. An addi-



tional aim of the duck census in 1969 and those censuses to be made in succeeding years will be to increase this public awareness and to point out some of the changes which are occurring while an opportunity to retain some of this habitat still exists.

A beginning was made in the spring of 1968 when Dr. Warner suggested the project to the University of Minnesota ornithology class. A number of sites, chiefly in the area around the University campus were surveyed. In this small area about 2,200 breeding ducks were found. Since the exact area of the habitat which was examined is unknown, the figure is of little use, but it does point out the fact that large numbers of waterfowl were attempting to nest in the area. The most abundant species was the Mallard, comprising about 66% of the total. The Blue-winged Teal made up about 19%, the Wood Duck about 11%, and the Red-head about 4% of the breeding ducks located. A few other species of ducks may nest in our area in small numbers, but they were not observed during this preliminary survey.

Notices were placed in some of the local newspapers, but unfortunately these appeared rather late in the season and none were found in the Minneapolis papers. However, about 40 letters were received which described breeding waterfowl in the St. Paul area. Many of these letters were particularly interesting in that they pointed out areas of particularly good habitat and high density of nesting waterfowl.

The methods to be used in the survey are simple. It is impractical to survey all habitat areas and to count all waterfowl. We intend to sample only a small portion of the area and project these figures to the whole. During the periods of May or June when the hen is on the nest, the drake is highly defensive of the area which he claims. He places himself prominently in the center of a body of water near his mate's nest in order to advertise his territory to other passing males. During this period, counts are relatively simple, and a drake found in such a posi-

tion can be assumed to represent a breeding pair in residence.

In order for the small sample to have any validity in relation to the whole, careful selection of the sampling areas must be made. The inventory of breeding sites and selection of sampling areas has occupied much of the past winter. The task was aided considerably by the Metropolitan Mosquito Control District. Dr. A. W. Buzicky of the District supplied punched cards which could be interpreted by computer and give us data on all possible mosquito breeding sites in the metropolitan area selected for the study. Since the mosquito breeding sites were classified as to type of habitat; for example, as whether in permanent marsh or temporary spring ponds it was simple to select out those sites which are probable waterfowl habitat. Large scale maps showing the locations of all these sites are also available from the Mosquito District. In addition, personnel of the Minnesota Conservation Department have been helpful in providing advice and have expressed enthusiasm for the project.

A topic of further interest is the matter of survival of the broods. In this case data will not be easy to obtain, but it is hoped that some observers will have the opportunity to observe the size of some broods as the summer progresses so the we might obtain an accurate idea of the rate of duckling loss and the number of ducklings produced per pair per year. These data will be particularly important in comparisons with other areas in the state.

Those in the metropolitan area who are interested in this project are urged to contact us at the Bell Museum of Natural History at the University. By aiding in the project you will further both our store of ornithological knowledge and aid in the conservation of wildlife habitat in our metropolitan Twin-Cities area.

A temporary exhibit concerning the Duck Census has been placed in the balcony of the Bell Museum. *Bell Museum of Natural History, University of Minnesota, Minneapolis, Minnesota.*

TWO NEW SPECIES FOR MINNESOTA

I. First Gray-headed Junco Record for Minnesota

Mrs. Jean Peterson

On the morning of October 27, 1968, I noticed an odd-looking junco feeding along with the other birds. This bird had the most distinctive reddish-brown patch on its back that I had ever seen on a junco. Since juncos vary so much in colorations (black hoods, various gray shades, redish tinges, pink colorations, etc.), I honestly have to admit that I watched the bird for over an hour before it dawned on me that this bird was uniformly light gray throughout its body. No matter what color variations I've seen in juncos they've always had lighter underparts in contrast to a darker topside. At first I thought the bird might be a hybrid.

I took complete field notes (listed below) of the bird and then out of curiosity I got out my field guide *Birds of North America* to see if there possibly were juncos other than Slate-colored Juncos and Oregon Juncos. There, much to my surprise, I found my bird pictured — the Gray-headed Junco. When I discovered this bird's normal range, I realized it was something special so I took several slides of it. (Editor's note: copies of these slides have been sent to the Fish and Wildlife Service's National Photoduplicate File and to the Casual and Accidental Species File of the Research and Records Committee of the M. O. U.)

I baited the ground directly under my kitchen picture window so I could easily see when the bird came out to feed. Directly under this window is a basement window so I set up the step ladder in the basement and with this arrangement I was able to observe the bird at eye level and very closely — between four and five feet.

I called Marie Aftreith and asked her to come and see the bird which she did. She observed it for over an hour and confirmed by observation. The books show this species with a white

belly patch but neither Marie nor I could detect one on this particular bird. It was last seen on October 29th.

Field notes: Obviously a junco type sparrow. Wings dark gray with lighter gray edgings on primaries. Tail dark gray, forked, and with white outer feathers. Except for back and top of head, body was uniform light gray, including rump and nape, breast and belly and flanks. Back was bright reddish brown. Top of head was a little darker than body. There was a black line through the eye, the eye was black and the bill was light. Very shy — runs out and feeds hurriedly for a few moments and then hides. *Tofte, Minnesota.*

II. Say's Phoebe Seen in Minnesota

C. M. Einhorn

My wife and I were vacationing in Southeastern Minnesota and on September 3, 1963, we happened to be birding along some of the country roads near St. Charles, Winona County, on our way to Whitewater State Park. On some telephone wires on the right side of the road and several hundred feet ahead of us, we noticed what was obviously a tyrant flycatcher but which seemed a little large for an Eastern Phoebe. As we drew closer, I noticed it had rusty underparts and jokingly remarked to my wife that the bird looked like a cross between a Robin and flycatcher. To avoid flushing the bird, I allowed the car to coast to a stop about 50 yards down the road.

I was at that time, and still am, field trip chairman of the Atlanta Bird Club of Atlanta, Georgia. Because this job presents a constant challenge to identify birds for participants on field trips, I had spent many, many hours studying birds of this and other countries. I had made a special effort to familiarize myself with the characteristics of as many of the birds named in the AOU Checklist as possible and in trying to mem-

orize each species as to order, family and subfamily. I had encouraged my wife to accompany me on field trips, both with and independent of the club, and we developed the habit of discussing various field marks before referring to a bird guide each time we sighted a new species.

Although we had never previously seen a Say's Phoebe, we both recognized the bird in question as not being in Peterson's Eastern Guide. I asked my wife to quickly check our Eastern and North Central Audubon Land Guide in this instance while I set up our telescope which had a 25X eyepiece. We gradually worked closer to the bird and alternately observed it through the scope and 7 x 35 extra wide angle binoculars. The time was about 10:00 A.M. and the light was excellent. The bird made several forays for insects and returned to approximately the same spot. It did not fly away until we were almost directly under it and until we had had a chance to study it for almost 10 minutes.

Although we were aware that the bird was out of its normal range after reading a description in the Audubon guide, we both agreed that its shape,

size, manner of perching and flight, and especially the decidedly rusty belly and under tail coverts left no question as to its identity. We have subsequently seen this species many times on trips to Texas, Arizona, and Colorado and the first time we encountered it on a Western trip, we recognized it as the same species we had seen near St. Charles.

I might mention that as we worked closer to the bird, we compared it with the picture in the Audubon guide which states that, "Even juveniles have the rusty-brown under parts that make this species unmistakable." While birding from dawn to dusk and covering a variety of habitat and geography during vacations, my wife and I generally find in excess of 200 species and have a high of 257 species for two weeks. My personal records show 433 for 1966 and 402 for 1967 and based on this experience, it is my feeling that any birder who spends a lot of time in the field and in studying bird manuals would have no more difficulty identifying a Say's Phoebe than such other distinctive birds as a Phainopepla, Scissor-tailed Flycatcher or Coppery-tailed Trogon. 1340 Holly Lane N.E., Atlanta, Georgia.

CASUAL OBSERVATION OF BIRDS

Earl D. Kopischke

While driving from near Vernon Center, Blue Earth County to Madelia, Watonwan County each day for the past 7 years, I have noticed numerous birds. They were usually most abundant during the fall. Out of curiosity, I recorded the birds observed each morning on the way to the office between August 1 and September 16, 1968. The nine miles of roadway included the following locations harboring birds: six farm groves including a cattle feed lot harboring House Sparrows and Starlings, one wooded creek, and one state-owned Wildlife Management Area. In addition, during the first week

of August, several acres of hayland were flooded so waterfowl and shorebirds were observed then. The water area on the Wildlife Area was located out of view from the road so water birds there were not counted. Only birds within about 200 feet from the road were counted along the entire nine miles.

Since I could not take time to check each bird or flock of birds with binoculars, many birds were recorded only in the unidentified category. Only when I saw birds unusual for this area did I stop the car and check the birds with 8x30 binoculars or a 20x spotting scope. The most unusual birds observed were the Rose-breasted Grosbeak, the Cooper's Hawk, and the Sharp-shinned Hawk.

At times large flocks of birds pre-

vented an accurate count. In these cases the number of individuals was estimated by counting a fraction of the birds and expanding that number.

Mourning Doves were the only spe-

cies seen each day during the 29 days of observation. Eastern Meadowlarks, Ring-necked Pheasants, and Starlings were seen 28 days. House Sparrows were seen 26 days. No less than 8

Number of birds observed along nine miles of roadway, August 1 to August 29, 1968.

Species	August																												
	1	2	5	6	7	8	9	12	13	14	15	19	21	22	23	26	27	28	29										
Great Blue Heron									3			1	3	1															
Mallard	2																												
Blue-winged Teal		2																											
Wood Duck					3																								
Red-tailed Hawk	1																		1										
Marsh Hawk															1														
Sparrow Hawk	1	5	1	3	2	3	2	2		1	2		1	1	1	1	1	1	2										
Ring-necked Pheasant	3	2	4	1	6	5	15	2	2	2	3	5	6	5	1	3		8	36										
Lesser Yellowlegs	3		1																										
Mourning Dove	16	8	23	16	24	21	31	16	11	28	6	36	18	11	14	33	7	33	27										
Cuckoo sp.?								1																					
Yellow-shafted Flicker	8	4	4	8	17	13	2	2	4		1	9	11	12	11	5			6										
Red-headed Woodpecker	8				1	4	2	5	6	7		2	7	1		3	1	6	1										
Eastern Kingbird		1			2			2					2	5	5														
Bank Swallow																2	34	25	21										
Barn Swallow	8	4		18	3		5			16		1		1	4	4	10	8	3										
Common Crow		4	11	13			11	5		3			4			2													
Robin	7	2	2				2			1	1					3			3										
Eastern Bluebird															1														
Starling		2	1	19	9	8	9	9	14	3	7	8	11	3	17	17	23	16	8										
House Sparrow	9	4	9	25	7	20	4	1	10	12	3	3	6	26	2	2			7										
Eastern Meadowlark	20	5	9	24	10	11	8	12	10	12	7	9	7	15	5	15	2	4	1										
Yellow-headed Blackbird	8								10																				
Red-winged Blackbird				21		1	7																						
Baltimore Oriole																			1										
Common Grackle	9			3			11	2	1	900+	300+								300+										
Brown-headed Cowbird		1	2																										
American Goldfinch					1				1																				
Unidentified: Blackbirds					18	3	40																						
Gulls			3																										
Shorebirds		8																											
Species ?	21	5		12	13	14	20	3	11	16	2	13	4	11	10	6	8	6	16										
Warblers																			6										
TOTAL SPECIES	15	15	12	13	14	13	14	14	12	11	10	10	12	11	13	12	9	12	13										
TOTAL INDIVIDUALS	124	57	70	181	101	155	123	59	85	998+	332+	87	80	66	79	117	88	113	428+										

Earl D. Kopischke

**HABITAT DESTRUCTION
MEANS FEWER BIRDS**



Marsh drainage

species or 50 individual birds were seen on a single day. The greatest number of birds seen in a single morn-

ing was 998+ on August 14. *Vernon Center, Minnesota.*

Number of birds observed along nine miles of roadway, September 3 to September 16, 1968.

Species	3	4	5	6	September		11	12	13	16
					9	10				
Sharp-shinned Hawk							1			
Cooper's Hawk				1						
Red-tailed Hawk		4		1						
Rough-legged Hawk				1	1					
Sparrow Hawk		3	3	5	1	3	5	2	1	3
Ring-necked Pheasant	10	7	14	5	7	9	12	17	1	1
Killdeer										5
Mourning Dove	10	18	4	22	29	38	33	55	43	10
Common Nighthawk				1						
Yellow-shafted Flicker	1	6	9	6			1	2	4	2
Red-headed Woodpecker	2	1		7			4			1
Eastern Kingbird	1									
Bank & Barn Swallows		16	11		7	3	86+	29	37	74+
Blue Jay							3	2		
Common Crow			1	10	3	3	1	2		
Brown Thrasher			1							
Robin									1	
Eastern Bluebird								2		
Starling	5	6	4	76	107+	5	8	80+	5	14
House Sparrow	2	7	7	4		4	23	2		
Eastern Meadowlark	7	1	2	7	2		2	2	13	9
Red-winged Blackbird							12			
Baltimore Oriole	1									
Common Grackle	2					8	60+			
Rose-breasted Grosbeak	1									
Unidentified: Blackbirds				6				14		19
Species ?	3	8	6	5	12	7	18	26	23	34
Warblers	5									
TOTAL SPECIES	13	11	11	15	8	10	16	13	9	12
TOTAL INDIVIDUALS	50	77	62	157	168	81	269	235	128	172



Farm grove elimination



Burning roadside and brushy areas



Cropping road and rail right-of-ways

(August 1 - November 30, 1968)

Beginning with this report, a different compiler will be responsible for each seasonal record in *The Loon*. After seven years Ronald L. Huber has "retired" from the task of doing all of the seasons. Certainly the first order of business here is a hearty THANK YOU to Ron. The challenge of the job will become apparent to those who work with the statistics, its magnitude by that fact that it will take four of us to replace Ron!

Minnesota weather in August was generally cool, and rainy in several areas of the state. The northwestern part received twice as much rain as usual, delaying the harvest in some sections until mid-November. Duluth had a record low temperature for August, 35° on August 27th. September and October were wet all across the state, the wettest on record for some parts of it, especially in the southwest and south-central. After all of that rain a warm, dry November was appreciated, with rainfall in mostly less than half normal amounts. Duluth was again singled out for noteworthy weather — this time a 16-inch snowfall on November 12th. The rest of us caught up later in the year.

There were 55 reporters for the fall season, and they tallied 262 species. The general arrangement of each citation below is date, place, number if it seemed significant or interesting, and observer. The place is the county, with a more specific location in parentheses in many instances. An exception to this latter is Duluth, which had many reports. Also with regard to Duluth it should be noted that the records for the hawk count by MC were seconded by Dr. P. B. Hofslund.

Common Loon: Latest 12-3 Crow Wing MSB; 11-18 Washington (Lake De Montreville) WWL; 11-11 Mille

Lacs ELC; 10-9 Jackson (Heron Lake) 15 HSH; 10-20 Mille Lacs 24 MSB.

Red-throated Loon: 10-18 Itasca (Lake Winnibigoshish) 6, largest number to be reported away from Lake Superior, MC; 10-30 Cass (Leech Lake) MC; 11-11 Ramsey (Lake Vadnais) JJ.

Red-necked Grebe: Only one report, 11-2 Hennepin MHM.

Horned Grebe: Earliest 9-6 Cook (Lake Superior) RLG; 9-6 St. Louis HM; latest 11-3 St. Louis (Duluth) MC; 11-11 and 11-17 Hennepin (Lake Harriet) ETS, RBJ.

Western Grebe: 9-2 Nicollet (Swan Lake) DB; 11-16 Hennepin (Lake Harriet) DB, CKS, KP; 11-17 same RBJ.

Pied-billed Grebe: 8-12 Watonwan DMF; 10-24 Cook MC; 11-2 Crow Wing MSB; 11-4 Hennepin VL.

White Pelican: 8-15 and 10-7 Nobles HSH; 9-2 Nicollet (Swan Lake) 100+ DB; 9-2 Pope 200 WH; 9-23 Carver (Tiger Lake) 33 RDT.

Double-crested Cormorant: 9-7 Lyon BL; 9-13 and 9-30 Pope WH; 10-11 Lac qui Parle 85 PE; 10-13 Winona BT; 10-18 Mille Lacs 1 imm. ELC; 11-3 Houston FL.

Great Blue Heron: 8-4 Cottonwood LAF; 8-17 Cook RLG; 8-25 Watonwan DMF; 9-11 Pope WH; latest 11-10 Wabasha BT; 11-16 Olmsted AFR; 100+ reported in Nobles for September HSH.

Green Heron: 8-19 Stevens (Pomme de Terre Lake) JAH; 8-19 Morrison LSR; 8-25 Wright 6 ETS; almost daily to 9-20 Wabasha DGM.

Common Egret: 8-21 Pope 26 WH; 8-25 Hennepin 9 FN/MAS; 9-11 and

9-22 Le Sueur 10+ DMF; 9-15 Grant (Elbow Lake) JAH; 10-6 Nobles HSH; 10-15 Dakota JAH.

Black-crowned Night Heron: 9-3 Hennepin 4 CLH; 9-9 Cottonwood 12 LAF; 10-12 Lyon PE; latest 10-22 Washington WWL.

Yellow-crowned Night Heron: 8-11 Stearns (Grand Lake) NMH; 9-17 Hennepin EWJ.

Least Bittern: 8-25 Wright 4 ETS; 9-16 Cook (Schroeder) Mrs. Marion Olsen; 10-12 Nicollet (Middle Lake) DB *vide* A. Bolduc.

American Bittern: 8-3 Hennepin MHM; latest 10-6 Watonwan DMF; 10-12 Lyon PE; 10-12 Nicollet DB *vide* A. Bolduc; 10-20 Nobles HSH; 11-6 Blue Earth EDK.

Whistling Swan: North 10-19 Duluth J. K. Bronoel; 10-19 Mille Lacs (Onamia) MIV; 11-8 Duluth MC, HM; 11-10 Beltrami 46 HBW; South 11-23 Wabasha 600+ FL; 11-29 Hennepin VL; 12-6 Wabasha 300+ FL.

Canada Goose: 10-28 Chisago (Wyoming) 200+ FVS; 11-3 St. Louis (Kinney) LM; 11-3 Winona 300+ BT; 11-10 Ramsey MO; 11-14 Hennepin (Xmas Lake) 700+ RDT.

Snow/Blue Goose: 9-21 Watonwan DMF; 10-20 Roseau 5,000 PEB; 10-25 St. Louis 400 HM; 11-19 Nobles HSH; 11-19 Hennepin EWJ; 11-26 Hennepin (Xmas Lake) 50 RDT; 11-26 St. Louis RBJ.

Mallard: Numerous reports from just about everywhere.

Black Duck: Latest 11-23 Ramsey (White Bear) MIG; 11-24 Hennepin FN/MAS; 11-24 Wabasha 100 DGM; 11-30 Hennepin VL, CLH.

Gadwall: 10-27 Anoka WHL; 10-27 Hennepin DB; 10-29 Watonwan DMF; 11-2 Wabasha 5 FL; 11-9 Lac qui Parle 4 BL.

Pintail: 9-2 Nobles HSH; 11-4 Wabasha "many" FN/MAS; 11-6 Houston FL.

Green-winged Teal: 8-28-11-1 Anoka WHL; 9-7 Carver (Lake Berlin) 15 RDT; 10-5 Watonwan 10 DMF; 11-2 Wabasha FL.

Blue-winged Teal: 9-29 Aitkin 200+ MSB; 10-12 Carlton 50 to 60 JGH; 10-19 Ramsey BL; 10-20 Aitkin (Rice Lake Refuge) MC; 10-27 Anoka WHL.

American Widgeon: 10-27 - 11-10 Hennepin (Grass Lake) 300 VL; 11-10 Wabasha 100+ BT; 11-17 Hennepin FN/MAS; 11-23 Hennepin (Lake Cornelia) VL.

Shoveler: 11-16 Hennepin 30 KP; 11-30 Hennepin (Lake Harriet) CLH.

Wood Duck: 10-19 St. Louis RBJ; 10-27 Anoka WHL; 11-2 Nicollet DB; 11-12 Hennepin 50 RDT.

Redhead: 9-16 Hennepin MHM; 9-20-10-4 Hennepin (Grass Lake) flock of 30 to 36 VL; 10-20 Aitkin (Rice Lake Refuge) MC; 11-11 Ramsey 1 male JJ.

Ring-necked Duck: 10-25 St. Louis (Pelican Lake) 1500! LM; 11-10 Ramsey 500+ MIG; 11-10 Hennepin (Medicine Lake) VL.

Canvasback: 10-12 Cook JCG; 11-3 Winona 200+ BT; 11-24 Wabasha DGM.

Greater Scaup: Only reported 11-3 from Lyon, 75 in mixed flock with Lesser Scaup, HCK.

Lesser Scaup: North 10-26 Cook BL; 11-11 Duluth MC; South 11-21 Hennepin (Grass Lake) VL; 11-24 Ramsey JJ. Large concentrations reported 11-3 Winona 400+ BT; 11-3 Stearns (Grand Lake) 500 NMH; **10-30 Itasca (Lake Winnibigoshish) 25,000 MC.**

Common Goldeneye: Reported from nine counties.

Bufflehead: Earliest 10-3 Hennepin (Grass Lake) VL; 10-20 Mille Lacs, approximately 100 MSB; 10-26 Lake JCG; 10-27 Hennepin 42 RBJ; latest 11-23 Hennepin KP; 11-26 Watonwan DMF *vide* R. N. Johnson.

Oldsquaw: 10-25 Cook 15 JGH; 11-22 Beltrami (Lake Bemidji) EHH; 11-30 Lake (Two Harbors) MC.

White-winged Scoter: 11-2 Beltrami (Blackduck Lake), shot, Jeffrey Dypwick; 11-3 terns (Grand Lake) NMH; 11-10 Hennepin (Medicine Lake) 2 FN/MAS (first observed by Mr. and Mrs. Thomas Davies); 11-17 same place 2 VL, ETS, FN/MAS; 11-11 Mille Lacs Lake 1 shot ELC.

Ruddy Duck: 9-3 Ramsey 1 female with 5 y ELC; latest 11-12 Hennepin (Grass Lake) VL; 12-5 Crow Wing MSB.

Hooded Merganser: 10-21 Hennepin (Silver Lake) 11 RDT; 10-25 Cook (Grand Marais) 11 MC; 11-16 Houston FL.

Common Merganser: 11-17 Hennepin FN/MAS; 11-21 Wabasha 50 DGM; 11-23 Wabasha FL.

Red-breasted Merganser: 8-4 Lake Superior 29 MAF; 9-20 Cook 26 RLG; 11-30 Wabasha 2 DGM.

Turkey Vulture: 9-26 Duluth 658 MC; 10-2 Carver MHM; 10-4 St. Louis JCG.

Goshawk: 9-19 Wabasha 3 DGM; 9-27 Duluth 5 JCG; 10-21 Morrison NMH; 10-23 Duluth 7 MC.

Sharp-shinned Hawk: 9-27 Duluth 196 MC, 300 JCG; 10-15 Rice JAH; late dates 10-22 St. Louis JCG; 11-18 Watonwan DMF; 12-2 Hennepin MEH.

Cooper's Hawk: 9-27 Duluth 9 JCG; 10-21 Duluth MC; 11-11 Hennepin (Minnesota Valley) 1 imm. MEH; 11-26 Hennepin (Christmas Lake) RDT.

Red-tailed Hawk: 10-7 and 10-30 Watonwan Krider's DMF; 10-23 Duluth 497 MC; late north 11-4 Itasca ACR; 11-30 Duluth MC; late south 11-23 Ramsey ETS; 11-27-11-30 Wabasha DGM; 11-30 Nobles HSH.

Harlan's Hawk: 10-10 and 10-12 Lyon PE.

Red-shouldered Hawk: 9-14 Anoka 3 CLH; 9-30 Anoka WHL; 10-20 Chisago EL.

Broad-winged Hawk: latest and most 9-26 Duluth 11,152 MC; 9-27 Duluth 1500 JCG; other reports 9-23 Carver 25- RDT; 10-30 Carver MHM.

Swainson's Hawk: 8-19 Washington BL; 8-25 Dakota (Black Dog) FN/MAS; 10-3 and 10-6 Lyon PE; 10-12 St. Croix Falls, Wisconsin MIG.

Rough-legged Hawk: Reported in 16 counties; early 9-15 Pine (Grindstone Lake) MIG; 9-30 Anoka WHL; late 11-12 Traverse RBJ; 11-30 Lake LM. 14 reported from hawk count at Duluth on 11-4 by MC.

Golden Eagle: 10-20 Aitkin (Rice Lake Refuge) 3 MC; 10-23 Duluth MC; 11-3 and 11-10 Wabasha (Weaver) 1 and 5 BT; 11-22 Duluth 1 imm. JCG; 11-30 Aitkin 1 imm. BL.

Bald Eagle: Reported in 12 counties: Carver RDT; Crow Wing, Merle W. Johnson; Chisago EL; Dakota DGM; Houston FL; Lac qui Parle DMF; Lake MC; Morrison ELC; Mille Lacs ELC; Nobles HSH; Roseau DB; St. Louis MC; Wabasha FN/MAS. Included 15 immature birds.

Marsh Hawk: 9-24 Duluth 18 JCG; 9-26 Duluth 86 MC; 10-13 Cottonwood (Mountain Lake) 5 LAF; late north 11-10 Pine MIG; 11-15 Roseau PEB; late south 11-18 Watonwan EDK; 11-26 Wabasha DGM.

Osprey: Reported from 12 counties. Latest 10-5 Morrison ELC; 11-23 Chisago (Stacy) MIG; 11-25 Wabasha BT.

Peregrine Falcon: 9-24 and 9-26 Duluth MC.

Pigeon Hawk: Reported in September from Cook MIG; St. Louis MC, WKE, FN/MAS; Mille Lacs MIV.

Sparrow Hawk: 8-10 Duluth 29 MC

and 9-20 same 46 MC; 11-23 Ren-ville LAF; 11-25 Hennepin (Grass Lake) VL; 11-28 Wabasha DGM; 11-29 Watonwan EDK.

Spruce Grouse: 10-19 St. Louis 8 RBJ; 10-25 Cook MC; 11-23 Beltrami 6 EHH; also reported from Roseau by PEB.

Ruffed Grouse: Reported from 13 counties.

Sharp-tailed Grouse: 10-8 Roseau 15+ DB; 11-2 St. Louis MC, JCG.

Ring-necked Pheasant: Reported from 10 counties.

Gray Partridge: 8-18 Stearns 10 NMH; 8-20 Watonwan 12, R. N. Johnson *vide* DMF; 11-3 Pope 15 WH. Reported common in Blue Earth by EDK and resident in Roseau by PEB.

Sandhill Crane: 9-17 - 9-19 Mille Lacs 2 DMF; 10-3 Lake (Beaver Bay) 2 LM; 10-20 Aitkin (Rice Lake Refuge) 2 MC; 10-25 - 10-27 Duluth JCG; 10-31 Morrison (Buckman) 8 NMH.

Virginia Rail: 8-14 Watonwan 1 imm. DMF; 9-4 - 9-5 Crow Wing 1 imm. found in back yard MSB; 9-7 Carver RDT; 9-14 Watonwan DMF; 9-14 Hennepin KP. Four reported during the season in Wright by ETS.

Sora: 9-11 and 9-18 Hennepin VL; 9-20 Mille Lacs MIV; 9-23 Carver RDT; 10-4 Lyon PE; 10-5 Watonwan DMF.

Common Gallinule: Summer nesting Ramsey 7 y, 9-21 2 y BL.

American Coot: 11-3 Stearns (Grand Lake) 100 NMH; 11-15 Wabasha DGM; 11-16 Hennepin DB; 11-30 Hennepin (Lake Calhoun) 20+ CLH.

Semipalmated Plover: 8-16 Mille Lacs ELC; 8-26 Cook (Grand Portage) JCG; 8-29 and 8-30 Watonwan DMF.

Killdeer: 8-11 Carver 50+ MHM; 9-

22 Duluth 25 JCG; 9-29 Aitkin 100+ MSB; 10-30 Wabasha 10 DGM; 11-3 Lyon 8 HCK.

American Golden Plover: 8-11 Carver MHM; 9-8 Lac qui Parle 15 KE; 10-5 Lyon 80 PE; 10-20 Aitkin (Rice Lake Refuge) 16 MC; 11-3 Lyon HCK.

Black-bellied Plover: 8-22 - 9-22 Du-luth MC, JCG, FN/MAS, RBJ; 9-8 Lac qui Parle 10 KE.

Ruddy Turnstone: 8-22 Duluth BL; 9-6 Duluth JCG.

American Woodcock: 8-14 Cook (on driveway) 2 RLG; 8-16 and 8-18 Mille Lacs 8 DMF; 9-10 Chisago FVS; 9-28 Kanabec 6 DB; 10-22 Anoka WHL; 10-29 Mille Lacs (Onamia) MIV; 11-19 Roseau PEB.

Common Snipe: 9-2 Nicollet (Middle Lake) 30+ DB; also 9 other counties.

Spotted Sandpiper: 8-19 Stevens 20+ JAH; 9-15 Cook RLG; 10-8 Lake JCG.

Solitary Sandpiper: 9-2 Nicollet (Middle Lake) 4 DB; 9-16 Hennepin VL; 9-18 Mille Lacs DMF; 9-18 Duluth MC.

Willet: 8-23 Wright (Albertville) ETS.

Greater Yellowlegs: Earliest 8-11 Carver MHM; 8-19 Grant JAH; 8-29 Watonwan DMF; latest 11-3 Wright ETS; 11-3 Houston FL. On 9-9 Du-luth, 7 reported by JCG for J. P. Perkins.

Lesser Yellowlegs: 8-11 Carver MHM; 8-17 Hennepin KP; 8-17 and 8-18 Roseau ETS; 8-19 Grant 10+ JAH; 10-6 McLeod FN/MAS; 10-7 Watonwan DMF.

Knot: 8-22 Duluth BL.

Pectoral Sandpiper: Earliest 8-11 Carver MHM; 8-19 Grant JAH; largest

numbers 8-27 Wright 8 ETS; 9-9 Duluth 14 JCG for J. P. Perkins; 8-28 - 11-1 Wabasha 4 or 5 daily DGM; latest 10-20 Aitkin MC.

White-rumped Sandpiper: 8-23 Wright 2 ETS.

Baird's Sandpiper: 8-1 and 8-2 Cook 1 and 10 JCG; 8-19 Grant JAH; 8-20 Wright ETS; 9-30 Watonwan DMF.

Least Sandpiper: 8-1 and 8-2 Cook 2 JCG; 8-19 Grant 3 JAH; 8-25 Wright 2 ETS; 8-28 Crow Wing 2 RBJ; 8-29 Watonwan DMF.

Dunlin: 10-5 Houston FL; 10-20 Aitkin (Rice Lake Refuge) MC.

Long-billed Dowitcher: 8-20 Wright 8 ETS; 9-28 Houston 5 FL.

Dowitcher, species ?: 8-19 Grant JAH; 9-29 Aitkin MSB.

Stilt Sandpiper: 8-25 Wright ETS; 8-29 and 9-3 Watonwan 1 and 3 DMF.

Semipalmated Sandpiper: Earliest 8-14 Mille Lacs ELC; 8-16 Duluth JCG; 8-19 Grant 25+ JAH; 8-30 Watonwan 30 DMF; latest 9-5 Watonwan DMF; 9-9 Duluth JCG for J. P. Perkins.

Buff-breasted Sandpiper: 9-9 Duluth 2 JCG for J. P. Perkins.

Marbled Godwit: 8-19 Grant JAH.

Sanderling: Earliest 8-28 Crow Wing RBJ; five other records all from Duluth in September.

American Avocet: 11-1 Nicollet (Middle Lake) DB *vide* A. Bolduc. This is one of very few fall dates for this species.

Wilson's Phalarope: 8-25 Big Stone 5+ JAH.

Northern Phalarope: 9-7 Watonwan 4 DMF.

Parasitic Jaeger: 9-7 Duluth JCG; 9-17 St. Louis FN/MAS. Four observers saw this last bird on Vermillion Road near Duluth, FN, Gus Nubel, Ruth Ackley, Cleo Atkisson, at height just above the telephone wires.

Herring Gull: 10-2 Cottonwood (Mountain Lake) 1,000 in mixed flock LAF; 10-25 Ramsey 300+ MO; late north 11-23 Mille Lacs MSB; 11-30 Lake (Two Harbors) MC; late south 11-24 Hennepin (Lake Harriet) FN/MAS; 11-30 Washington WHL.

Ring-billed Gull: 9-7 Duluth 75 JCG; 9-29 Cottonwood 40 LAF; 10-7 Mille Lacs 100 MIV; 11-27 Wabasha 80 DGM.

Franklin's Gull: 10-6 Carver FN/MAS; 10-23 Pope WH; 11-12 Douglas (Mary Lake) RBJ; 11-17 Watonwan DMF.

Bonaparte's Gull: 8-25 Big Stone (Odessa) JAH; 10-20 and 11-10 Mille Lacs 50 MSB; late 11-12 Douglas RBJ; 11-23 Mille Lacs MSB.

Forster's Tern: 9-4 and 9-14 Hennepin (Grass Lake) 10 and 1 VL.

Common Tern: 9-2 Hennepin 3 RBJ; 9-7 Duluth 21 JCG.

Caspian Tern: 8-11 Hennepin RBJ; 9-14 Dakota 17 FL; 9-25 Wabasha 12 DGM. On 10-17 a late observation in Hennepin (Lake Calhoun) by VL, FN/MAS, and Martha Stebelton; the latter also reported one on 10-27 there.

Black Tern: 8-25 Washington 24 WHL; 9-8 Cottonwood (Mountain Lake) 8 DMF; 9-21 Ramsey BL.

Mourning Dove: 11-15 Pope WH; 11-25 Blue Earth EDK; 11-29 Roseau PEB; 11-30 Hennepin FN/MAS; 12-1 Cook RLG.

Yellow-billed Cuckoo: 9-27 Watonwan DMF.

Black-billed Cuckoo: 8-11 Wright KP; 8-22 St. Louis JCG; 8-30 Pope WH; 9-17 Morrison LSR; 10-22 Watonwan DMF.

Groove-billed Ani: A specimen was collected sometime between 10-14 and 10-18 in Washington County. It is now at Wisconsin State University, River Falls. Reported by BL.

Screech Owl: August through October Ramsey ELC; 9-13 Watonwan 1 dead DMF; one November report Nobles HSH.

Great Horned Owl: Reported from Blue Earth, Hennepin, Mille Lacs, Nobles, Olmsted, Pine, St. Louis and Watonwan; 11-12 Traverse 4 RBJ.

Snowy Owl: 10-29 Lake JCG for Pearl Griffith; 11-9 and 11-13 Cook MOP; 11-10 St. Louis JCG for G. Flaim; 11-27 Morrison ELC.

Hawk-Owl: 11-3 Duluth MC.

Barred Owl: 8-22 - 11-10 Wabasha DGM; 9-8 - 10-19 Pine (Grindstone Lake) MIG; 9-17 and 9-18 Crow Wing MSB; 10-29 Duluth MC; 11-6 Itasca ACR.

Great Gray Owl: Forthcoming attraction! See Winter Report.

Long-eared Owl: 10-28 Morrison NMH; 10-28 Rice JAH; 9-20 - 10-22 Mille Lacs (Onamia) MIV.

Short-eared Owl: 10-5 Watonwan DMF; 10-23 Duluth JGH; 10-27 Watonwan EDK.

Saw-whet Owl: 9-24 Duluth JCG *vide* E. Putnam; 9-24 and 9-27 Duluth 1 trapped each day JCG for Ben Basham.

Whip-poor-will: 9-15 Beltrami MG.

Common Nighthawk: 8-20 Lake 330 RK; 9-22 Hennepin 200+ VL; 9-23 Ramsey 8 MO.

Chimney Swift: Latest 9-5 Watonwan DMF; 9-8 Washington WHL; 9-23 Hennepin VL.

Ruby - throated Hummingbird: 9-9 Cook 6 RLG; 9-22 Chisago EL; 9-25 Duluth MC; 9-25 Ramsey MIG; 10-28 Cottonwood LAF.

Belted Kingfisher: Late north 10-19 Pine MIG; 10-23 Roseau PEB; late south 10-21 Cottonwood LAF; 10-28 Nobles HSH; 11-23 Goodhue BL.

Yellow-shafted Flicker: 8-7 and 8-8 Blue Earth 30+ EDK; 8-18 Ramsey 30 RJC; 10-4 Cook MAF; 10-24 St. Louis 100+ JCG; latest 11-15 Roseau PEB; 11-25 Hennepin ETS.

Red-shafted Flicker: 10-7 western Nobles Co. 1 HSH.

Pileated Woodpecker: Reported from Beltrami, Chisago, Cook, Crow Wing, Douglas, Hennepin, Pine, Roseau, St. Louis and Winona.

Red-bellied Woodpecker: The northernmost reports were 10-5 Morrison ELC; 10-19 Chisago BL.

Red-headed Woodpecker: 8-8 Cottonwood 15 LAF; latest 11-17 Mille Lacs MIV; 11-23 Chisago (Stacy) MIG.

Yellow-bellied Sapsucker: 10-1 Cook MOP; 10-15 St. Louis HM; 10-19 Cook MAF; 10-20 Aitkin MC; 11-24 Hennepin ETS.

Hairy Woodpecker: Reported from 15 counties.

Downy Woodpecker: Reported from 17 counties.

Black-backed Three-toed Woodpecker:

Latest 10-25 Lake JGH; 11-13 Cook EL.

Northern Three-toed Woodpecker: 10-14 - 10-17 St. Louis (French River) JCG for Helen Hendrickson; 10-25 Lake JGH, JCG for Bruce Hale; 11-2 Roseau PEB.

Eastern Kingbird: 8-22 Pope 20 WH; 9-1 Wabasha 20 DGM; latest 9-10 St. Louis JCG; 9-20 Hennepin (Eden Prairie) VL.

Western Kingbird: 8-25 Big Stone (Artichoke Lake) JAH.

Great Crested Flycatcher: An unusually late report, 10-26 St. Louis JCG, RBJ.

Eastern Phoebe: 9 - 24 Watonwan DMF; 10-15 Olmsted HBW; 10-18 Winona BT; 10-20 Hennepin CLH.

Yellow-bellied Flycatcher: 8-26 Morrison LSR; 8-29 Ramsey MIG; 9-1 Pine MIG; 9-19 Duluth 2 banded JCG for Ben Basham.

Trail's Flycatcher: 9-15 Wright ETS; 9-19 Morrison LSR.

Least Flycatcher: 9-27 Rice JAH; 9-28 Cottonwood LAF; 10-10 Hennepin (Minnesota Valley) MEH.

Eastern Wood Pewee: 9-23 Washington WHL; 9-26 St. Louis JCG; 10-1 Hennepin VL; 10-6 Watonwan DMF.

Olive-sided Flycatcher: 8-20 Goodhue BL; 9-19 Ramsey MIG; 9-20 Hennepin (Eden Prairie) VL.

Horned Lark: 10-3 Cook 100's MAF; late north 10-24 Duluth MC; 10-22 Lake RK; 10-31 Cook MAF; late south 10-30 Hennepin VL; 11 - 26 Nobles HSH.

Tree Swallow: 8-22 Cottonwood 500 in mixed flock LAF; 8-22 Pope 200 WH; 8-28 Mille Lacs, 3,000 RBJ;

10-6 Carver 100's FN/MAS; latest 10-20 Mille Lacs MIV.

Bank Swallow: 8-23 - 8-30 Blue Earth 100's in mixed flock EDK; latest 9-8 Wabasha DGM.

Rough-winged Swallow: 8-11 Carver MHM; 8-22 Cottonwood LAF.

Barn Swallow: 8 - 31 Marshall 100 MSB; 10-3 Wabasha DGM; 10-9 Watonwan DMF; 10-17 Lyon PE.

Cliff Swallow: 9 - 10 Morrison last young left nest NMH; other late date 9-8 Wabasha DGM.

Purple Martin: 8 - 18 Ramsey 1500 RJC; 8-25 Wright 400+ ETS; latest 9-21 Ramsey MO; 9-21 Watonwan DMF.

Gray Jay: 9-22 Beltrami MK; 10-25 Cook (Grand Marais) 14 MC; southernmost reports 10-19 Kanabec DB; 11-12 Mille Lacs ELC.

Blue Jay: Concentrations reported 9-1 Lake 150 RK; 9-11 Cook 40 MOP; 9-12 St. Louis 75 LM; 9-22 Hennepin 20 to 25 WKE.

Black-billed Magpie: 9-5 Roseau 4 PEB; 9-15 Beltrami MG; 10-6 Roseau 23 PEB; 10-20 Aitkin (Rice Lake Refuge) MC; 11-23 Beltrami EHH.

Common Raven: Southernmost reports 10-19 and 10-27 Pine MIG; 10-28 Anoka WHL.

Common Crow: Concentrations reported 10-13 Cottonwood 74 LAF; 10-19 Lake 60 RK; 11-19 Benton 25 NMH.

Black - capped Chickadee: Reported from fifteen counties. 11-21 - 11-23 St. Louis (Hibbing) HM recorded 34 individuals — 16 newly banded and 18 returns.

Boreal Chickadee: Reported from Cook, Itasca, Lake and St. Louis.

Concentration of 25 on 9-28 in Two Harbors reported by MC.

Tufted Titmouse: 8-10 - 11-30 Hennepin WKE, MEH, VL, KP; 10-20 - 10-28 Olmsted at feeder HBW; 10-27 Washington WWL.

White-breasted Nuthatch: Reported from 16 counties.

Red-breasted Nuthatch: August to November, Hennepin and Ramsey WKE, ELC, MEH, CLH, MIG, RDT, FN/MAS; 11-3 and 11-12 Olmsted AFR and HBW; 10-26 and 11-27 Nobles HSH; 11-20 Cottonwood LAF; 10-30 Wabasha DGM.

Brown Creeper: 9-22 Duluth 10 JCG; 10-19 Hennepin 7 KP; 11-3 Ramsey 6 MO; early south 9-26 Hennepin VL; 9-28 Carver MHM; late north 10-28 Duluth MC.

House Wren: Latest 9-29 Mille Lacs (Onamia) MIV; 10-1 St. Louis JCG.

Winter Wren: 9-18 Duluth FN/MAS; 9-22 Duluth JCG; 9-28 Ramsey MIG.

Long-billed Marsh Wren: 8-14 Stearns (Grand Lake) 2 still singing NMH; 9-1 Carver MHM; 9-26 Rice JAH; 10-13 Lyon 7 PE; 10-13 Watonwan DMF.

Short-billed Marsh Wren: 8-25 Wright ETS; 9-4 Anoka WHL; 9-27 and 10-6 Hennepin (Lake Cornelia) VL; 10-4 Lyon PE; 10-11 Watonwana DMF.

Mockingbird: 9-9 Morrison (Royalton) NMH; 10-4 and 10-11 Mille Lacs (Onamia) MIV.

Catbird: Latest reports were from Cook County 10-26 and 10-27, MOP and MAF; latest for more southerly counties 9-25 Mille Lacs (Onamia) MIV; 9-27 Morrison LSR; 9-30 Anoka WHL; 10-1 Ramsey MIG.

Brown Thrasher: Latest 10-1 Olmsted HBW; 10-5 Hennepin WKE; 11-24 Duluth JCG for Anne K. Arndt.

Robin: Concentrations 9 - 7 Cottonwood 72 LAF; 9-25 Lake 100+ RK;

9-27 Duluth 75 JCG; 10-3 Anoka 110 WHL.

Wood Thrush: 8-12 Watonwan DMF.

Hermit Thrush: 10-10 St. Louis JCG for Anne K. Arndt; 10 - 13 Nobles HSH; 10-18 Cottonwood LAF; 10-19 Olmsted AFR; 10-23 Lake RK; 10-26 Hennepin KP.

Varied Thrush: 11-21 Hennepin FN/MAS; 11-29 Duluth P. B. Hofslund for Edna Fox.

Swainson's Thrush: 9-16 Pope WH; 9-21 St. Louis KP; 10-4 Cook MOP; 10-4 and 10-5 Hennepin EWJ, VL.

Gray-cheeked Thrush: 8-8 Cook MAF; 8-22 Hennepin WKE; 9-30 Morrison LSR; 10-5 Pine MIG; 10-6 Pope WH; 10-25 Duluth JCG for Anne K. Arndt.

Veery: Late north 9-9 Cook MAF; late south 9-2 Hennepin VL.

Eastern Bluebird: 9-28 Roseau 50 PEB; 10-3 Anoka WHL; 10-12 Yellow Medicine and Lac qui Parle 50+ PE; latest 10-26 Lake JCG; 11-1 Chicago EL; 11-20 Hennepin CKS.

Blue-gray Gnatcatcher: 8-20 Goodhue BL.

Golden-crowned Kinglet: 9-29 Rice 10 JAH; 9-26 Hennepin WKE; 9-26 Anoka WHL; latest north 11-11 Roseau PEB.

Ruby-crowned Kinglet: Early south 8-24 Hennepin (Xmas Lake) RDT; 9-12 Carver MHM; late north 10-29 Duluth JCG for Anne K. Arndt; 11-15 Cook MOP; 11-22 Morrison, Hildur Dalquist.

Water Pipit: 9-29 Aitkin 24 MSB; 10-6 Ramsey BL; 10-13 Cook 30 JCG; 10-20 Aitkin (Rice Lake Refuge) MC; 10-21 Anoka 40 to 50 FN/MAS.

Bohemian Waxwing: 11-14 Cook (Hovland) 35 EL; 11-16 Beltrami (Red Lake) MG; 11-21 and 11-22 Morrison, Hildur Dalquist; 11-26 Watonwan DMF; 11-28 Duluth 30+ MC.

Cedar Waxwing: Reported from 14 counties. Greatest numbers 9-3 St.

Louis 50 JCG; 9-14 Cook 100's MAF; 9-24 Chisago 35 EL.

Northern Shrike: Earliest 10-8 Roseau DB; 10-8 Duluth JCG for Anne K. Arndt; 11-1 Mille Lacs MIV.

Bell's Vireo: 9-7 Chisago (Taylors Falls) EL.

Yellow-throated Vireo: 9-13 Wright 3 ETS; 9-23 Hennepin WKE; 9-26 Wabasha DGM; 10-19 Chisago BL.

Solitary Vireo: 9-27 Hennepin 1 singing VL; 9-29 Mille Lacs RBJ; 9-29 Rice JAH; 10-1 Ramsey MIG; 10-21 Morrison LSR.

Red-eyed Vireo: Latest 9-28 St. Louis JCG; one very late record 10-26 Hennepin KP.

Philadelphia Vireo: Early south 8-26 Wright ETS; late 10-1 Morrison LSR; 10-5 and 10-6 Hennepin FN/MAS.

Warbling Vireo: 9 - 1 Mille Lacs 5 MIV; late 9-17 Morrison LSR; 9-20 Hennepin VL; 9-20 Carver MHM; 9-24 Watonwan DMF.

Black-and-white Warbler: Numerous August and September sightings in 13 counties; late 10-7 Cook MOP; 11-10 Duluth JCG for Anne K. Arndt.

Golden-winged Warbler: 8-26 Morrison LSR; 9-1 Hennepin FN/MAS.

Tennessee Warbler: 9-7 St. Louis 20 JCG; 9-14 Hennepin 20+ DB; late 10-8 Lake RK; 10-14 Olmsted HBW; 10-19 Hennepin VL.

Orange-crowned Warbler: 10-1 Morrison 21 LSR; early 9 - 1 Hennepin (Xmas Lake) RDT; late 10-10 Lyon PE; 10-18 Chisago BL.

Nashville Warbler: 9-14 Hennepin (T. S. Roberts) 15- DB; late 10-18 and 10-19 Hennepin FN/MAS, VL; 10-19 Pine MIG; 10-22 Duluth JCG for Anne K. Arndt.

Parula Warbler: 9-1 - 9-30 Hennepin five reports; 9-12 St. Louis JCG; 9-13 Ramsey ELC; 10-22 Blue Earth, seen by Dr. and Mrs. Bradley Troost. This last is probably the latest date on record for the state.

Yellow Warbler: 9-16 St. Louis FN/MAS; 9-19 Morrison LSR; 9-30 Hennepin VL.

Magnolia Warbler: Latest 9 - 19 St. Louis (Hibbing) HM; 9-21 St. Louis (Minn. Pt.) DB; 9-23 Morrison LSR; 9-27 Hennepin VL.

Cape May Warbler: 9-20 Hennepin FN/MAS; 9-21 Duluth DB, KP; 9-25 Cook MAF; 9-28 Ramsey MIG; 10-7 St. Louis JCG.

Black - throated Blue Warbler: 9 - 14 Hennepin (T. S. Roberts) DB; 9-18 Carver MHM; 9 - 18 Washington WWL; 9-20 Hennepin FN/MAS.

Myrtle Warbler: 10 - 21 Watonwan DMF; 10-22 Lake RK; 10-26 Anoka WHL; 10-26 Nobles HSH; 10-26 St. Louis RBJ, JCG.

Black-throated Green Warbler: 9-13 Wright ETS; 9-15 Pine MIG; 9-23 St. Louis JCG; 9-29 Hennepin VL.

Cerulean Warbler: 8-20 Goodhue BL.

Blackburnian Warbler: 9 - 6 Cook MAF; 9-7 St. Louis JCG; 9-16 Hennepin VL; 9-20 Cottonwood LAF.

Chestnut - sided Warbler: 9 - 15 Pine MIG; 9-20 Cottonwood LAF; 9-21 Duluth KP, MIG; 9-23 Morrison LSR.

Bay-breasted Warbler: 9-10 Stevens JAH; 9-30 Duluth MC; 10-1 Morrison LSR; 10-19 Hennepin DB *vide* S. Bolduc; 10-19 Chisago EL.

Blackpoll Warbler: Early 8-16 Duluth JCG; 8-22 Hennepin (Xmas Lake) RDT; 9-1 Houston FL; late 9-20 St. Louis JCG; 10-1 Hennepin FN/MAS.

Pine Warbler: 9-18 Crow Wing 16 MSB; late 9-21 Duluth DB *vide* A. Bolduc; 9-19 and 9-27 Hennepin EWJ and VL.

Palm Warbler: Late 10-3 Lyon PE; 10-5 Lake RK; 10-6 Crow Wing MSB; 10-6 Wright ETS; 10-25 Chisago EL; 11-19 Cook MOP.

Ovenbird: 9-20 Cottonwood LAF; 9-26 Rice (Northfield) JAH; 9-23 Morrison LSR; 10-2 Hennepin VL.

Northern Waterthrush: 9-17 Hennepin VL; 9-21 Duluth DB, KP; 9-23 Morrison LSR; 10-15 Dakota DGM.

Louisiana Waterthrush: 9-4 Wright ETS.

Connecticut Warbler: 8-26 Mille Lacs MIV; 9-4 Ramsey MIG; 9-6 Hennepin WKE; 9-9 Duluth 1 banded JCG for Koni Sundquist.

Mourning Warbler: 8-21 and 9-13 Morrison LSR; 9-14 Hennepin (T. S. Roberts) DB; 9-16 Duluth FN/MAS; 9-29 Hennepin VL.

Yellowthroat: 10-1 Morrison 6 LSR; 9-21 Mille Lacs MIV; 9-24 Hennepin EWJ; 9-27 Anoka WHL; 10-1 Olmsted HBW.

Wilson's Warbler: 9-7 Duluth JCG, RBJ; 9-10 Stevens JAH; 9-27 Morrison LSR; 10-18 Hennepin FN/MAS.

Canada Warbler: 9-17 Hennepin WKE; 9-20 Cottonwood LAF.

American Redstart: 9-6 Cook 22 MAF; 9-9 St. Louis 25 JCG; late 9-23 Morrison LSR; 9-20 Cottonwood LAF; 9-29 Ramsey MIG; 10-14 Hennepin EWJ.

Bobolink: None reported.

Eastern Meadowlark: Late 11-2 Cottonwood LAF; 11-9 Lake JCG; 11-30 Watonwan EDK.

Western Meadowlark: Late 11-6 Itasca ACR; 11-9 Lac quie Parle BL; 11-22 Nobles HSH.

Yellow-headed Blackbird: 8-13 Cass JGH; 8-20 Waseca MO; 10-5 Lyon PE; 10-30 Nobles HSH.

Red-winged Blackbird: 11-3 Cottonwood 500 LAF; 11-25 Nobles 200+ HSH; 11-28 Anoka 4,000 WHL.

Baltimore Oriole: 9-8 Hennepin WKE; 9-9 Ramsey MIG; 9-10 Crow Wing MSB; 10-1 Nobles HSH.

BULLOCK'S ORIOLE: 3 reports from St. Louis County 10-12 - 10-31 from H. Sims, Mrs. Benon and BL.

Rusty Blackbird: 10-28 Anoka 2,000 WHL; 10-28 Cook MOP, 11-19 Hennepin (Minnesota Valley) MEH.

Brewer's Blackbird: 11-7 Anoka WHL; 11-8 Pope WH; 11-29 Watonwan DMF.

Common Grackle: 10-28 Anoka 4,000 WHL; late 11-26 Watonwan DMF; 11-28 Hennepin MEH; 11-29 Cook MOP; 11-30 Cottonwood LAF.

Brown-headed Cowbird: 10-10 Kanabec RHJ; 11-10 Watonwan DMF.

Scarlet Tanager: 10-1 Hennepin (T. S. Roberts) DB; 10-1 Duluth JCG for Anne K. Arndt.

Cardinal: Usual southern records; 10-21 Cook a pair RLG; 11-5 Itasca ACR.

Rose-breasted Grosbeak: Late 9-23 Morrison LSR; 9-23 Hennepin WKE; 9-26 Rice JAH; 10-25 St. Louis JCG for Anne G. Arndt; 10-30 Cook MOP.

Indigo Bunting: 9-22 Pope WH; 9-26 Hennepin (T. S. Roberts) VL; 10-1 Olmsted HBW; 10-28 Cook MOP.

Dickcissel: 8-3 and 8-8 Cottonwood 9 and 4 LAF; 8-29 Wabasha 6 DGM; 8-25 Watonwan DMF.

Evening Grosbeak: Usual northern records; 10-25 Winona BT; 11-3 Olmsted AFR.

Purple Finch: Flocks of 30 to 70 reported from Rice, Lake and St. Louis counties; 9-11 Kanabec 1 albino at feeder RHJ.

Pine Grosbeak: 11-1 Anoka WHL; 11-24 Hennepin (Xmas Lake) RDT; 11-30 Chisago (Taylors Falls) EL.

Hoary Redpoll: 11-5 Duluth JCG; 11-9 Lake JCG.

Common Redpoll: 10-6 Itasca ACR; 10-23 Hennepin RBJ; 10-24 Ramsey 1 banded MIG; flocks of 100 or more reported from Crow Wing, Pine, St. Louis, Morrison and Benton.

Pine Siskin: Several records for Twin City area in November, including 11-30 Hennepin 30+ VL.

American Goldfinch: 8-23 Ramsey RJC; 11-8 50 MEH.

Red Crossbill: 10-6 Itasca ACR; 11-22 Swift HSH; 11-28 Wabasha DGM.

White-winged Crossbill: 10-5 Olmsted 2 imm HBW.

Rufous-sided Towhee: 9-30 and 10-1 Ramsey MIG; 10-1 Duluth JCG for Mrs. James M. Parks; 10-2 Hennepin (Minnesota Valley) MEH; 11-14 and 11-15 Beltrami MG.

Lark Bunting: 9-12 St. Louis 1 female JCG.

Savannah Sparrow: 8-31 Watonwan DMF; 9-7 Duluth RBJ; 9-25 and 10-2 Hennepin VL; 9-28 Rice 10 JAH; 9-29 Cottonwood LAF.

Le Conte's Sparrow: 9-13 Watonwan DMF; 10-12 Lyon 25 PE.

Vesper Sparrow: 10-24 Duluth JCG for Anne K. Arndt; 10-27 Watonwan DMF; 11-20 Itasca ACR.

Lark Sparrow: 8-30 Watonwan DMF; 9-12 St. Louis JCG; 9-15 Hennepin (Eden Prairie) VL.

Slate-colored Junco: Early south 9-24 Hennepin WKE; 9-27 Chisago EL; 9-30 Wabasha DGM; 9-30 Nobles HSH; late north 11-30 Cook MAF; 11-30 St. Louis JCG. Largest flocks 10-3 St. Louis 1000's JCG; 10-5 Lake 300+ RK; 10-5 Pine, flocks of 50 to 200 MIG.

Oregon Junco: Reported from Carver, Chisago, Cook, Hennepin, Lake, Mille Lacs, Pope, Ramsey, St. Louis, 9-29-11-15.

GRAY-HEADED JUNCO: 10-27-10-29 Cook MAF, MOP. (See article this issue)

Tree Sparrow: Earliest 9-27 Chisago EL; 10-13 Cook JCG; 10-15 Nobles HSH; 10-24 Winona BT.

Chipping Sparrow: Latest 10-2 St. Louis JCG; 10-3 Anoka 20 WHL; 10-6 Wright ETS; 10-11 Wabasha DGM; and very late 10-27 Hennepin RBJ.

Clay-colored Sparrow: 9-16 Duluth

FN/MAS; 9-29 St. Louis JCG; 9-22 Carver MHM.

Field Sparrow: 8-25 Hennepin 5 MHM; 9-21 Duluth KP; 9-23 Washington banded 2 y ELC; 10-18 Winona BT.

Harris' Sparrow: Earliest 9-10 Itasca ACR; 9-13 Lake RK; 9-26 Hennepin WKE; 9-27 Morrison LSR; latest 10-24 Winona BT; 10-26 Olmsted AFR; 11-3 Cottonwood LAF; 11-9 Lac qui Parle BL.

White-crowned Sparrow: Early 9-9 Duluth MC; 9-20 Carver MHM; 9-21 Cook MAF; late 10-22 Cook MOP; 10-27 Lake RK; 10-31 Nobles HSH.

White-throated Sparrow: 9-20 Duluth 125 MC; 9-25 Cook 100's MAF; latest 11-19 Ramsey MIG; 11-30 Cook MOP; 11-30 St. Louis HM.

Fox Sparrow: Early 9-16 Duluth FN/MAS; 9-25 Morrison LSR; 9-26 Hennepin (Lake Cornelia) VL; late 11-10 Itasca ACR; 11-12 Pope WH; 11-14 Hennepin MEH; 11-21 St. Louis JCG.

Lincoln's Sparrow: 9-18 Ramsey MIG; 10-1 Morrison LSR; 10-6 Crow Wing MSB; 10-10 Hennepin 20+ RDT; 10-27 Hennepin RBJ.

Swamp Sparrow: Late 10-13 Cook JCG; 10-18 Itasca MC; 10-26 Wright ETS.

Song Sparrow: Late 10-20 Roseau PEB; 10-22 Washington WHL; 10-22 Hennepin (Grass Lake) VL; 10-23 Wabasha DGM; 11-24 Olmsted HBW.

Lapland Longspur: 10-31 Watonwan 100+ DMF; 11-9 Lac qui Parle 1000's BL; early 9-12 St. Louis JCG; 9-27 Cook MOP; 9-28 Lake RK; late 11-12 Traverse RBJ; 11-21 Cook MAF; 11-23 Goodhue 30 to 50 BL.

Snow Bunting: 10-24 Cook 300 MC; 10-28 St. Louis 400 JCG; 11-9 Mille Lacs 120 WHL; early 10-7 Carlton HBW; 10-20 Cook MOP; 10-20 Aitkin (Rice Lake Refuge) MC; 10-21 Pine FN/MAS.

Addenda to the Spring Season 1968:

Delete **Least Bittern** record of 4-22, Nobles Co., HSH.

Turkey Vulture, 3-19, Hennepin Co., V. Lender and M. Stebleton.

Broad-winged Hawk, 3-24, Chisago Co., T. Nicholls.

White-rumped Sandpiper cited 4-14 should have been 5-14 EMB.

Red-headed Woodpecker cited 3-29 should have been 3-23 MIV.

Mockingbird, 5-20, Duluth, B. Basham.

Pine Siskin, 5-23, Onamia, Mille Lacs Co., MIV.

White-winged Crossbill, 4-23 into June, small flock, Duluth, M. Carr.

Red Crossbill, all spring into June, small flock, Duluth, K. Sundquist.

Addenda to the Summer Season 1968:

Great Blue Heron, 7-15, Clifton, St. Louis Co., flying along shore to SW, probably a migrant; 7-23 Hovland, Cook Co., one; 7-29, Grand Marais, Cook Co., two; both of these probably migrants as they were along shore of Lake Superior, seen there only during migration peak in August, not seen there during nesting season in June, JCG.

Wood Duck, 6-18, one male, Little Marais, Cook Co., JCG.

Delete **Bufflehead** record of 8-29, Olmsted Co., HBW.

American Coot, 6-16 to 20, one, Little Marais, Cook Co., JCG.

Bank Swallow, 6-29, 2-3 pair, Cramer, Lake Co., JCG.

Rough-winged Swallow, 6-26, two, Finland, Lake Co., JCG.

LeConte's Sparrow, 6-27, two, Sawmill Creek Valley, Little Marais, Cook Co., JCG.

CONTRIBUTORS: DB, Donald Bolduc; MSB, Mrs. Steve (Jo) Blanich; PEB, Paul E. Bremer; ELC, Elizabeth Campbell; MC, Marjorie M. Carr;

RJC, R. Christman; PE, Paul Ege-land; WKE, Whitney and Karen Eastman; DMF, Dennis M. Forsythe; LAF, Mrs. Loren A. Feil; MAF, Marie Aftreith; JCG, Janet C. Green; MG, Mabel Goranson; MIG, Maury and Isabel Goldberg; RLG, Robert Gambill; CLH, Charles L. Horn, Jr.; EHH, E. H. Hermanson; HSH, Helen S. Hatlelid; JAH, John A. Hart; JGH, John G. Hale; MEH, Mrs. Edward F. Harms; NMH, Nestor M. Hiemenz; WH, Mr. and Mrs. Wayne Hawkinson; EWJ, Mrs. E. W. Joul; JJ, Joan Johnson; RBJ, Robert B. Janssen; RHJ, Rev. and Mrs. R. H. Jackson; EDK, Earl D. Kopsischke; HCK, Henry C. Kyllingstad; MK, Maria Krogseng; RK, Ruth Kuchta; BL, Bill Litkey; EL, Mrs. Elva Larson; FL, Fred Leshner; VL, Mrs. William H. Lender; WHL, William H. Longley; WWL, Mrs. W. W. Lundgren; DGM, Dr. and Mrs. D. G. Mahle; HM, Harriet Micensky; LM, Lester T. Magnus; MHM, Mary H. Muehlhausen; FN/MAS, Mpls. Audubon Society, Fran Nubel, Field Sec'y; MO, Manley E. Olson; KP, Karol Pieper; MOP, Mrs. Oliver Peterson; AFR, Alden F. Risser; ACR, A. C. Rosenwinkel; LSR, L. S. Ryan; CKS, C. K. Sherck; ETS, Evelyn T. Stanley; FVS, Rev. Forest V. Strnad; BT, Brother Theodore; RDT, Rachel D. Tryon; MIV, M. Ivanovs; HBW, Mrs. Howard B. Welch.

SUMMARY: This compiler is forced to admit that she has never seen a number of the species included, and that without some experience in compiling these records any sweeping generalizations seem quite impossible. Flocks of Whistling Swans, Woodcocks on driveways, Sandhill Cranes, etc., were the source of envious day-dreaming, while there was a certain vicarious pleasure in recording them. The reporters perform a fine service for the MOU. For my part, let me simply confess that without the assistance of Dorothy Lockard and Jessie Richardson this report could not have been completed—at least on time. 1026 23rd Ave. N.E., Minneapolis, Minnesota.

Notes of Interest

Iceland Gull records for the 1967-68 Winter Season — During the 1967-68 winter season I observed two Iceland Gulls on Lake Superior. The first one was seen at Knife River, Lake County on January 10, 1968. It was an immature bird in the buffy, mottled plumage typical of a first winter bird. During most of the time that I observed it, it was walking or resting on the ice of the boat slip with some Herring Gulls so I was able to get many photographs of it in both black and white and color. A black and white print appears below. Note the white wing tips and the small, all dark bill. Although the bill is slightly forshortened in the photograph, it is small even in comparison with the bills of the Herring Gulls. A colored slide of this gull will be submitted to the *National Photoduplicate File* at the Migratory Bird Populations Station in Laurel, Md. The second bird was seen in the Duluth harbor on April 24, 1968. It also was in the buffy, mottled plumage of an immature bird. I do not think it was the same gull that I saw in January because the April gull was larger (the size of the male Herring Gull whereas the January bird was small like a female Herring Gull) and



had a buffy band on the tail that I did not note in the January bird. The field notes that I took on the Iceland Gull I saw in April are as follows: "The gull was seen in the Duluth harbor near the Recreation Center. On that day (April 24, 1968) there were a couple of thousand gulls (Herring and Ring-billed Gulls) feeding on the smelt. This bird was first seen flying to a group of gulls circling a smelt net off the point at the northwest end of the Recreation Center. It was the same size as the Herring Gulls — not noticeably smaller or daintier on the wing. I watched it for about five minutes as it circled with the gulls over the net. It was several hundred feet away and I followed it with the spotting scope (zoom lens, 15-60 power). There was no glare over the water since the day was overcast. The gull was buffy white all over with unmarked primary tips. This could be clearly seen as the bird was constantly hovering or slowly flapping over the net with its back towards me. The bird was darker overall than the first year Glaucous Gulls that I have seen in the winter. The trailing edge of the flight feathers was pure white in a narrow band and the buffy markings were darkest just anterior to this edge, but not dark enough to form a distinct band. There was a distinctly darker, buffy, wide, sub-terminal band on the tail — as if the band on the tail of an immature (first year type) Herring Gull had been bleached out almost to the background color of the rest of the bird. The bill appeared all dark but

it was impossible to be completely sure of that at the distance that the gull was observed. The eye also seemed dark." *Janet C. Green, 9773 N. Shore Drive, Duluth, Minnesota.*

King Rail Seen at Agassiz Refuge — On May 25, 1968 a King Rail was seen by three observers while they were in the process of making a duck brood count on the Agassiz National Wildlife Refuge, Marshall County. The bird was flushed from the edge of a cattail marsh and was observed for about one minute at a distance of 200 feet with 7x50 binoculars. The light conditions were good and we noted the large rail-like form and dark appearance. The other observers were biologists Merrill Hammond and William Bair. *Howard A. Lipke, Agassiz National Wildlife Refuge, Holt, Minnesota.*

Editor's Note: This is only the second reliable sight observation for the King Rail in Northern Minnesota. The other record is of a single bird seen near Hackensack, Cass County on August 5, 1936. The King Rail normally does not range north of a line drawn from Traverse County in the west to Chisago County in the east.

Early Date for the Field Sparrow — On March 9, 1968 Ray Glassel, Allison Bolduc and I were birding along the Wacouta Road in Goodhue County. While observing a group of Tree Sparrows we heard the distinct song of the Field Sparrow. After a short time I saw the bird in the lower limb of a cottonwood tree. The pinkish bill, reddish cap and narrow white eye ring identified the bird. Ray and Al followed the bird among the weeds and brush until they too saw the markings that so readily identify it. *Donald Bolduc, 4211 Blaisdell Avenue S., Minneapolis, Minnesota.*

European Widgeon at Mille Lacs Lake — Seeing the European Widgeon in Minnesota is nothing new to me, as this is my fourth record for the state, but it was the first time that two of my sons, Chuck and Greg, had seen this species, a new bird to their life list.

On June 4, 1968 while fishing in the vicinity of Hennepin Island, Mille Lacs Lake, Mille Lacs County, we spotted five ducks swimming near the island. Examining these birds through our 7x40 wide angle binoculars we discovered that the ducks were all male widgeons, but four of them were green-headed, white-crowned American Widgeons and the fifth was a red-headed, yellow-crowned European Widgeon. We approached the birds to within fifty feet before they flew. Twice, later on in the day, the European Widgeon was seen alone close to the island, and once we approached to within twenty feet before it flew. The presence of all five males, without any females, certainly raises a question as to whether the birds are nesting in the vicinity. *Nestor M. Hiemenz, 705 18th Avenue S., St. Cloud, Minnesota.*

Bald Eagle Captures Duck — During the first two weeks of December, 1968 I sighted one to three Bald Eagles on six different days. On December 14th, I watched a mature Bald Eagle make a pass at a flock of Mallards in a strip of water kept open by the birds off our shore in Robinson Bay of Lake Minnetonka. All the ducks except one hen immediately took flight. The eagle made repeated passes at this one hen without success since she escaped readily by diving. Then the eagle alighted on the ice some ten feet away. After so many misses the hen seemed to feel fairly secure, stretched up and flapped her wings. With that, the eagle shuffled over to the edge of the ice, within, I should say, six feet of the duck and jumped into the water on top of her. He extricated himself, carrying the duck, with considerable difficulty, landed on the ice and proceeded to tear her to pieces. *George J. Fullerton, Route 3, Box 208, Wayzata, Minnesota.*

Baltimore Oriole Attempt to Winter in Minneapolis — On December 7, 1968 I received a call from Mrs. Donald A. Sundt of 7417 Emerson Avenue South in Minneapolis stating that a Baltimore Oriole had been coming to her backyard feeding station. At noon on December 8 I was at her home and saw a beautiful male Baltimore Oriole at her feeding station eating on a piece of fruit cake and semi-frozen fruit juice. The bird appeared normal with the exception of the left wing which drooped slightly. Mrs. Sundt stated that several Starlings had attacked the oriole and this may have caused the slight injury to the wing. The flight of the bird appeared quite normal while I was observing it. The oriole was first seen by Mrs. Sundt on November 23, 1968 and had been coming to the feeder daily. Further conversation with Mrs. Sundt revealed that the bird came daily to her feeder until December 25. During the period Minneapolis experienced heavy snow and many days of below zero weather. On the the 25th the bird was in a weakened condition and later in the day it was found by Mrs. Sundt dead underneath the feeder. The specimen is now in the collection of the James Ford Bell Museum of Natural History. *Robert B. Janssen, 14321 Prince Place, Hopkins, Minnesota.*

Western Grebe on Lake Harriet — On November 16, 1968, about 8:45 a.m. I was looking over the east side of Lake Harriet in Minneapolis, and noticed a grebe with a long white neck, dark back and slender bill, swimming on the edge of a group of American Coots. I went immediately to the Donald Bolduc home and asked someone to come and look at the bird because I thought it might be a Western Grebe; Don, Shirley and Allison came and all confirmed it to be that. The bird had moved farther out during the fifteen minutes I was gone, but with the use of a 25x60 spotting scope and 8x40, 8x50, 8x36, and 7x50 binoculars, we could still see the bird. This was my first identified Western Grebe; the Bolducs have seen them many times before. The sky was cloudy, the temperature about 33°, wind ESE 10 mph. We used the Robbins book on Birds of North America and the Peterson Eastern Field Guide. *Karol Pieper, 3615 Grand Avenue S., Minneapolis, Minnesota.*

Baird's Sparrow — Ron Huber and Allison Bolduc reported hearing and seeing a Baird's Sparrow at the Clay County gravel pits near Felton on May 31, 1968. Bill Litkey reported hearing and seeing at least one bird on July 5 at the same location. Charles Wiberg and I went to the Clay County location on the evening of July 19, 1968. As we stepped out of the car we immediately heard a song that was not a Savannah or a Grasshopper Sparrow. Three or four chirps, then a trill. When we located the bird, it was about sixty yards away. We saw a short necklace of fine dark brown streaks on the breast which appeared light brown or light gray. The streaks formed a slight V on the breast. The wide crown stripe was easily noticeable and the color of the stripe seemed light buff. The crown stripe did not extend very far over the head when it came together. At the back of the head where the stripe terminated the color appeared russet or dark brown. We identified this bird as a Baird's Sparrow. The following morning at daylight with the sun out, we heard more than one bird at one time. The song was repeated at two to four minute intervals while we remained in the area. The description under daylight conditions agreed with the color and markings we had seen the evening before. We also approached closer to the bird for a better look. Binoculars used were 7x35 and 10x40. *Donald Bolduc, 4211 Blaisdell Avenue S., Minneapolis, Minnesota.*

Townsend's Solitaire at St. Bonifacius — On December 16, 1968, while walking along the east shore of Parley Lake in the Hennepin County Park Reserve (S. 5,

T. 116 N., R. 24 W., in Carver County) I found a Townsend's Solitaire. It was a clear day, temperature just below freezing, almost no wind, with about 4 inches of snow from the first storm of the season on the ground; the time was near 1 p.m. I was proceeding through a cedar grove, and several Blue Jays were playing a silent game of hide and seek with me, when I noticed a bird that was smaller and grayer. My first thoughts were of a shrike or possibly a Pine Grosbeak. When I finally got the bird in full view and good light, where I was able to watch it at rest and in flight for some five or ten minutes, the identification was immediate and unmistakable. The buff wing patches were very clear when it flew. The uniform grey color and the eye ring were all quite evident, as was the comparatively erect and slim thrush silhouette. (I don't recall noticing the white tail feathers.) I am quite familiar with the Townsend's Solitaire in winter in Kansas, as well as in Colorado in the summer. I did not see the bird again, though I passed through the grove again quickly on my way home about 45 minutes later. I checked the grove again December 18 during a snowstorm, and again December 25 after a third storm, but failed to find the bird. *Rev. Thomas A. Hoffman, S.J., Jesuit College, St. Bonifacius, Minnesota.*

Additional Observations of Teal Diving — While conducting waterfowl research on an approximately 100 acre marsh 2 miles northwest of Madison, Lac Qui Parle County, during the summer of 1968, I observed a great many Blue-winged Teal diving. This behavior was first noticed on August 16 and it continued until at least September 4, after which I no longer made visits to the marsh. I estimated that there were at least 150-200 birds which were diving during the peak period of activity. It became most prominent about a week after it was first observed. This behavior continued throughout this period regardless of the weather. The day I first noticed it there was a light drizzle coming down but I also observed it on clear, sunny days. I assumed that both immature birds and adults were diving because during the peak of this activity it seemed as if every Blue-winged Teal that was in deeper water on the marsh was diving. On August 17, I also observed at least one Green-winged Teal diving. The water depth in this marsh is relatively uniform at about 2-3 feet deep. The act of diving itself corresponded exactly to the description given by John Hart (*The Loon*, 39:139-140). The average interval between dives of the individual birds was about three seconds with the birds staying under water from three to five seconds. I do not know what the birds were diving after but some observations can be made concerning this. Because there was a tremendous amount of sago pondweed and a few other pondweeds floating at and near the surface of the marsh during this period, I believe that these birds were probably diving for small invertebrates on the bottom of the marsh. With the abundant supply of pondweeds available near the surface, it seems doubtful to me that they would dive to obtain small plants on the bottom. However, there is no evidence that this was not actually the case. It seems very interesting to me that my observations took place within 20 miles of the only other published observation that I know of for this type behavior in Blue-wings (Hart *op. cit.*), although it has also been seen by Frank McKinney at Delta, Manitoba (Kear and Johnsgard, *Wilson Bulletin*, 80:231). The period of August and September for my observations coincides exactly with those of McKinney, although Hart's observation occurred in the spring.

The fact that the only other published account that I know of Green-wings diving (Janssen, *The Loon*, 36:141) and the already mentioned accounts of Blue-wings diving all occurred in Minnesota and in adjacent Manitoba leads me to suspect that this behavior might be a common occurrence in the prairie pothole region that has not been observed and reported to any extent in the literature. *John L. Schladweiler, 421 Sixth Avenue, Madison, Minnesota.*

BOOK REVIEWS

WHITEWINGS. THE LIFE HISTORY, STATUS AND MANAGEMENT OF THE WHITE-WINGED DOVE edited by C. Cottam and J. B. Trefethen. D. Van Nostrand Co., Princeton, N.J. 348 xv pages. 1968. \$7.50.

Cottam and Trefethen as editors have amassed a large amount of information and have covered quite well the biology and management of the White-winged Dove. The text is well written and rarely lapses into ambiguous language. The chapters are set up according to the varied biology of the doves throughout their range. There are chapters on the eastern range, western range, southern habits and the migration and movements of northern nesters. Also included are chapters on the feeding habits of White-winged Doves, White-wing population and management and even a chapter on White-wing hunting. Finally, at the end, there are statistical appendices dealing with banding recoveries, agricultural use of White-wing land, hunting regulations, taxonomy and a complete bibliography. If there is one underlying feature of the book it is the effect of man (both good and bad) on the White-winged Dove. This book also includes some very excellent examples of the data which can be obtained from banding programs. For example, by banding, biologists were able to determine that concentrated, colony nesting, Texas White-wings used completely different migration routes than those used by the dispersed, sparser population of Arizona nesting birds.

The editors are quite free in translating scientific terms and descriptions into layman's language. I think on principle that this is good, but at times the text seems a bit wordy. An especially bad example is in the section dealing with migration where there is a long and off the subject discourse on migrational mysteries.

The volume has many photos all of which are used in conjunction with passages of the text. There are also two color plates of White-winged Doves by Bob Hines. These I think are quite bad. The colors are inaccurate and the poses of the birds while not extremely unnatural, lack imagination. Bob Hines' sketches (which are on the title page of each chapter) are, however, quite good and imaginative.

Overall, I would favorably recommend this book to all ornithologists as an asset to their library of wildlife monographs.

John A. Hart, Carleton College, Northfield, Minnesota 55057.

BIRGER'S BIRDS by Birger Roos. Golden Press, 850 Third Avenue, New York, New York. 6x6, 48 pages. 1969. \$1.50.

BIRGER'S BIRDS, just published by Golden Press, is a truly unusual cartoon book of birds.

Author-artist Birger Roos has never seen these feathered creatures before, except in his own imagination. And that's exactly the zany, creative way he has drawn them — in rollicking full-color by the funny visual image their common names evoke. Here is the "Barn Swallow," the "Cedar Waxwing," the "Passenger Pigeon," the "Belted Kingfisher" and many other droll cartoons of absolutely authentic birds . . . the scientific name, as well as the common name, is included with each drawing.

In his introduction to *BIRGER'S BIRDS*, famous humorist and caricaturist Roger Price enthusiastically comments: "These seemingly simple drawings have the quality possessed by all legitimate works of art — they involve the viewer . . . to the extent that (1) you want to show them to someone else and (2) you start trying to think of your own Birger's Birds.

Mr. Roos' highly inventive style practically guarantees a laugh per page. *BIRGER'S BIRDS* is a perfect gift book for any birdwatcher or non-birdwatcher.

1968 M.O.U. ENDOWMENT FUND DRIVE

Report to Members

The second M.O.U. Endowment Fund drive raised \$952 from 85 persons and one affiliated club. The money has been placed in a Savings and Loan certificate and the interest will be used to help Minnesota birds and birding. Part of last year's income will be used to send a youth to the Long Lake Nature Camp. We wish to thank the following persons for their 1968 contributions to the M.O.U. Endowment Fund.

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Anderson, Mr. and Mrs. Elmer
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Sterk, W. H.
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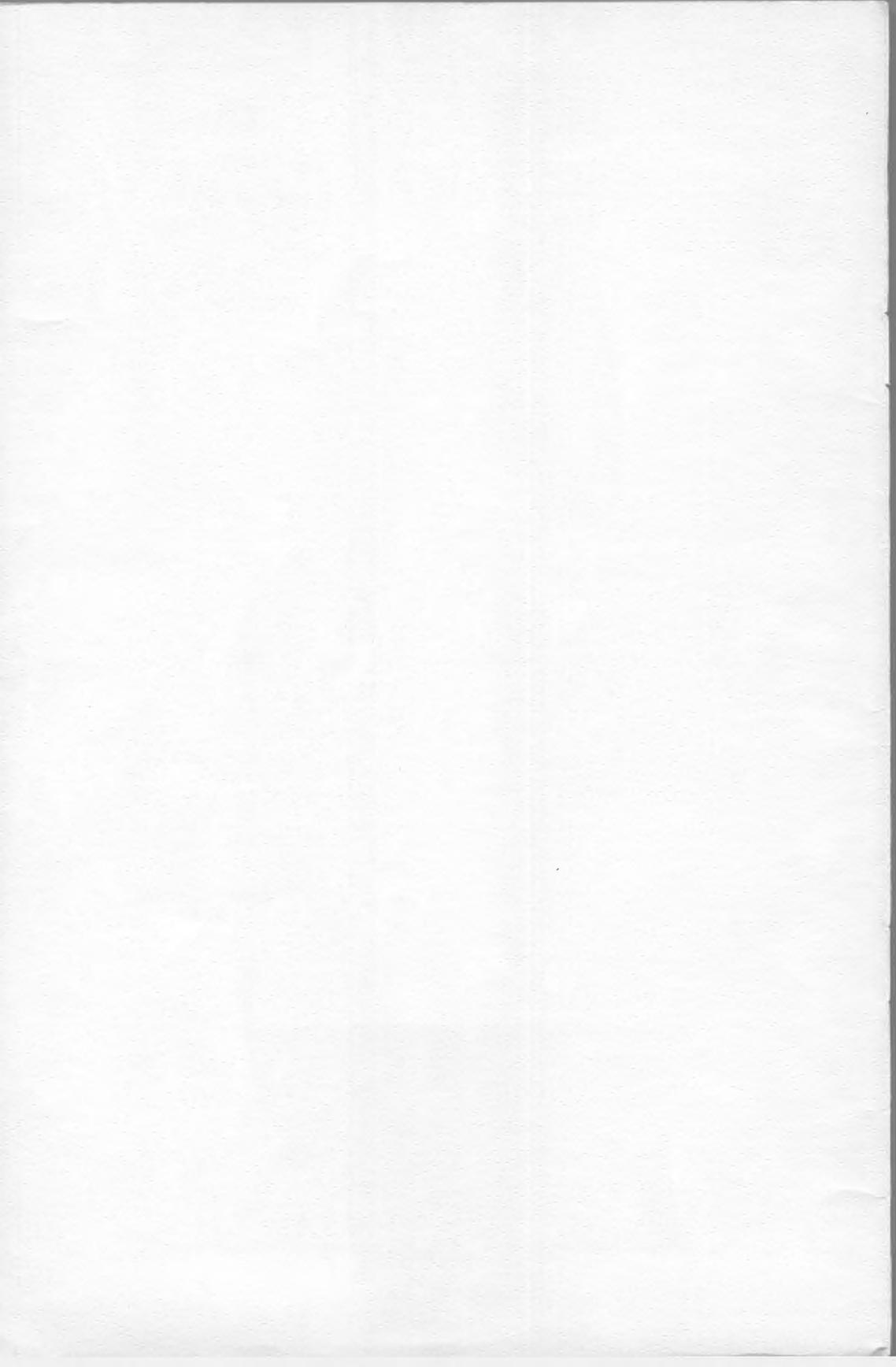
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NORTHERN OWL INVASION

WINTER, 1968 - 1969

Janet C. Green

Since 1960 the Minnesota Ornithologists' Union has been gathering records on the winter movements of northern owls. Some of these data have been published in the quarterly seasonal report, but when there has been a major invasion, all the reports have been summarized in an article such as this. So far we have documented a Hawk-Owl invasion in 1962-63 (*The Flicker* 35:77-78), a Snowy Owl invasion in 1966-67 (*The Loon* 40:90-92), a Boreal Owl invasion in 1962-63 (*The Flicker* 35:70-71) and in 1965-66 (*The Loon* 38:45), and a Great Gray Owl invasion in 1965-66 (*The Loon* 38:44-45). This past winter, 1968-69, Minnesota had another major Great Gray Owl invasion and a minor Boreal Owl invasion.

GREAT GRAY OWL

The Great Gray Owl movement was greater than that of 1965-66 both in total number of owls reported and in the geographical extent of the invasion. In fact, this winter was the first time that this species had been reported in numbers south of the coniferous forests of the northern half of the state.

The first observation of this winter's invasion was one found dead at Two Harbors, Lake County on December 21st (J. C. Green). Then, from the very end of December through the first week of January, a big influx occurred in the Duluth area. There were reports of at least six different owls (greatest number seen on one day was four on January 1st, J. C. Green) in a rural area just northeast of the city of Duluth near the shore of Lake Superior (Duluth Township) and during this same period there were two owls seen in the city of Duluth. The

owls in Duluth Township settled down during the first three weeks of January but as the amount of snow increased they began to move around more and leave the hunting territories they had established. This movement started January 18th and continued through the first few days of February. The last owl was seen in Duluth Township on February 8th. During this same period there were more reports of Great Gray Owls from the city of Duluth and it is assumed that some of these were birds moving out of the rural areas because of the deep snow. They had been observed catching mice along the roadside, but the rodents probably became inaccessible under the three to four feet of snow that was on the ground at the end of January. The last owl that was reported from the whole northeastern area of Minnesota was on February 16th in the harbor area of Duluth where it had been observed for about a week and was presumably preying on rats. It is difficult to say how many different owls were involved in this invasion at Duluth. Excluding observations that were obviously the same bird, the number of reports from late December through mid-February was of 21 birds. Since some of these were probably the same owl moving around (for instance, from rural Duluth into the city of Duluth in late January) the order of magnitude of the invasion in the Duluth area is estimated at about 15 Great Gray Owls.

The invasion in northern Minnesota was not just in the Duluth area but most of the observations are from there because that is where most of the people are and since that is also where I live, I was able to pick up a lot of data verbally from people I knew.

However, other bits of information that I picked up indicate that the invasion must have been quite extensive in St. Louis and Koochiching Counties. The best indication of this is a report from Littlefork, Koochiching County where an observer from Duluth about Christmas time saw in one day 16 "large owls" in a 4-5 mile stretch of road just outside this town. Were these the owls that eventually found their way to Duluth or were they distributed



Great Gray Owl, Duluth Township, St. Louis County, Feb. 8, 1969.

throughout the woods in all of St. Louis and Koochiching Counties? A trip to the Zim-Meadowlands area (an area of extensive muskegs and abandoned fields which has proved very good for northern raptors in other years) on February 1st failed to turn up any owls (D. Bolduc), but perhaps they had moved away from there by then. There were two other reports from northern St. Louis County in January: one at Lake Vermilion on the 3rd (W. Martin) and one near Cotton on the 31st (G. F. McHugh). However, the only concentration seemed to be in the Duluth area. I questioned active observers on the Mesabi Range and only received these two reports listed above.

The extent of the Great Gray Owl invasion throughout all of northern Minnesota is hard to determine. They evidently did not reach the shore of Lake Superior in Lake and Cook Counties since Jean Peterson, who writes a bird column for the Grand Marais paper, did not have any reports at all. Besides the regular M.O.U. observers from the northern half of the state, I solicited reports from five members of the Conservation Department and was able to turn up only the five following reports: Carlton County, one (killed on the Cloquet Forest Research Center sometime during the winter; G. W. Gullion); Aitkin County, one (Feb. 2, 4, 24, Rice Lake National Wildlife Refuge, C. E. Pospichal); Crow Wing County, one (late January, Brainerd, picture in St. Cloud Times of 1/25); Itasca County, one (mid-February, 15 miles NE of Cass Lake, G. Goltz); Cass County, one (2/10, Remer, R. A. Chessness). I also was told that they had been seen at Agassiz National Wildlife Refuge in Marshall County, but have no further data from there. It would seem that the major concentration of Great Gray Owls was in the eastern part of the state.

At the same time that the birds began to leave the Duluth area, they were first reported around the Twin Cities. The first Twin Cities report was for January 18th in Champlin (J. L. Smith). The next one was on January 23rd at the Miller Hospital in St. Paul (*vide* R. B. Janssen). From late January through early March there were reports of about 20 owls from the Twin Cities area. Most of the observations were made during the first three weeks of February. Five of the owls were seen west of the Mississippi River and 15 east of the river. It would seem from the dates and locations that these numbers represent the probable number of different owls; however, the total number of reports, excluding obvious duplications, was of 27 owls. The only report of prey taken was one seen carrying a rat (W. J. Breckenridge). Except for one seen at the Lake Harriet Refuge, Minneapolis on

March 23rd (M. Howe, D. Bolduc) the last report for the Twin Cities area was on March 5th at Roseville (Mrs. Keviniak).

The area around Minneapolis and St. Paul from which these reports are summarized is bounded by Champlin, Hennepin County and Coon Lake, Anoka County (one found dead, no date, W. H. Longley) to the north; Chanhassen, Carver County (2/23-3/3, M. H. Muehlhausen) to the west; Bloomington, Hennepin County (3/2, Mrs. S. P. Hughes) to the south; and Lake Elmo, Washington County (2/15, Mrs. Hilling) to the east. Most of the reports were in Ramsey County. All other reports for the southern part of the state are listed separately below. I would like to acknowledge the assistance of Marshall Howe who gathered most of the reports from the Twin Cities area.

There are also reports of three Great Gray Owls south of the Twin Cities area. Two were present all winter, from the first week of January into March, at Helmer Myre State Park in Freeborn County (Lester A. Larson). One was found dead near New Prague, LeSueur County on February 28th (R. Glassel).

As one would expect there are few reports of Great Gray Owls after the first week of March when they presumably were moving back north. Obviously many of the owls died before they were able to make the return journey. Of the reports that are listed above, eleven are of birds found dead. Three were shot, three probably starved, three were probably killed by cars, one was killed by a predator, and the cause of the other death is unknown.

The observations during the late winter and early spring are mostly from the central part of the state, northwest of the Twin Cities area up the Mississippi River. These reports are as follows: Isanti County, one (about 3/1, Cambridge, W. Violet); Wadena County, two (found dead, 3/8, R. Oehlenschlager); Cass County, one (shot about mid-March, near Bena, *vide* J. Mathisen); St. Louis

County, two (3/25, Cotton, W. Arndt; 4/6, Meadowlands, J. Voma-chka); Stearns County, one (4/16, St. Cloud, A. Grewe); Sherburne County, one (4/25, found dead on the road, Becker, *vide* A. Grewe).

It will be interesting to see what the states adjacent to Minnesota have to report on Great Gray Owls this past winter. The Saskatchewan Natural History Society already has published some data on the movements of Great Gray Owls in Manitoba in 1968-69 (*The Blue Jay* 27:39-40). It seems that the birds that invaded Minnesota probably originated in an area east of Winnipeg that Robert W. Nero described as "of about 45 miles by 75 miles extent bordering the west side of the Whiteshell Provincial Park" (*ibid*, p. 39) and which he estimated must contain "at least a few hundred" Great Gray Owls. This concentration in Manitoba built up in late October and early November and it is not known from where these birds originated.

The choice of prey of the Great Gray Owl belies its large appearance since it is a specialist on small rodents. A detailed study of the prey of a breeding population of Great Gray Owls in Sweden by Nils H. Höglund and Erik Lansgren determined that about 90% of their diet was composed of four species of voles — two of the genus *Microtus* (*M. agrestis* and *M. ratticeps*) and two of the genus *Clethrionomys* (*C. glareolus* and *C. rufocanus*) ("The Great Gray Owl and its Prey in Sweden", *Viltrevy* 5:364-421). The availability of small rodents determines the breeding success and is responsible for the extra-limital movements of this owl. Höglund and Lansgren have a good statement on the vagrancy of this bird: "After good reproduction and in connection with decreasing frequency of small rodents in the breeding localities the great gray owl will not rarely occur outside its normal range. According to our opinion this occurrence is largely to be understood as a more or less pronounced starvation migration." (*ibid*, p. 410) . . . "Like a number of other owls also the great gray owl is probably

living a sort of nomadic life within its normal range and will settle periodically in localities which for the time can offer sufficient food for maintenance of life and for breeding." (ibid, p. 411.)

BOREAL OWL

This past winter there were eleven reports of this elusive owl compared to fifteen in 1965-66. However, the latter invasion was confined to northeastern Minnesota while this year the observations are scattered throughout the eastern part of the state. All the 1968-69 records of this species are listed below:

Jan. 9, Duluth, one photographed (J. Brandenburg)

Jan. 11, Two Harbors, Lake County, one seen (R. and R. Kuchta)

In Jan., Encampment Forest, Lake County, one found dead (M. E. Penner)

In Jan., Anoka County, one found, soon died (L. Bradley)

Feb. 3, Royalton, Morrison County, one picked up dead, seen falling out of tree (*vide* N. M. Hiemenz)

Mid-Feb., Locke Park, Fridley, Ramsey County, one seen (W. Violet)

Feb. 15, LeSueur County (D. Chelberg and H. B. Troost)

Feb. 21, Duluth, one found dead (*vide* J. C. Green)

Jan. and Feb., Helmer Myre State Park, Freeborn County, one seen three times (L. A. Larson)

March 3-4, Excelsior, Carver County, one seen (M. H. Muehlhausen, F. Nubel, V. Lender, R. B. Janssen *et al.*)

April 21, Becker, Sherburne County, one found dead on road (*vide* A. Grewe)

9773 North Shore Drive, Duluth, Minnesota.

Lee Fullerton

HERON ISLAND

Rice County now owns Heron Island, a land area of approximately 6.4 acres, located on General Shields Lake, about 9 miles northwest of Faribault, Minnesota.

Heron Island, officially known as LW-22-00158 on the files of the Bureau of Outdoor Recreation, (B.O.R.) and at the State of Minnesota, Department of Conservation, St. Paul, Minnesota. This island is now a portion of LW-22-00008 on the B.O.R. files; the first area to be purchased by Rice County for development into a portion of the "infant" Rice County Parks System, named "McCullough Park." This area consists of 104 acres of rolling farm land, homesteaded by the McCullough family and kept in the family until Mr. McCullough came

into the Rice County Planning and Zoning office to inquire if the County would consider purchasing the entire farm for development into a park. This was carefully checked by the Rice County Recreation & Parks Committee with a recommendation that the property be purchased. The preliminary papers were signed in the spring of 1966, with the Federal funds being delivered in person by Jerome Kuehn, Planning Director, Dept. of Conservation, State of Minnesota, St. Paul, Minnesota, in August 1968, to the Rice County Commissioners.

This 104 acres has approximately 2,200 feet of shore line, with the state owning approximately 800 feet of additional shore line now being developed into a public access. The McCul-

lough area will be developed into a year around recreation facility for family recreation, with summer picnic area, playground, etc., with the most unique hill, with natural undulating terrain, to be developed into a campground overlooking the lake and surrounding area, including Heron Island.

You may ask why I am writing about McCullough Park, when I started to write about Heron Island, a bird sanctuary for principally, The Great Blue Heron and Common Egret.

If Rice County had not purchased this 104 acre tract on the mainland of General Shields Lake, the B.O.R. would not have approved funds for the purchase of Heron Island, as a bird sanctuary.

The purchase of Heron Island is the first time the B.O.R. has allocated funds for an island for "passive recreation." There were two reasons why this rule was set aside:

1. Rice County had a 104 acre tract, "McCullough Park," to tie this 6 acre island to, as an addition to, not as a separate unit.
2. This island is a nesting place for the Common Egret, a bird that was virtually extinct a few short years ago, as well as the Great Blue Heron, and many song birds.

How was this island purchased? Dr. George Rysgaard, Northfield, Minnesota, had tried to purchase this island a few years ago, when one of the owners started cutting down the tall elms on the island. The owners refused to sell to a private party to keep the island as a bird sanctuary, but were considering selling to an individual to build a private home on.

Mr. Orwin A. Rustad, Faribault, Minnesota, happened to be in our office one day requesting information regarding the Rice County Zoning and this island was brought up. I suggested that he and Dr. Rysgaard meet with the Rice County Recreation & Parks Committee. Mr. Rustad showed his slides and Dr. Rysgaard his movies of the birds taken on the island. The Rice County Recreation & Parks Commit-

tee were immediately sold on the need to preserve this island as a bird sanctuary and add it to McCullough Park as a portion of the Rice County Parks System.

The next step was to sell the Rice County Commissioners on the need to purchase this island as a bird sanctuary. Again Mr. Rustad took a leading part, assisted by the Rice County Recreation and Parks Committee. This was sold so completely that if the B.O.R. would have refused to allocate funds for the purchase of this island, Rice County would have purchased this island alone.

The next step was to sell the B.O.R. on the idea of allocating funds for "passive recreation." This was a thumbs down project. Again Mr. Rustad was called upon, he wrote many letters asking for "moral support" not financial, from organizations and individuals that were interested in preserving this island. These letters were directed to the State Department of Conservation, to W. R. Anderson, stating the need of preserving this island as a bird sanctuary. The letters came thick and fast until Mr. Anderson phoned one day and wanted to know what the idea was. I told him we were trying to sell the idea that passive recreation of the proper type was just as important as active recreation. Mr. Anderson said, "You win, stop the deluge of mail."

So thanks to Mr. Orwin A. Rustad, Dr. Rysgaard, an alert and open-minded Rice County Recreation and Parks Committee and an equally open-minded Rice County Board of Commissioners.

To the many individuals and organizations that Mr. Rustad contacted Heron Island LW-22-00158, is now a portion of McCullough Park and is classified as a bird sanctuary.

Rice County cannot put up "No Trespassing" signs. Also, there will be no boat docking facilities on the island. The island will have signs marked, "Heron Island, Bird Sanctuary, Rice County Parks."

Rice County has purchased Heron Island for "The Birds." Thanks to a

cooperative effort of many fine people. This was another first for Rice County, not only in Minnesota, but I understand, this was the first time B.O.R. funds were allocated for this purpose in the continental United States.

I will not give the detail of paper work that went into this purchase, it is sufficient to say that it was a lot of work, but when work is climaxed in success, then work becomes enjoyable.

Now may we extend an invitation to you who helped, and all bird watchers to come and enjoy the hospitality of Rice County and our Heron Island that was purchased "For the Birds." This is located on General Shields Lake, take Minn. Hwy. No. 21 at the junction of Interstate No. 35, at Faribault, travel northwest through some of our lake area. The first lakes you will see on your left are two jewels named Kelley and Dudley, then Mazaska Lake, on the right. As you are still enjoying Mazaska you will pass through Shieldsville Village, then on the left Mud Lake, a good duck lake, next General Shields Lake, a distance of approximately 9 miles from Faribault.

McCullough Park is as yet undeveloped, but a small resort is being operated on the property by James Brennan, boats and motors are available. The State of Minnesota also is building a public access to the lake, adjacent to McCullough Park area. *Faribault, Minnesota.*

Mr. Fullerton is the Administrator of the Rice County Planning and Zoning Commission.

FIRST BULLOCK'S ORIOLE FOR MINNESOTA

Janet C. Green

In mid-October Raymond Naddy, who writes a nature column for local newspapers, received several phone calls from people in Duluth about orioles that had recently showed up at their feeding stations. Two of these calls were from the Woodland section of the city and on October 19, 1968, the bird settled down there at the feeder of Mr. and Mrs. Irving Benson. Mrs. Benson in her phone call to Mr. Naddy identified the bird as an immature male Bullock's Oriole and said that it looked like the picture in the National Geographic book on song birds. When I heard about the oriole, I went to the Benson's home and had little difficulty in seeing the bird. It was coming to feed several times daily at a window ledge feeder where sunflower seeds, suet, peanut butter and jelly were available and which were all consumed by the oriole. I agreed with Mrs. Benson's identification and realized that this species had never been reported before in Minnesota. By the end of October more than a dozen people, both local and from out of town, had seen their first Bullock's Oriole at the Benson's feeder. We later found out that the bird had been at a neighbor's feeding station for about a week before it settled down at the Benson's on October 19th.

The other phone call was about an oriole that also sounded from the description given to Mr. Naddy like an immature male Bullock's Oriole, but no one was able to check on it. It was present daily at a feeder in West Duluth from about October 12th through 31st when it disappeared.

Since the Bullock's Oriole hybridized

with the Baltimore Oriole in a broad area of the Great Plains where their ranges meet, I was anxious to determine if the Benson's bird was a hybrid or not. The descriptions in the literature (Charles G. Sibley and Lester L. Short, Jr., "Hybridization in the Orioles of the Great Plains," *Condor* 66: 130-150, 1964) are of breeding adults and there is no discussion of the plumage variations in immatures. So on November 22nd Koni Sundquist and I went to the Benson's and mist-netted the oriole. I banded it and then took a series of colored 35 mm. photographs of it, showing the details of the plumage from all angles. Although photographs do not show as accurately as a specimen would the exact shade of color and extent of mottling of various areas of the plumage that are necessary for a critical determination of the species status of the bird, I hoped that they would be sufficient so that an expert on these species could decide what our oriole was.

I sent the photographs to Dr. Lester L. Short, Jr. of the American Museum of Natural History. Dr. Short kindly examined the slides and returned them with the following comment:

"I'm still a little reluctant and inclined to hedge on the oriole, but I would give it a nod as 'tentatively a subadult male *Icterus galbula bullockii*'

(I consider the Baltimore and Bullock's orioles conspecific). Slides are never a full substitute for a skin. For example, two of your Nov. 22 slides show the rump clearly, but they look to represent different birds. The amount of orange-gold around the rump in the one is atypical of *bullockii* and strongly points toward *galbula*. But the other shows it much grayer and like *bullockii*! Thus, the bird is still possibly a hybrid strongly tending toward *bullockii*. The rather heavy back markings and the moderate posterior extent of gold ventrally would suggest hybridity as well. However, without that one (too-gold rump) slide, I would say the bird was within the normal range of variation of *I. g. bullockii*. The problem is — we have no series of subadult hybrid males for comparison!"

The slides (nine of them) have now been sent for permanent safe keeping to the National Photoduplicate File at the U. S. Fish and Wildlife Service's Migratory Bird Populations Station in Laurel, Maryland.

Although orioles have occasionally over-wintered in the northeastern part of the country, this bird did not survive our northern Minnesota winter. It was last seen on December 13, 1968, the first day of a major winter storm. 9773 North Shore Drive, Duluth, Minnesota.



Bullock's Oriole

(December 1, 1968 - Feb. 28, 1969)

The weather conditions in Minnesota during the winter season can be described in one word — nasty. Snow, snow, and more snow was dumped on the state; as was noted in the previous issue of *The Loon*, Duluth got its first snowfall in November. Beginning in mid-December (the 19th here in Freeborn County), heavy snowfalls came, and from then on increased in frequency; the greatest amount, at least in the extreme southern part of the state, fell in January.

Northeastern and western Minnesota were probably the hardest hit; despite the great amounts of precipitation, the temperatures didn't seem to drop as severely as in some years, and it wasn't an altogether bad winter for birds. While some species were not observed as frequently as in other years, many others were seen, and some of these in greater numbers — an "invasion year" for some species. For this compiler, at least, more new species were added to his life list than in many winters previous.

Each species listing is arranged similarly to that form used in *The Fall Season*: date, place, number, and observer. When locations were referred to, county is given first, then in parentheses follows the city, refuge, river, etc.; Duluth and Minneapolis are also parenthesized for the sake of continuity. If no number is given, it can be assumed that only one bird was observed. Arrangement may differ in some cases.

It should be noted that any comments regarding range or number, or for that matter, an unusual species record, were made by Jan Green, who pre-edits all bird observation reports. She was kind enough to allow this com-

piler to use a number of summaries she had previously prepared for the current issue of *Audubon Field Notes*.

Pied-billed Grebe: 12-7 Hennepin (Minneapolis) 2 RG.

BLACK-CROWNED NIGHT HERON: 1-7 Rice (Northfield) GNR. (About sixth winter record for state.)

Whistling Swan: Last—12-6 Wabasha (Minneiska) 300 FZL; 12-21 Morrison (Mississippi River) LSR; one throughout winter with captive Trumpeters at Hennepin Co. Park Reserve, Carver Co. TAH, RBJ.

Canada Goose: 12-10 Blue Earth 10 EDK; all winter Olmsted (Rochester) 3-4000 RBJ; all winter Carver (Hennepin Co. Park Reserve) TAH, RBJ.

WHITE-FRONTED GOOSE: 12-2 RG, 2-16 ES Olmsted (Rochester). (First winter record.)

Blue Goose: 2-1 St. Louis (Virginia) DB. (Wild bird?)

ROSS' GOOSE: 12-2 BL, 12-8 FZL, KP, 1-4 RG, BL, 2-16 ES, 2-23 RG, 3-1 *vide* RG, all Olmsted (Rochester). (Fifth state record.)

Black Duck: All winter; largest groups, 6-20, Cook, Goodhue, Carver, Scott, Olmsted, Winona, Dakota, Hennepin Counties.

Gadwall: Last 12-7 Hennepin (Minneapolis) RG.

Pintail: 2-1-2 Cook (Grand Marais) JCG, RBJ, FZL, MMC; 2-14 Winona (Whitewater Park) DMF; 2-16 4 ES, 2-23 2 RG, both Olmsted (Rochester).

Green-winged Teal: 1-4 RBJ; 2-23

RG, both Winona (Whitewater Park).

American Widgeon: 2-23 Winona (Whitewater Park) RG.

Shoveler: Last 12-7 Hennepin (Minneapolis) RG.

Wood Duck: 12-7 Hennepin (Minneapolis) RG; 2-1 St. Louis (Virginia) 4 - wild? DB; 2-2 Anoka (Rum River) MHM.

Ring-necked Duck: 2-1 St. Louis (Virginia) DB.

Canvasback: Last 12-7 Hennepin (Minneapolis) 2 CLH.

Lesser Scaup: 12-3 Ramsey (White Bear Lake) WHL; 12-21 - 1-5 Lake (Two Harbors) JCG; 2-1 St. Louis (Virginia) DB.

Common Goldeneye: Throughout the winter in very small groups Lake Superior 1-6 JCG; 2-15 Lake (Birch Lake dam) 50, 2-16 Lake (Shagawa River) both THN; all winter Stearns (Mississippi River) 20-50 NMH; all winter Ramsey (Mississippi River) 3-500 RBJ, BL; smaller groups elsewhere.

BARROW'S GOLDENEYE: 12-27 BL, 2-26 EC Ramsey (St. Paul) male; (seen also by RBJ, RG).

Bufflehead: 2-8-14 Lake (Two Harbors) pair; 12-21 - 1-5 Lake (Two Harbors) male; both JCG.

Oldsquaw: Scarce on Lake Superior Lake (Two Harbors) 5-7 JCG, from 12-1 - 1-5; small groups Cook 2-1-2 observers MOU Trip, largest, 11 (Hovland) T. Perrons.

White-winged Scoter: 12-1 Lake (Two Harbors) JCG.

Ruddy Duck: Last 12-7 Hennepin (Minneapolis) RG.

Hooded Merganser: 1-1 Dakota RBJ.

Red-breasted Merganser: Last 12-6

Hennepin (Minneapolis) VL; 12-10 Lake (Two Harbors) MMC.

Goshawk: Scarce — reported from Anoka (Carlos Avery) twice *vide* WHL; 12-22 Rice GNR; 2-2 Cook EC; 2-16 Wadena RO; 2-20 Aitkin (Rice Lake Refuge) CEP.

Sharp-shinned Hawk: 12-24 and 1-3 Hennepin (Lake Minnetonka) DWL; 1-8 Hennepin FN/MAS.

Red-tailed Hawk: Most reported raptor - South: Goodhue, Wabasha, Olmsted, Hennepin, Dakota, Ramsey, Fillmore, Carver, Anoka, Chisago, Winona, Houston, Scott, Watonwan, Rice, and Cottonwood; North: migrants through 12-28 St. Louis (Duluth) JCG; 2-8-11 St. Louis (Duluth) MMC.

Red-shouldered Hawk: 12-18 Hennepin VL; 1-11 Goodhue 2 FN/MAS; 1-26 Goodhue MHM; 2-7 Chisago (Taylors Falls) EL; 2-13 Winona (Whitewater Park) 3-4 DMF; 2-16 Dakota EMB; 2-23 Winona (Whitewater Park) RG.

Rough-legged Hawk: Reported in Dec. and early Jan. from Blue Earth, Ramsey, Benton, Anoka, Nobles, Winona, St. Louis, Lake, Rock, Aitkin, and Watonwan Counties; last 1-14 Watonwan DMF; 1-19 St. Louis (Duluth) MMC; first 2-23 Wabasha RG.

Golden Eagle: 12-15 Anoka (Carlos Avery) MHM.

Bald Eagle: Last 12-4, 5 12-10 2 Aitkin (Rice Lake Refuge) CEP; 12-20 Wabasha 20 DGM; winter singles: Chisago (Taylors Falls) EL; 1-24 St. Louis (Duluth) MMC; 1-11 Goodhue (Reads Landing) 4-5 FN/MAS; first 2-14 Pike Lake, Duluth *vide* PBH; 2-15 Lake (Sucker Lake) THN; 2-22 St. Louis (Island Lake) *vide* JCG; 2-23 Goodhue (Reads Landing) 15, (Red Wing) 3 both RG.

Marsh Hawk: Last 12-1 Fillmore AFR; 12-1 Nobles HSH; 12-2 Dodge 2 RG; 12-2-5 Blue Earth EDK.

Sparrow Hawk: South - reported from

Carver, Dakota, Goodhue, Washington, Ramsey, Nobles, Hennepin, Wabasha, Rice, Cottonwood, Blue Earth, Scott, Dodge, Watonwan Counties; North - 1-28 Morrison (Royalton) 2 NMH.

Spruce Grouse: Reported from Roseau Co. PEB.

Ruffed Grouse: Reported from Chisago, St. Louis, Anoka, Lake, Aitkin, Cook, Morrison, Roseau, Wabasha, Olmsted, Fillmore, Mille Lacs, and Washington Counties.

Sharp-tailed Grouse: 2-2 Pine (Willow River) 2 EC; also present Roseau common PEB.

Bobwhite: 12-21 Fillmore 7 AFR.

Ring-necked Pheasant: Reported from Carver, Winona, Blue Earth, Chisago, Ramsey, Hennepin, Watonwan, Dakota, Nobles, Cottonwood, Rice, Washington, Wabasha, Olmsted, Freeborn, Fillmore, Benton, and Ramsey Counties.

Chukar: St. Louis (Ely) 17 DB, RG, BL.

Gray Partridge: Reported from Blue Earth, Dakota, Dodge, Morrison, Nobles, Olmsted, Rice, Wabasha, and Winona Counties; numbers ranged from 5 Wabasha (Elgin) DB, to 20 Nobles, HSH.

Wild Turkey: 2-13 Whitewater Management Area, 9, part of flock of Merriam race, live-trapped in South Dakota and released 1967, DMF.

Sandhill Crane: Female remained all winter with flightless male at Carlos Avery, Anoka Co. WHL.

American Coot: 12-4 Wabasha 2 W&DM; 12-5 Hennepin 25 VL; 12-7 Hennepin 14 RG; 12-7 Hennepin late migrant CLH; 1-1 Olmsted (Rochester) RG; 1-4 Olmsted (Rochester) DB; 1-5 Scott VL; 2-23 Olmsted (Rochester) RG; also reported from Dakota EMB.

Common Snipe: 12-5 Wabasha W&

DM; 12-28 Hennepin (Eden Prairie) TAH; 12-28 Hennepin 2 RBJ; 1-4 Hennepin MEWJ; 1-10 Scott 2 RG; 1-20 Houston FZL; 2-23 Winona RG.

Glaucous Gull: First 12-20 St. Louis (Duluth) imm. JCG; 12-21 Lake (Knife River) adult JCG; winter - unusual number of adults over immatures on Lake Superior as these peak counts show: 1-12 (Knife River) 5 adults; 2-26 (Duluth dump) 4 adults, 1 imm. both JCG; 2-1 Cook (Grand Marais) adult RBJ; inland record - 1-1 Dakota (Black Dog) imm. RBJ, RG.

Herring Gull: Last 12-7 Hennepin (Minneapolis) CLH, VL; all winter Lake Superior.

Ring-billed Gull: Last 12-8 Hennepin (Minneapolis) CLH.

Mourning Dove: Reported from Blue Earth, Dakota, Hennepin, Morrison, Ramsey, Wabasha, Washington, Winona Counties.

Screech Owl: Reported from Olmsted, Washington, Rice, and Hennepin Counties.

Great Horned Owl: Reported from Mille Lacs, Ramsey, Hennepin, Dakota, Washington, Wabasha, Watonwan, Rice, St. Louis, Blue Earth, and Roseau Counties.

Snowy Owl: 12-2-9 St. Louis (French River) *fide* JCG; mid-Dec. through early March (Duluth Harbor) 2 *fide* JCG; 12-29 Chisago (Shafer) EL; 1-4 Pine (Hinckley) *fide* JCG; 1-11 and 2-3 Hennepin (Eden Prairie) LW; 2-1 Lake (Little Marais) S. Anderson; 2-1 near mouth of Split Rock River and 2-2 twelve miles farther sw on Lake Superior shore at Flood Bay, probably same very white bird JCG, movement along Superior shore or even birds seen along shore away from towns is most unusual after the end of fall migration; 2-12 Hennepin (Brooklyn Park) Mrs. J. Ewert.

Hawk-Owl: 11-26 Aitkin (Rice Lake Refuge) CEP.

Barred Owl: Reported from Wabasha, Hennepin, Dakota, Washington, Goodhue, Chisago, Rice, Aitkin, Blue Earth, Cook, and St. Louis Counties.

Great Gray Owl: First invasion since winter of 1965-66; more extensive than that year; see Jan Green's write-up this issue!

Long-eared Owl: 12-3 Aitkin (Rice Lake Refuge) CEP; 12-23 and 1-8 Watonwan DMF.

Short-eared Owl: 12-7 Mower AFR; 12-23 Watonwan 2 DMF.

Boreal Owl: First significant invasion since winter of 1965-66; note coincidence with Great Gray Owl invasion both years; see Jan Green's write-up this issue.

Saw-whet Owl: 2-1 Clay (Buffalo River State Park), died - specimen given to Moorhead State College; 2-3 Ramsey (White Bear Lake) EC; week of 2-9 Stevens (Frog Lake) E. Strubbe, seen for several days then found dead; 2-10 Hennepin, specimen Bell Museum.

Belted Kingfisher: Reported from Chisago, Dakota, Faribault, Hennepin, Houston, and Winona Counties; 12-21 Faribault 2 OAR; 1-20 Houston FZL; all Jan. Dakota EMB.

Yellow-shafted Flicker: Reported from Nobles 12-2 and 2-8 HSH; 12-2 Dodge RG; 12-6 Pope WH, also 2-23; Dec. Blue Earth HBT, 12-15 EDK; 1-5 Ramsey JJ; 12-5-6 Cottonwood LAF; 12-29, 1-4 Chisago FH; all winter Wabasha DGM; all winter Watonwan few DMF.

Red-bellied Woodpecker: Permanent resident from Twin Cities area south-eastward; 1-4 Kanabec (Mora) NAJ.

Red-headed Woodpecker: A good winter, especially in the "Big Woods" in the central part of the state; reported from Morrison, Isanti, Kanabec, Olmsted, Wabasha, Houston, Hennepin, Chisago, Rice (Nerstrand Woods), Wright, Mille Lacs, Washington, Ram-

sey, Crow Wing (Crosby, all winter, T. Savaloja) Counties.

Black-backed Three-toed Woodpecker: 2-2 Cook (Cascade River) 2 VL; 2-12 Aitkin (Rice Lake Refuge) CEP.

Horned Lark: Reported from Aitkin, Blue Earth, Carver, Scott, Goodhue, Wabasha, Hennepin, Chisago, Morrison, Nobles, Fillmore, Kanabec, Dakota, Ramsey, Winona, Watonwan, Cottonwood, Rice, and Washington Counties.

Horned Lark (Northern Race): 12-21 Rice (Dennison) OAR.

Gray Jay: Reports from Cook, Lake, Roseau, and St. Louis Counties.

Blue Jay: Reported from 25 counties throughout state.

Black-billed Magpie: 2-23 Clay *vide* EGA.

Common Raven: Reported from Lake, Cook, St. Louis, Aitkin, Roseau and Beltrami Counties; greatest number, 2-1 Cook 40 JCG.

Common Crow: Reported from 22 counties throughout state.

Black-capped Chickadee: Reported from 24 counties throughout state.

Boreal Chickadee: Reported from St. Louis, Crow Wing, Cook, and Lake Counties.

Tufted Titmouse: Permanent resident from Twin Cities southeastward; 1-12-30 Stearns (St. Cloud) 2 *vide* NMH.

Red-breasted Nuthatch: Wintered in good numbers - regular or daily reports of 1-4 Hennepin 6 people, Carver MHM; Kanabec NAJ; Olmsted AFR; Washington JO; Nobles HSH; Ramsey 2 people; Rice OAR; Cottonwood LAF; Mille Lacs MI; St. Louis (Duluth) 2 people.

Brown Creeper: Reported from 12 counties; North - 1-3, 1-25 St. Louis

(Duluth) 2 MMC; South - 1-8 Rice 2 GNR.

Mockingbird: 12-2-20 Hennepin (Minneapolis) RZ, KP.

Robin: Reported from Blue Earth, Goodhue, Rice, Hennepin, St. Louis, Carver, Morrison, and Ramsey Counties; 12-11 Blue Earth EDK; 2-26 Hennepin RG.

Varied Thrush: 11-29 - 2-2 St. Louis (Duluth) male Mr. and Mrs. W. Fox, RBJ, FZL, TAH; 12-4 Crow Wing (Emily) male found dead J. Blanich; about 12-9 - 2-30 Kanabec (Mora) female J. Coles *vide* NAJ; 12-21 Clay (Dilworth) specimen, Moorhead State College; 12-15 - 1-10 male, specimen, St. Paul Science Museum; the following three records from Hennepin may or may not be the same bird - all were bright males: 11-20 - 12-19 (Brooklyn Park) WJB, FN; Dec. - early Jan., returned 1-22 (Hopkins) DB saw it on 12-23; 1-5-6, 1-14 (Morningside) RG.

Townsend's Solitaire: 12-16 Carver (Hennepin Co. Park Reserve) TAH; 2-4-5 Carver (Excelsior) MHM, VL, AJ — probably the same bird.

Golden-crowned Kinglet: Last 12-11 Cottonwood MLAF; 12-11 Watonwan DMF.

Bohemian Waxwing: Only a minor influx — 2 observations by 11 people of usually 10-35 birds from Hennepin, Carver, Rice, St. Louis, Chisago, and Beltrami Counties. First - (north) 12-4 St. Louis (Duluth) JKB; 12-5 Beltrami (Bemidji) J&AM; (south) 12-18 Hennepin AJ. Greatest number - 2-26 Carver (Excelsior) 120 RG; throughout Jan. St. Louis (Duluth) 50-75 MMC.

Cedar Waxwing: 14 observations by 11 people of usually 2-12 birds from Hennepin, Washington, Rice, Cottonwood, Carver, Blue Earth Counties; 5 observations in Dec., 6 in Feb. Greatest numbers - 2-9-11 Hennepin (Edina) 40 RZ; 2-19 Blue Earth (Mankato) 40 HBT.

Northern Shrike: Wintered in good numbers throughout the state; 31 people out of a total of 57 observers reported seeing them one or more times. **Starling:** 12-5 and 12-30 Chisago EL; 12-30 Freeman 13 RHJ; also present Mille Lacs Dec. - Feb. MI.

ORANGE-CROWNED WARBLER: 12-4-13 Ramsey (White Bear Lake) EC; first state winter record.

Western Meadowlark: 1-20 Nobles HSH.

Meadowlark, species?: 12-5 Dodge 5 RG; 12-23 Watonwan DMF; 1-25 Goodhue RG.

Red-winged Blackbird: Singles during winter from Winona, Cottonwood, Hennepin, Wabasha, Sibley, Dakota Counties; groups - 1-20 Houston (Reno) 5 FZL; all winter, 6-10, fewer in Feb. Watonwan DMF; first - 2-17-24 Hennepin 400 VL; 2-22 Hennepin 200 DB.

BALTIMORE ORIOLE: 11-24 - 12-25 Hennepin male RBJ; see note of interest, March 1969 Loon.

BULLOCK'S ORIOLE: Mid-Oct.-12-13 St. Louis (Duluth) imm. male JCG et al.; (see article in this issue) June 1969 Loon; first Minnesota record; photographs on file **National Photoduplicate File**.

Rusty Blackbird: 12-21 - 3-16 Otter Tail (Fergus Falls) 2 *vide* EGA; 1-4 Winona (Beaver) BL; 2-9 Olmsted 15 AFR; 2-26 Hennepin (Bloomington) RG.

Common Grackle: Stragglers, 1-4, lingered through early Jan. in Freeborn, Swift, Hennepin, Rice, Wabasha, St. Louis, Scott, Goodhue, Ramsey Counties; wintered in Watonwan 10-12, fewer in Feb. DMF; Kanabec 1-22 NAH; Olmsted AFR; Hennepin RZ; Cottonwood 1-30 - 2-11 LAF; Cook late Nov. - 2-28 *vide* JP.

Evening Grosbeak: Quite scarce in all of the northern part of the state; virtually none in the city of Duluth in late

winter (after Jan.) but a few groups in outlying rural areas all winter, definitely a non-invasion year in north-eastern Minnesota; more reports for the southern part of the state but still very erratic and uncommon there, numbers reduced in late winter also. For whole state - over-winter flocks, 20-75, reported only from Kanabec, Stearns, Mille Lacs, Beltrami, Hubbard, Morrison, Roseau, Chisago Counties.

Purple Finch: Quite scarce; only reported from the south - small groups, 1-6 usually; NMH, GNR, HSH reported 20-25 occasionally; erratically seen in Kanabec, Olmsted, Hennepin, Washington, Houston, Blue Earth, Freeborn, Swift, Nobles, Cottonwood, Chisago, Wabasha, Rice and Stearns Counties.

Pine Grosbeak: North - movement was in Oct. and Nov., very scarce Dec.-Feb., 1-3 usually seen; greatest number, 6, 12-1 St. Louis (Orr) DMF; South - arrivals: 2-1 Chisago (Shafer) EL; 12-10 Anoka (Carlos Avery) 10 AJ. Although reported more often in mid-winter from the south than the north, still scarce, 1-10, and erratic; greatest numbers: Stearns (St. Cloud) up to 30 *fide* NMH; Morrison up to 12 HD; farthest south - 12-14 LaCrosse, Wisconsin FZL; 1-4 Winona 4 RBJ; last in south 2-20 Ramsey JJ; 2-20 Anoka (Carlos Avery) 4 WHL.

Hoary Redpoll: A very good year — present in groups, 1-4, in redpoll flocks, 15-40, in the northeast: St. Louis (Duluth), Lake, Cook Counties in Feb. - first 1-27 (Duluth) MMC; last 2-27 Cook (Tofte) JP; more abundant in the northwest throughout the winter: in Wadena Co., RO collected 36 from 11-8 through 3-23, with peak numbers 2-24, 10, and 3-9, 12, and in Roseau Co., PEB reported 5-10 sporadically. A few reports from the south: 11-23 Mille Lacs (Onamia) specimen, Bell Museum; 1-14 (Minneapolis) RG; 2-2 Hennepin (Champlin) 2 MHM.

Common Redpoll: An invasion year;

the most commonly reported fringillid throughout the state. Flocks of 100 or more seen in Dakota, Hennepin, Anoka, Morrison, Crow Wing, Rice, Chisago, and Watonwan Counties; greatest numbers - 12-11 Morrison 900 LSR; 12-24 Rice (Faribault) 1,000+ OAR; 2-2 Hennepin (Champlin) 1,000+ MHM; other counties: reporting flocks of usually 10-30, Wabasha, Ramsey, Stearns, Hubbard, Wadena, Roseau, Beltrami, Aitkin, St. Louis, Lake, Cook; reporting small groups, occasionally - Pope, Nobles, Swift and Freeborn.

Pine Siskin: A few flocks, 15-30, overwintered in Stearns (St. Cloud) NMH, and Hennepin (Minneapolis) VL, Counties. A few other sporadic observations of usually 1-10 birds in Washington, Blue Earth, Swift, Ramsey, and Washington Counties.

American Goldfinch: A good year — numerous flocks of 20-50 birds overwintered in Chisago, Wabasha, Hennepin, Watonwan, Ramsey, Carver, and Washington Counties.

Rufous-sided Towhee: Early winter - 1-13 Hennepin (Minneapolis) Mrs. Hunter *fide* DWW.

Slate-colored Junco: All winter from Duluth, 1-4, southward.

Oregon Junco: 12-13 Stearns (St. Cloud) NMH; 12-19 Olmsted AFR; 12-21 Rice 2 GNR; 12-28 Hennepin 2 RBJ; 12-30 - 1-11 (Minneapolis) VL; 1-4 Winona DB, RBJ; 1-8 - 2-7 (Minneapolis) AJ; 2-8 Winona (Pickwick) FZL.

Tree Sparrow: North - last: 12-8 Cook JP; all winter Morrison 10 LSR; South - all winter from Chisago County southward.

Harris' Sparrow: 12-23 Watonwan 2 DMF; 1-13 - 2-7 Hennepin (Bloomington) RG; all winter Cottonwood (Mt. Lake) 2 LAF.

White-throated Sparrow: 11-20 - 12-20 Rice GNR; Nov.-April St. Louis (Duluth) AKA; 1-20 Hennepin (Edina) RG.

Fox Sparrow: 12-13 Chisago EL; 12-16 2, 12-19 (Duluth) KS.

Song Sparrow: 12-21 Fillmore 3 AFR; 12-28 Ramsey (St. Paul) BL; all winter Rice GNR, and Watonwan DMF.

Lapland Longspur: Flocks, 20-75 reported from Pope, Dakota, Hennepin, and Chisago Counties; lesser numbers from Carver, Winona, Ramsey, Goodhue, and St. Louis; singles - 12-28 and 1-25, dump, 12-28 harbor, PBH & MMC; greatest numbers and only Feb. observations from Watonwan Co., 2-400, DMF.

Snow Bunting: All winter, reported from 20 counties.

SUMMARY: A total of 67 observers recorded some 116 species of birds, which is, coincidentally, the same number as was recorded last winter in the seasonal report.

It would be foolish for this compiler to make any statements concerning unusual observations, numbers, or the like; however, some species could be mentioned. Species of interest would include the Black-crowned Night Heron, White-fronted Goose, Ross's Goose, Barrow's Goldeneye, Orange-crowned Warbler, Baltimore and also Bullock's Oriole.

It was also interesting to note that only one observation of the Bobwhite was made; more important, some species invaded Minnesota, the Common Redpoll, Great Gray Owl, and Boreal Owl (the latter two are featured in an article written by Jan Green in this issue). One winter species, the Evening Grosbeak, was very scarce this year, and the Purple Finch was somewhat uncommon.

Deep snow was mentioned by some observers as the obstacle which prevented them from making many birding hikes; another did all her birding by watching her bird feeder. Altogether, it was an unusual winter.

I would like to express my appreciation to Jan Green, who, by provid-

ing me with many completed species summaries and comments, made my job much easier and enjoyable. 214 South Third Avenue West, Albert Lea, Minnesota.

Addenda to Fall Season 1968:

Delete record of Red-throated Loon on 11-11 Ramsey Co. JJ contained in Vol. 41:14.

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TERN MORTALITY DUE TO ENTANGLEMENT IN NYLON MONOFILAMENT FISHLINE

Thomas C. Dunstan

A number of cases of diving birds becoming entangled in fishing gear have been recorded in the literature (1, 2).

During the breeding season of 1968 evidence of the death of two species of terns, the Common Tern and the Caspian Tern as a result of entanglement in nylon monofilament fishline was found.

Between July 1 and August 21 four field trips were made to a small rocky island located in Leech Lake, Cass County, Minnesota. This island annually supports an estimated breeding population of approximately 1,000 pairs of Common Terns. The water adjacent to this colony is a popular area for sport fishing and an average of five

or six fishermen can be seen daily fishing from small boats within 200 yards of the colony. Terns commonly dive after bait minnows that are cast into the water by fishermen and several cases of terns being hooked while picking up the bait minnows are recorded annually. These birds usually escape or are released by the fishermen.

A total of eight Common Terns and one Caspian Tern was found dead and tangled in monofilament fishline. Four flightless birds that had left the open nesting area to hide among the rocks and sparse vegetation were found with line around the wings and in two cases the line was also wrapped around rocks and dead sticks thereby immobilizing

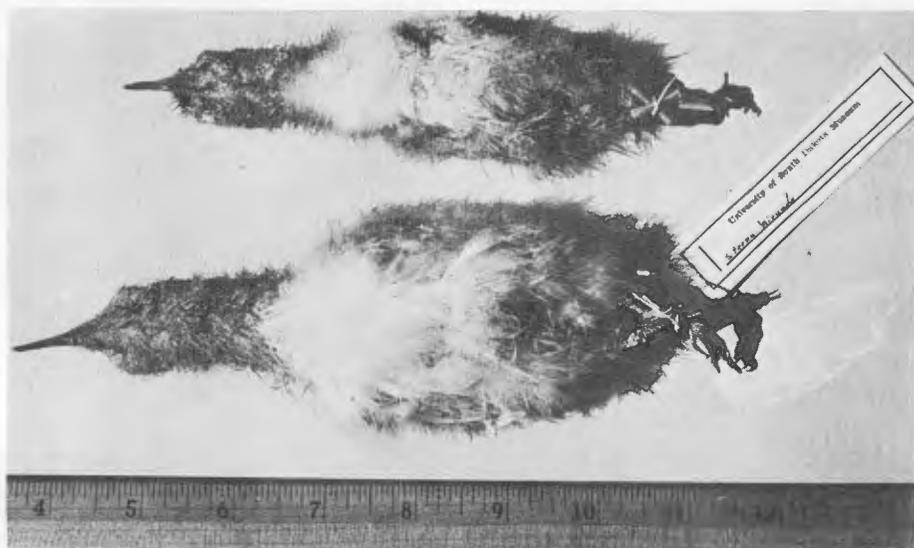


Figure 1. Two Common Terns that were found dead and entangled in fishline. The bottom bird was banded 7 days before it was found dead.



Figure 2. This photograph shows the remains of a Caspian Tern that was found dead and entangled in a fishline. Note the line in the regions of the head and wings.

the birds. One of these birds had been banded on July 3 and was found dead on July 9 (Fig. 1). Four mature birds were found (three on the colony island and one on a nearby shore) with wings, neck, and feet entangled in the line making flight difficult or impossible.

The one Caspian Tern (Fig. 2) was found on the island with line around the wings, head, and neck and could possibly have been a migrant bird. No Caspian Terns were seen breeding on this island.

The length of the lines varied from 21 to 67 yards and were probably discarded into the water by fishermen or broken and lost when snagged or fouled under the water. No fishhooks were found attached to the lines or imbedded in the birds. Investigation of the shoreline of the colony island revealed five separate large entanglements of line among the rocks.

Factors other than line entanglement are probably of greater significance as mortality factors in tern breeding success. However, in regions where sport fishing with hook and line is a popular sport the chance of death due to entanglement in discarded fishline does occur.

Acknowledgements

The author wishes to acknowledge transportation and cooperation given through Dr. D. W. Warner and Dr. J. F. Mehner, and the Lake Itasca Forestry and Biological Station, University of Minnesota.

Literature Cited

1. Anthony, A. W. 1921. A loon (*Gavia immer*) caught on a fishing line. *Auk*. 38:369.
2. Scott, Walter E. 1938. Old Squaws taken in gillnets. *Auk*. 55:668. *Department of Zoology, University of South Dakota, Vermillion, South Dakota.*

Friday morning May 10, 1968 was much the same as any other morning. My husband and I were sitting at our table in front of the east windows eating breakfast. Then I saw a pair of Wood Ducks fly to a box elder tree about 40 feet from where we were sitting. I have been a birdwatcher for 32 years but I was excited and thrilled. Wood Ducks are not too common in one's front yard and the male is the most highly colored North American Duck. Then the female flew to the other box elder tree on the front lawn. A large branch had been sawed off and the ducks disappeared inside. I didn't take my eyes off that hollow spot and 15 minutes later she reappeared and flew off to the east with her mate. We hoped that she was nesting.

The next morning I got up at 6:00 A.M. and sat in front of our living room windows waiting and hoping the ducks would be back. At 6:15 she came winging in with three escorts. This time she went directly into the hollow branch. Fifteen minutes later she flew off to the south. Because of the leaves I could not see if her three companions had waited for her.

Tuesday, May 14 she came in at 6:55 A.M. I watched for one hour but I did not see her leave.

From the 14th to the 25th I watched for her twice, one of those times I waited 1½ hours but I did not see her.

Sunday, May 26 I was up at 5:30 A.M. watching for her. She came in alone from the south or east between the granary and barn at 6:15. My view from this angle was not as good so I didn't see her until she was nearly to the edge of the hollow. Now we were sure she was nesting in the tree.

About 9 A.M. on May 28 I was walking down our sidewalk, which is

about 20 feet from the nest, when she flew over me with a great commotion. I was startled and looked up to see that our cat had climbed the tree and had scared her off the nest. I didn't wait to see if she came back. We locked the cat in the barn and then nailed a strip of tin around the duck tree.

June 1st while working in the flower beds about 35 feet from the nest I heard her fly off. This was at 4:45 P.M. Most of the time her flight was noiseless as she left or came in to her nest. But if we were around she always made a noise to attract our attention to her and the direction she was going away from her nest. I just had to know if we could determine the number of eggs she had laid. My husband got a ladder, climbed it and looked into the nest. He couldn't see a thing. It was a deep nesting place.

June 6th I chanced to see her come in at 8:40 P.M. Then I realized that she left the nest twice a day.

June 13th she came in at 6:02 A.M. It was three days past the time we had figured her hatching date.

On the 16th I got up at 4:45 A.M. and sat on the front step waiting for her to leave. We thought her eggs must hatch one of these days and that she was apt to leave with the young early in the morning. She left at 5:25 and came back at 5:52.

June 19th she went off at 5:17 A.M. As soon as she left I got the ladder and climbed up to the nest taking a flashlight along. All I could see was a pile of down. The nest was about four feet down in the tree. I put the ladder away and went into the house to see when she came back. I waited until 6:15 A.M. but I missed her. That evening I saw her come in at 8:45.

June 23rd she went off at 5:30 A.M. We wondered if she had laid many

more eggs. It was 13 days over the 28 days the eggs usually take to hatch, forty one days since the first morning I had seen her.

June 26th she left at 8:15 P.M. I looked into her nest again. Two eggs were visible on opposite sides of the nest, the rest were covered with down. I took two flash pictures.

June 27th - In the late afternoon I was washing the car when she left the nest. She flew directly over me making quite a bit of noise. This was the only time I saw her leave the nest and fly to the northwest.

On July 7th I got up at 5:30 A.M., glanced out the east bedroom window as I walked by. There the Wood Duck was . . . standing in the middle of the road facing her nest about fifteen feet above her. I was so excited, at last her eggs had hatched and I would be lucky enough to see the young leave the nest. "She's calling her young out of the nest," I whispered to my sleeping husband and rushed to the living room where there was a better view of the nest. When I got there she was gone. I waited and she came back at 6:45 P.M. At 8:15 P.M. that evening she went off and we looked into her nest. We could see four eggs. This was the

last time that I saw the Wood Duck. But she came back again, because when I looked in her nest July 10th I could see two eggs on opposite sides of the nest and she had pulled out some of her larger more colorful feathers to cover the remaining eggs.

July 13th we looked into the nest at 11 A.M. The duck was not on. My husband took the eggs out of the nest with a ladle tied on the end of a long stick. There were nine eggs and they were cold. All were rotten. Sometime after I had broken the eggs I read an article stating, eggs that don't hatch almost always contain D.D.T. I wished I had known this earlier and I would have had the eggs tested. We have not used D.D.T. on our farm but that would not mean the ducks had not been in contact with it.

I saw the Wood Duck leave the nest 16 times and come on 21. Probably some of the times I missed her I glanced away for a couple of seconds, she came in that fast. When she left the nest I would see a slight movement among the leaves, she would stand on the edge of the nest for a few seconds and then fly. So sadly ended my 63 days of Wood Duck watching. *Route 3, Willmar, Minnesota.*

Notes of Interest

Bell's Vireo in Stevens County — Ray Glassel, his son Alan, Emmett Herman-son, Harding Huber, and I were walking along the east shore of Frog Lake, Stevens County, looking at warblers when Ray said, "I see a vireo". Just as I asked, "What kind?" part of the unmistakable song of a Bell's Vireo came to our ears. Everyone gathered together and we all got a good look for about five minutes at this vireo in an unusual location. The bird sang the complete song several times more. Since I have seen and heard Bell's Vireos several times in Minnesota and many times more in southern states, I am familiar with its song and appearance. This event took place on Saturday, May 25, 1968 about ten o'clock A.M. Sun was shining; temp. about 60°. Glasses used: 6x30, 7x35, 7x50, 9x35 B&L, 10x40 WA. *Don Bolduc, 4211 Blaisdell Ave., Minneapolis, Minnesota.*

Varied Thrush near Emily — On December 11, 1968, Mrs. William R. Hoffman, of 1 mile north of Emily, Minnesota, on Ruth Lake, Crow Wing County called to tell me that she was quite sure she had a Varied Thrush which had

been killed on December 4th by flying into her glass storm door. She had taken the bird to the Wilderness Museum in Emily for confirmation of her identification, and the Emil Berg's of the Museum advised her to call me. My husband and I had become particularly interested in previous winter observations of Varied Thrushes throughout the state ever since he had seen these birds while working in northern Washington. We identified the bird at once as an adult male Varied Thrush, having a black band across an orange breast, orange eye stripe and wing bars, slaty black head and dark blue-grey back. The bill was dark, except for the orange base of the lower mandible. Under tail coverts were white, streaked with orange. The bird is now in the collection of the James Ford Bell Museum of Natural History. *Mrs. Josephine Blanich, 222 E. Main Street, Crosby, Minnesota.*

Groove-Billed Ani record for Washington County — Sometime during the weekend of October 18-20, 1968, a Groove-Billed Ani was shot by some high school boys in Woodbury Township, Washington County. (See Photo) Since the bird was unfamiliar to them, it was brought to their biology teacher for identification. A student teacher at the high school from Wisconsin State University-River Falls identified the specimen, and because of its unusualness, he



then turned it over to his ornithology professor, Dr. Stephen Goddard, at WSU-RF. Dr. Goddard in turn passed the information on to me. Details about the bird regarding date, behavior, habitat, etc. when it was collected have regrettably been lost in the transference of information. The specimen is currently indexed No. 316 in the bird skin collection of the Biology Department at WSU-RF. This constitutes the fourth Groove-Billed Ani record for Minnesota. *Bill Litkey, 733 Cook Avenue East, St. Paul, Minnesota.*

Orange-crowned Warbler — On December 4, 1968, a rainy day about 40 degrees, at 3:00 P.M. I was startled to see a small bird with a greenish-gray back perched on the suet feeder which is fastened on the side of a Maple tree in our yard. I was able to approach it within a few feet while it was busy eating bits of suet. It was an Orange-crowned Warbler. It had no wing bars and when it turned I could see the gray breast with a faint wash of yellow and definitely yellow under-tail coverts. It was faintly streaked with dark gray on the sides of the breast. However, I was not able to see a crown patch. It came back several times and also went to a suet feeder next door. That night the weather turned cold and stormy but I saw the bird once in the morning. It was back again on December 9 (the temperature was 10°!) in the afternoon. We did not see it again until December 13. It was cold, windy, and snowing. The bird was here

in the morning and came back three times late in the afternoon. The last time I saw it, it was feeding with a Red-breasted Nuthatch and a Downy Woodpecker. (The Downy did not succeed in chasing it away.) I was always surprised at the large pieces of suet that so small a bird could manage to eat. I wonder what other food it was able to find during this time. I imagine that the temperature of 5 degrees below zero that night was too much for so fragile a bird as we did not see it again. *Elizabeth M. Campbell, 5267 W. Bald Eagle Blvd., White Bear Lake, Minnesota.*

Observation of a Black-Backed Gull — *Date and Location:* January 4, 1968 at Knife River, Lake County, Minnesota. There is a small boat slip there, protected by a breakwater from Lake Superior, and it is used by 3-4 boats that fish for lake herring during the winter. From 200-500 Herring Gulls congregate there in the winter and they are often accompanied by 5-10 Glaucous Gulls and occasionally by an Iceland Gull (see J. C. Green, "The Iceland Gull in Minnesota: Its Status and Identification", *The Loon* 39:44-48).

Conditions of observation: The black-backed gull was seen in the boat slip with a small group of Herring Gulls. It was either resting in the water, or walking or resting on the ice (the slip was about $\frac{2}{3}$ frozen) and occasionally would take off with the Herring Gulls, circle around a few times and then land in the slip again, always at the edge of the group of gulls. I observed it from the car which was positioned along the side of the slip so that the sun was at my back (it was a bright sunny day with a temperature of about -25°) at a distance varying from 30 to 100 feet.

Duration of observation and optical equipment used: I watched the gull for $\frac{1}{2}$ hour from about 9:30-10:00 a.m., always from inside the car (which was a good blind and was reasonably warm). I used 7x35 binoculars and a 15-60, zoom lens spotting scope on a gunstock mount. When I was noting the eye color of the bird, I opened the window and braced the spotting scope on the window sill.

Description of bird: With the bird in view and before I consulted any field guides I took the following notes on the gull; elaborations on these notes made the same day but not with the bird in view are in (). (Adult, white-headed gull), the size of a male Herring Gull with wings extending over tail the same proportion as in a Herring Gull. Mantle: dark slate gray with white trailing edge to wing (darker than Herring Gull but not black); wing tips black in contrast to mantle (this contrast especially noticeable when bird was resting on ice); when resting with wing folded, tips were alternately black and white with a wider band of white before the dark slate gray of the mantle began.

Head, nape and upper breast: white with quite a bit of dusky mottling, especially around eye, and least around the bill where it was pure white. (Extent of the mottling was about like an average adult Herring Gull in winter plumage and was much more than a Glaucous Gull in winter plumage.)

Tail and rest of underparts: pure white.

Legs and feet: bright flesh pink (brighter than most winter Herring Gulls).

Bill: light yellow, brightest on upper mandible; reddish-orange spots at gonys; tip of lower mandible more greenish yellow than rest of bill; size of bill was that of Herring Gull (not wider or longer than Herring Gull of similar size).

Eye: light yellow (pale straw color) with dark pupil.

Flight: on the wing it did not appear heavier in flight than a Herring Gull. (I have often seen Glaucous Gulls which appear to be the same overall size as a big

Herring Gull but in flight are noticeably chunkier and slower. This bird did not so appear.)

Later observations: Since I was alone (with no camera) when I spotted this gull, I immediately went to get a friend (Ruth Kuchta) to confirm the observation as soon as the group of gulls left the Knife River slip. We could not locate it again that morning but in the afternoon we saw a black-backed gull the size of a Herring Gull at the Two Harbors dump about 10 miles away. It was probably this bird but it was always in the air at a distance so we could observe no details. I looked for it again in the Knife River-Two Harbors area on January 5, 6, 7, 9, 10 and 12th but could not find it. On January 12th my second daughter was born so I had to give up the search for a while. Later on that month a black-backed gull was observed in the same area first on January 24th at Knife River by Mrs. Gustave P. Nubel and then on January 27th at Two Harbors by Robert P. Russell and Kim R. Eckert. I went up to Two Harbors on January 28th and spotted the bird but it was so far out in the bay and the lake was so choppy that I couldn't determine anything about it other than it was a black-backed gull that seemed the size of a big Herring Gull. Mrs. Nubel didn't submit any notes on the bird that she saw and Robert Russell told me he had seen the gull quite well and felt that it was a Lesser Black-backed Gull. He also said that the gull's legs were "orange." No black-backed gulls were spotted again that winter.

Discussion: Although I have seen both Greater Black-backed Gulls (in New England and Europe) and Lesser Black backed Gulls (in Europe) before, they have always been in summer plumage. Also I have never studied them in detail to determine variations in size and in leg color. From field guides and other descriptions (mainly Witherby *et al.*, *The Handbook of British Birds* and Bannerman *The Birds of the British Isles*) the gull that I saw fits the description of the British race of the Lesser Black-backed Gull (*Larus fuscus graellsii*), except for the color of the legs and feet. Unless I made a colossal goof on noting the color of the legs, and I don't want to admit to that, since both my notes taken while I was looking at it and my memory of it once I discovered from the literature (the same day I saw the bird) that Lesser Black-backed Gulls don't have pink legs, was that the legs and feet were the same color as those of a Glaucous Gull, which always seem to me to be brighter than a Herring Gull's in winter. My bird fits best the descriptions of a Slaty-backed Gull (*Larus schistisagus*) which, considering that species' range, does seem a bit far-fetched. Janet C. Green, 9773 North Shore Drive, Duluth, Minnesota.

Drowning of Lesser Scaup in Drain Tile — On April 21, 1969 I observed 9 dead Lesser Scaup in an open ditch at or near the site where a drain tile emptied into the ditch. This drain tile outlet is located in the NW $\frac{1}{4}$ of Section 23, T 126 N, R 42 W, or about 8 miles north of Morris, Minnesota, in Stevens County. This drain tile drains a former marsh area, located about $\frac{1}{3}$ of a mile north of the tile outlet. At the time of the observation, the drained marsh still held about 1 to 2 feet of runoff water, and the tile line was running to capacity. Several hundred Lesser Scaup were still using this temporary marsh. The number of dead ducks found represents only a minimum mortality. Chris Mau, the farmer on whose land the tile outlet is located, reported that he had seen at least 12 dead ducks in the ditch on April 20, 1969. Also, other dead ducks could have been swept downstream without being observed, and as ducks were still using the area, further mortality could have occurred. This observation is similar to that reported by Earl D. Kopsichke (*The Journal Of Wildlife Management*, 28:848-849). In that observation, Kopsichke reported the mortality of nearly 90 diving ducks in a drain tile in Jackson County. He suspected that the

birds were sucked into the vertical tile intake when the birds were diving for food or sleeping near the tile. In this instance I used binoculars to check the water surface in the vicinity of the tile inlet. I could see no visible vortex or other disturbance of the water. Thus, it is my belief that in this instance the birds were sucked into the tile while diving for food. *John A. Scharf, Route 1, Morris, Minnesota.*

Ancient Murrelet found dead on highway — On February 28, 1969 a dead bird was picked up on Highway 371 near Fort Ripley, Crow Wing County by Glen Johnson, a highway department employee. The bird was crushed flat but Johnson knew he had an unusual specimen because it had the beak of a songbird and webbed feet. He brought the bird to me and it was identified as an Ancient



Photo from Brainerd Daily Dispatch, March 25, 1969

ANCIENT MURRELET—*Dr. J. E. Echternacht, left, points to the webbed feet of this unusual bird found recently on the highway by Glen Johnson, right, a highway department employee.*

Murrelet. The bird was restored and mounted (see photo) and was added to the collection of birds at the Brainerd High School. There are three other specimens of the Ancient Murrelet for Minnesota as follows: November 5, 1905, Hook Lake, McLeod County; November 22, 1950, Cut Foot Sioux Lake, Itasca County; November 14, 1961, Pelican Lake, Crow Wing County. *Dr. J. E. Echternacht, 325 N. Bluff Ave., Brainerd, Minnesota.*

Bald Eagle captures a Mallard — I sighted one to three Bald Eagles on six different days during the first two weeks of December, 1968. On December 14 I watched one of the mature eagles make a pass at a crippled Mallard hen in a strip of water, kept open by a flock of Mallards, off our shore in Robinson Bay of Lake Minnetonka, Hennepin County. All the ducks except one hen immediately took flight. The eagle made repeated passes at this one hen without success since she escaped rapidly by diving. Then the eagle alighted on the ice some ten feet away. After so many misses the hen seemed to feel fairly secure, stretched up and flapped her wings. With that, the eagle shuffled over to the edge

of the ice, within six feet of the duck and jumped into the water on top of her. He extricated himself carrying the duck with considerable difficulty, landed on the ice and proceeded to tear her to pieces. *George J. Fullerton, Route 3, Wayzata, Minnesota.*

Mockingbird at Mille Lacs — As we drive north on No. 169 on the way to our cabin, about a mile south of the source of the Rum River, Mille Lacs County we turn off the highway and drive along the scenic route on the shore of Lake Mille Lacs to look for shorebirds, gulls, and marsh wrens. When my husband and I reached this point on May 9, 1969 at about 1:30 p.m., the wind was blowing in from the lake and the waves were high, with no shorebirds or gulls in sight. This was disappointing until a bird flew up from the ground into the lower branches of a tree just ahead of the car. Large white wing patches in flight and a long tail made us stop immediately, as this was not a familiar pattern. For about ten minutes we sat in the car and watched the bird, which was within thirty feet of us all of the time. It had food in its mouth, and after we stopped it flew from the tree to the ground and finished eating something which looked like a dirt-covered worm. Again it flew into the lower branches of the tree (which had not yet leafed out), where it continued to perch and preen, once or twice moving a short distance to a different branch. We were able to see it clearly without glasses, but we also used 9x35 Bausch & Lomb and 7x35 Tasco binoculars. The color was shades of gray, darker above and lighter below. The tail and part of the wings were almost black, with white wingbars and a white patch on the wings, and the edges and underside of the tail white. The slender bill was very dark and a dark line seemed to extend from the bill almost to the eye. The legs and feet were dark. The bird was not disturbed by the loud barking of two large dogs which were fenced in next to a building about 100 feet away. When I got out of the car to get a closer look, I was able to stand within ten feet of the bird without disturbing it. Our belief that we were watching a Mockingbird was confirmed by referring to both the Robbins and Peterson field guides which were in the car. The following day on our way home we stopped at this area at about 1:00 p.m., but were unable to locate the bird. *Mrs. Thomas E. Murphy, 5936 Columbus Avenue, Minneapolis, Minnesota.*

Virginia Rail Chick on Upper Rice Lake — My first observation of the Virginia Rail took place on July 12, 1968. It was just another day when I left our little place on Lake Belle Taine near Nevis, Minnesota, at 4:00 A.M., called for my good birding friend, Mrs. A. W. Peterson of Park Rapids, and arrived at Itasca Park before dawn to hear and observe whatever bird life could be found. Our favorite haunts of the Osprey, Pileated Woodpecker, Golden-winged Warbler, Traill's Flycatcher and Swamp Sparrow (to name a few specials) were strangely unproductive that day, so we had a quick bite to eat and headed for Upper Rice Lake, Clearwater County which lies some twenty miles west of the Park. It was about 1:00 P.M. on that beastly hot afternoon when we drove south a few miles and as we passed the east edge of this quite large, shallow lake with its wide swath of rippling, straw-colored wild rice, I would stop from time to time to train the scope on the few Mallards, Ring-necks, Blue-winged Teal, Pied-billed and Red-necked Grebes as they lazily swam into the all-concealing tall rice and out again into an open band of water. I had been listening for the Virginia Rail — I had already coaxed the Sora to respond — because it was one of the birds I had a special interest in on that day, having the previous day checked, and studied it and listened to its recorded voice. I had just started up after one of our stops and was driving very slowly, trying to avoid the deepest ruts, when Ruth said in an awed whisper, "Oh, don't run over the little guy!" Since I am always intent on seeing everything within view,

I was startled and couldn't imagine what I had missed. I don't recall raising my binoculars but I'll never forget the sheer delight of clearly seeing this very fluffy, very black Virginia Rail chick with the blackest, longest legs for its size, carefully putting one big splayed black foot and then the other on a hunk of dirt in the so-called road, all the while plaintively peeping "Mama". I don't think he was any more frantic at seeing us than he was before we appeared. He gave us one look and then seemed to be intent only on traversing those mountainous obstacles of dirt in an effort to reach his mother. We saw him from many angles and I have a recollection of a slightly top-heavy chick about two weeks old, his body held on the horizontal, with a kind of sawed-off fluffy tail and a rather longish, slender black bill tipped with yellow. I did not see the color of his eyes. We watched him as, with unusual balance, he descended those deep ruts, disappeared, came into view, and finally scaled the last rut. Presently I heard a soft rustling in the tall grass bordering the road. The chick picked up speed on the flat ground, headed for that spot, and that was the last we saw of him. *Mrs. Leslie Welter, 315 2nd Ave. S., Moorhead, Minnesota*

Oriole Nest Building With Synthetic Fiber — On May 17th, 18th and 19th, 1969 a female Baltimore Oriole was observed at 2137 Commonwealth, St. Paul, Ramsey County making a nest of synthetic fibers (probably rayon). Source of the fibers was a rotted drapery which had been used to ball a spruce tree in 1968. The tree did not survive; the cotton fibers rotted away and left the synthetic fibers in long single strands wrapped about the roots of the tree when it was pulled up and cast on the compost pile. The oriole was observed to pull off a chunk of the fibers then fly to a near by gooseberry bush where it hopped from limb to limb dragging the wad of fibers after it and in effect carding the fibers. The oriole then picked up the individual strands, gathered them into a hank and flew to the nest in a near by elm tree. The nest lacks the customary smoothness of a normal oriole nest in outward appearances. *R. E. Barthelemy, James Ford Bell Museum of Natural History, University of Minnesota, Minneapolis, Minnesota.*

White-Fronted Goose Winters at Rochester — On February 16, 1969 my husband and I observed a single White-fronted Goose at Silver Lake, Rochester, Olmsted County with the large wintering flock of Canada Geese. The bird had been reported by several other observers earlier in the winter. The following is a description of the bird. The fore front of the head was very visible and the white about the beak was very clear, giving the bird a "heavy beaked" appearance. The back was dark and the only identification mark we did not see was the dark mottling across the breast. We observed the bird on the snow covered ice across the open water and the reflection may have erased the breast marking. The bird came close enough for us to observe the yellow legs and after that we could pick him out just by looking for a pair of yellow legs amidst the dark legged Canada Geese. *Evelyn and George Stanley, 4317 Toledo Avenue, Minneapolis, Minnesota.*

Editor's Note: This represents the first verified winter record for the White-fronted Goose in Minnesota.

Pirate Crow — We feed gray squirrels and chipmunks peanut butter sandwiches cut into small squares. The feeding spot is a table about six feet from the house. The squirrels often carry the sandwich pieces to trees 50 feet or more from the house. Many times they eat only the peanut butter center and drop the rest. Two common Crows have found these dropped pieces and regularly come down river to feed; however, they don't dare come up to the feeding table itself. Common

Grackles are also regular feeders. They are bold enough to use the table. The grackles have nests up river and will take complete sandwich pieces and fly off to feed their young. One, or possibly both, of the crows have learned to wait perched in a tree until a grackle heads off with a piece of food. It then swoops down and follows the grackle with surprising speed and agility through the trees. Unless the grackle has too much of a lead it usually gets close enough to force the grackle to drop its load. The crow then swings back and picks up the bread and either eats it on the spot or carries it off across the river. I have never seen the crow actually strike a grackle though careful observation is often obscured by the trees. Coming close seems to be good enough to secure the meal. *L. S. Ryan, 307 Riverwood, Little Falls, Minnesota.*

Mixed Up Phoebe — For several years Eastern Phoebes have nested on a six foot six inch high plate beside the roof rafters on the open side of a shed. The shed is open on two sides and closed on the other two. The rafters are spaced 24 inches apart and the junctions appear identical. In other years no problem has developed. A nest was built and often young were successfully raised. In 1969, the phoebe started building about April 20. However, she started not one, but three nests. They were all located on the right side of the rafter, looking out, and were at consecutive junctions. By May 10 the left hand nest was only a base, but the center and right hand ones were completed. They were not checked for eggs on that date. On May 17 there were 3 eggs in the center nest and two in the right hand one. On June 13 the center nest held 2 just hatched young and 1 egg; the right hand nest still had 2 eggs. On June 24 it was noted that the phoebe was gone. Examination revealed two dead birds, about 4 day old size, and the egg in the center nest and the two eggs in the right hand nest. Whether the female was killed, the young starved to death because of the very cold weather, or whether they died of exposure (possibly with the mother on the 2 egg nest) is not known. During incubation the mother was generally on the center nest, but twice flew from the two egg nest. The hatching of the two young at least 27 days after the final egg was laid was a surprise to me. The second phoebe, presumably the male, disappeared about June 1. Whether he was killed or merely bored into leaving by the long incubation period is not known. I have read of another case of duplicate phoebe nests being completed and eggs being laid in both. These nests were under a bridge and the observer theorized that the fact that one nest was first visible on a down stream approach and the other on an upstream approach was the cause of the confusion. In my case all three nests were equally visible on an approach from the open end of the shed. On an approach from the open side, under and up, all nests could be seen on a wide swing. Perhaps only the closest one would be noticed by the female if her swing was tight. Whether this phoebe's problem was caused by a deficiency in her nest location instinct, or by the chance start of three nests can't be proved. However, the fact that there was no confusion in other years plus the fact that this bird persisted in her lack of orientation, makes me feel that the problem lay in the particular bird. *L. S. Ryan, 307 Riverwood, Little Falls, Minnesota.*

BOOK REVIEWS

BIRDS OF THE EASTERN FOREST: 1 by John A. Livingston and paintings by J. F. Lansdowne 52 color illustrations. 232 pages. Houghton-Mifflin Co., 2 Park Street, Boston, Massachusetts. 1968. \$20.00.

The June 1967 issue of *The Loon* (39:71) contained a review of Livingston's book *Birds of the Northern Forest* containing 56 of Lansdowne's superb paintings. Now the second volume in the series has been published and the plates are equally outstanding with the first volume. This volume contains plates of eighteen waterfowl and shorebirds, ten birds of prey, five woodpeckers, five swallows, four flycatchers and ten others. Of the groups of plates I particularly enjoyed the waterfowl and shorebirds. The very first plate in the book, of the Pied-billed Grebe, especially caught my eye because of the illustrating of the young eggs and nest. The birds of prey plates were excellent as far as the hawks were concerned but in my opinion the owls, of which there were four plates, Barn, Barred, Screech and Saw-whet, left something to be desired. They did not seem to me to depict the birds as they are in the wild, especially as far as the Screech Owl is concerned. With such a talented artist as Lansdowne it hardly seems fair to criticize this well done book because generally the plates are excellent. From the more unusual standpoint I was happy to see an illustration of the King Rail, a species that is seldom treated in a book such as this. As in the *Birds of the Northern Forest* the plates are accompanied by sketch plates and one page of text for each of the 52 plates. The text generally enhances the plates and Mr. Livingston has provided many pages of interesting reading. One bit of new interest to me was the comment on the Chimney Swift and page where it is stated that they are solitary, not colonial, nesters. I was always under the impression that many pairs used a single chimney or hollow tree for nesting. For the number of Chimney Swifts in this area there certainly are more suitable nesting chimneys than I ever dreamed! The plates are beautifully reproduced and this volume should certainly be classed as a "must" for the general bird-watcher.

—Editor

NOTE

The September 1968 issue of "The Loon" contained a Book Review for the books "Combination List for Birds of North America and Traveler's List and Check List for Birds of North America." The Academy Press of Maitland, Florida was listed as the publisher of the books. It has come to our attention that the Academy Press did not fill orders for these books. For those interested in obtaining the books they are available from the author, Mr. James A. Tucker, Route 4, Box 218B, Austin, Texas 78757 or The Audubon Store, P.O. Drawer 7, Maitland, Florida 32751. The Combination List is available for \$2.00 and the Traveler's List at \$1.00.

SUGGESTIONS TO AUTHORS

1. The editor welcomes manuscripts for possible publication. If possible, manuscripts should be typed double-spaced on one side of the paper. Only in that form can they go to the printer. Send manuscripts to the editor's address.

2. Most main articles should run about four to six pages of double-spaced typing. Longer or shorter articles may be accepted, however.

3. Articles should be about birds in Minnesota, about species that occur in Minnesota, about Minnesota natural history, or related topics.

4. *The Loon* is one type of scientific journal. Yet, most of our readers are not scientists. Some are school children. To get your message across, therefore, adopt a somewhat informal, easy-to-read style. We welcome warmth but not sentimentality. A narrative in which the author appears as a main character (though unobtrusively) often is the best type of article. Or an account that states a problem, then shows how the problem was overcome, can be highly successful. But keep sentences short. Use common names of birds, and avoid or define scientific words that will be unfamiliar to readers.

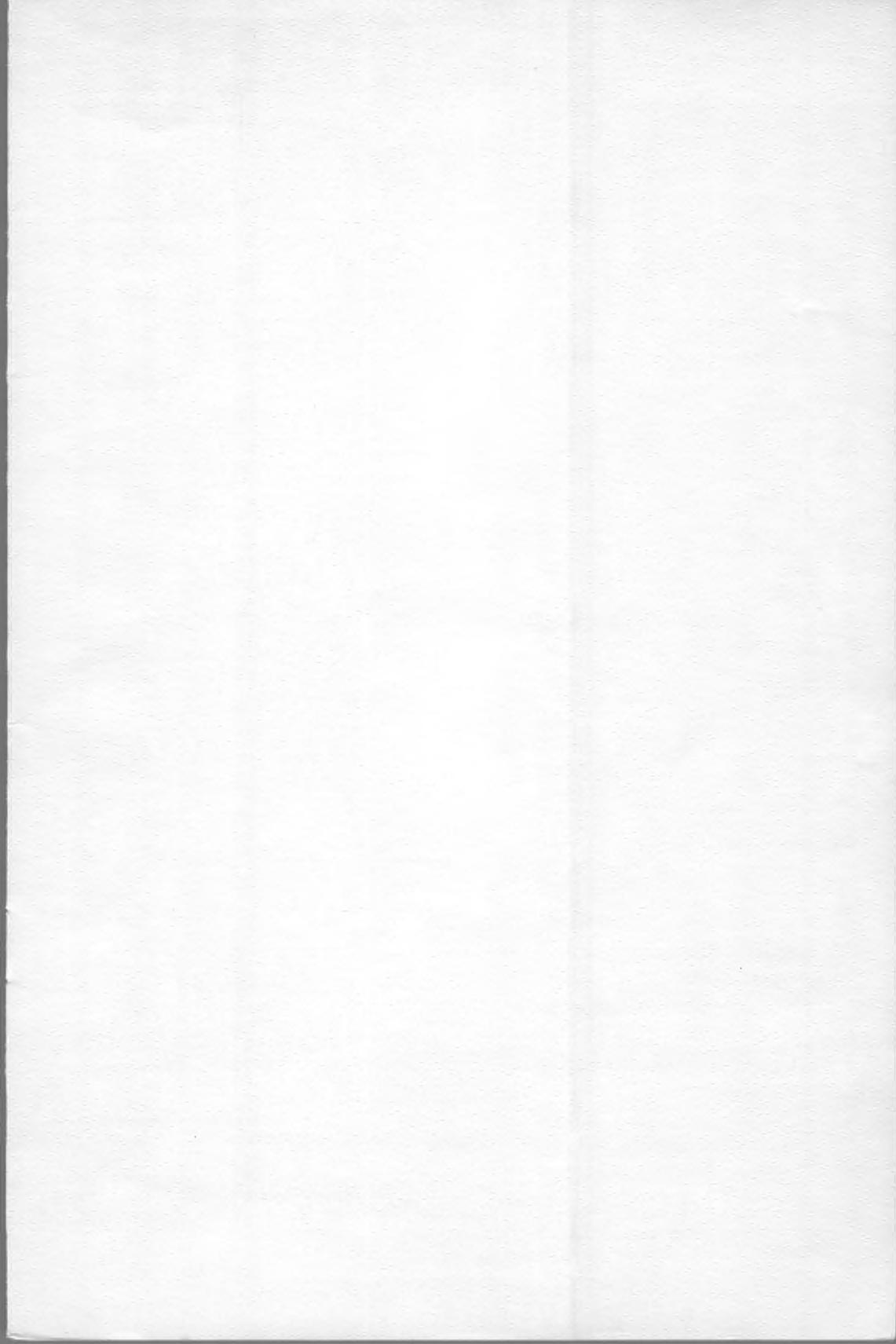
5. Get right to the main point, and make every word count.

6. Humor would be most welcome if it comes naturally to the topic and does not involve exaggeration or other inaccuracies.

7. "Notes of Interest" are any short observations that you think would interest other members. They, too, should be accurate, easy-to-read, and compact.

8. Opinion articles ordinarily are written only by the MOU president and the editor. But the editor is willing to consider occasional opinion articles from other members.

9. The editor would like to hear from any members who have suggestions regarding *The Loon*. The president welcomes suggestions about the MOU.



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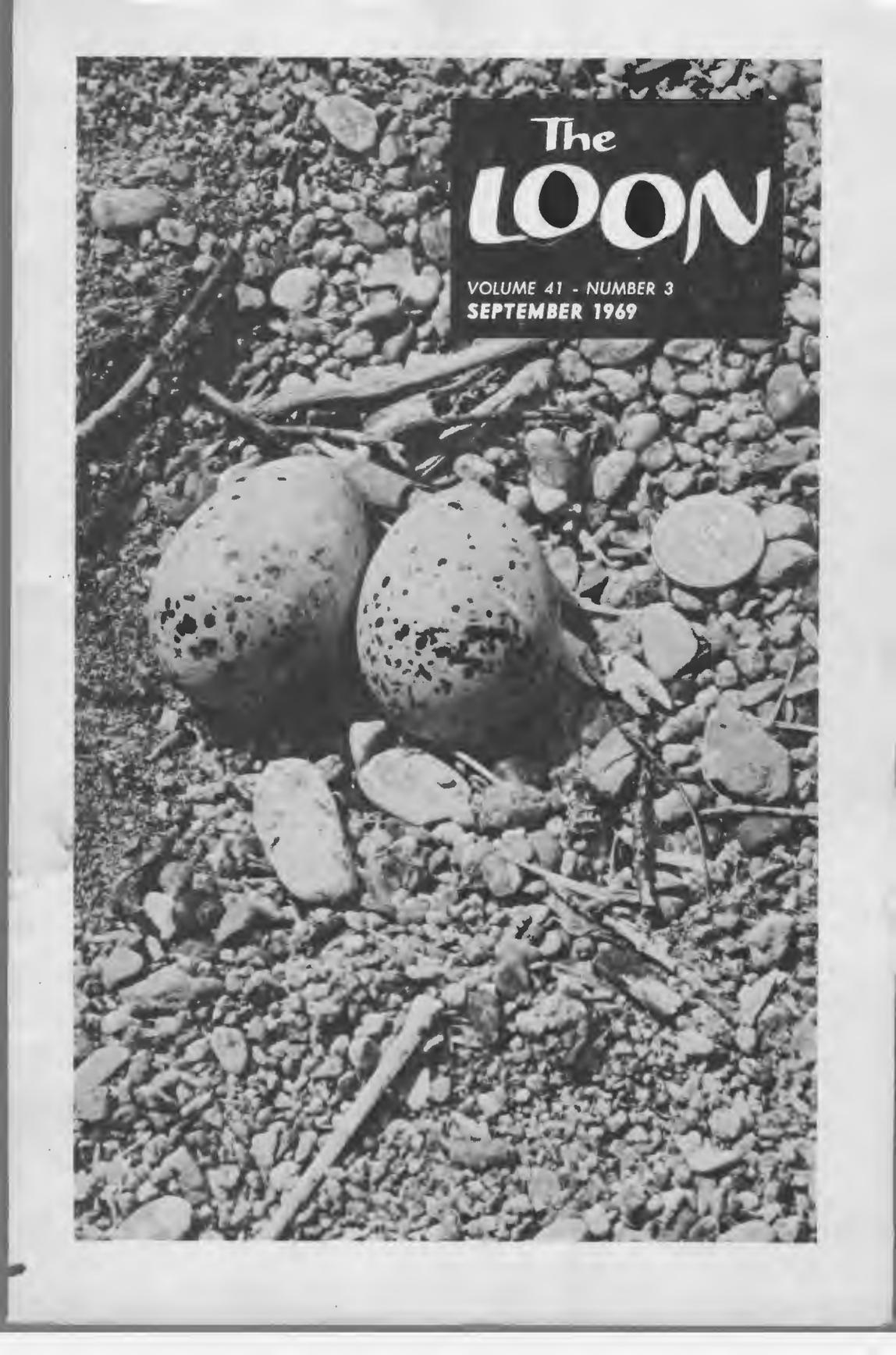
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A black and white photograph of two speckled bird eggs resting on a ground covered with small, smooth stones and twigs. The eggs are light-colored with numerous dark spots. The background is a dense field of similar stones and twigs, creating a textured, natural setting.

The LOON

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SEPTEMBER 1969

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Caspian Tern nest and eggs Leach Lake. (see article page 83)

The LOON Organ of the Minnesota

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PURPOSE OF THE M.O.U.

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 M.O.U. officers wish to point out to those interested in bird conservation that any or all phases of the M.O.U. program could be expanded significantly with gifts, memorials or bequests willed to the organization.

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The President Writes . . .

THE MOU IS YOUR ORGANIZATION

The MOU is meant to be a democratic group, responsive to the needs and wishes of its members. Every member and affiliate member has a voice—at least indirectly—in determining the policies and actions of the MOU. I hope many of you will take an active part in determining these policies and actions.

Those of you who hold only affiliate MOU membership (through your membership in an affiliated local bird group) can use your influence to pick a good representative of your affiliate group as a member of the MOU Board of Directors. Then you can help instruct that Board member in what topics to bring up at Board meetings.

If you pay dues directly to the MOU and thus hold full membership in the MOU, you can attend the annual meeting each December, speak up, and vote during the business meeting that forms an important part of the day-long program.

If you devote some of your time and talent to working for the MOU, doubtless you will soon hold an office and thus exert your influence. We need plenty of people with time and talent to help run this organization. No one is paid to work for the MOU, but such work can bring you considerable satisfaction. After all, the MOU is an important group even though it is small compared with many other organizations.

Besides choosing and instructing members of the Board and voting at our annual meeting, you can also influence the course of the MOU in another way. At our field trip last spring I promised to solicit suggestions from members and to pass them along to the MOU Board. Accordingly, I hope you will write to me, listing any suggestions you have that will make the MOU a better organization.

I can't promise that all suggestions will be adopted, but I will promise that I will summarize all suggestions that members send in and that I will present them to the Board at our next meeting. Some suggestions of yours may be cancelled out by opposite suggestions from other members. Some may be impracticable for budget reasons or because we lack the manpower (and womanpower) to carry them out. Some suggestions may not appeal to the Board. But I assure you that any suggestions that you send to me will be given due consideration. If you have several suggestions, please put them in separate, numbered paragraphs to make understanding easier.

I don't want to limit your suggestions along a few channels, but I ought to point out that (unless we change the MOU) our main business is to keep records of the occurrence and distribution of birds in Minnesota, to publish THE LOON, and to publish the MOU NEWSLETTER, and to organize field trips and meetings. Therefore your suggestions on how to do these things better are likely to be helpful.

Suggestions for new ventures are most welcome, of course. But ambitious new ventures that require considerable time, effort, and money may be unworkable—unless of course a number of you volunteer to contribute the necessary time, effort, and money.

I'll look forward to hearing from you.

Robert E. Turner
Box 66
Shafer, Minn. 55074

MINNESOTA'S FIRST BAND-TAILED PIGEON

by Ernest H. Strubbe

One day during the second week of July, 1969, Dick Wagner noticed a strange bird on his farm just east of Morris, Minnesota. He recognized it as a pigeon, but it was not like a pigeon he had ever seen before. It would gorge itself on ripening cherries from a tree in the Wagner orchard, then fly to a perch, usually quite high up in a tree that towered up behind and over the Wagner home. This routine was followed by the bird, with only a few exceptions, during the entire time of its stay in the area, which was nearly two weeks. Vegner Hustad, of Starbuck, Minnesota, Park Ranger of Glacial State Park south of Starbuck, was the first to identify this bird as a Band-tailed Pigeon. He asked Dick Wagner to notify me, which was done. Later the bird was also ob-

served by Dick Grant of the U of M, and Frank Breen of Morris. We all verified Vegner's identification, based on the following details. In size it was a trifle larger than a common barnyard pigeon, though possibly not quite so heavily built. Its tail was square with a wide light band covering about the terminal half of its length. Then followed a narrow blackish band, next to the medium gray of the basal part of the tail. The bill and feet were a bright yellow, the bill having a black or dark tip. A white half collar was plainly evident around the upper hind neck. Below this was a small area of iridescent feathers showing green to gold reflections, in good light. These feathers were probably edged with black, as the general appearance was of a scaly effect. The "raspberry" tint



Band-tailed Pigeon at Morris. Photo by E. H. Strubbe



Band-tailed Pigeon at Morris. Photo by E. H. Strubbe

of the head and lower body feathers was only slightly evident, as the bird was usually observed high in a tree with cloudy skies, or from a back-lighted position. However, Dick Wagner stated that on a few occasions when he saw the bird in good sun at close range, the colors were quite prominent, including a golden iridescence on the shoulders. The eye-ring was red, as shown in the books, but

the eye was quite dark, close to the illustration on page 208 of "American Water and Game Birds" (Rand). At any rate it was far from the light or bright yellow eye usually given this bird by the illustrators of our bird books. On July 26 it was reported to me that the bird had been missing from the Wagner farm for several days. Maybe it will turn up in some other 'new' locality. **Alberta, Minn.**

THE SPRING SEASON

March 1 — May 31, 1969

by Josephine Herz and Rachel Tyron

In Southern Minnesota the winter was characterized by very heavy snow which stayed on the ground through March. Then, a sudden change, with snow melting off in a week, came in early April. Very early reports on number of individual birds were rath-

er disappointing although most of the usual species appeared.

In this report we have tried to indicate two early dates south and north and, in the case of migrants not nesting, one or two late dates south or north. The dates are in chronological

order. We have not used the word "early" and have used the word "late" only (1) when "late dates only" were required or (2) when "late dates east or northeast" were asked for. We have tried to include two concentrations if present. A few very common residents have been omitted. For others less common just the counties reporting them are listed.

Common Loon: 4-6 Wabasha Co., DGM; 4-7 Anoka Co., DS; 4-15 (5) Mille Lacs Co., MI; 4-19 St. Louis Co., NJH.

Red-throated Loon: 5-1 St. Louis Co., MMC; and 5-21 (3) St. Louis Co., MMC; only reports.

Red-necked Grebe: 4-14 Lake Co., JCG; 4-18 Wabasha Co., DWM; 4-19 (4) Carver Co., KP; 5-9 Cook Co., RLG.

Horned Grebe: 4-5 Dakota Co., EMB; 4-8 Hennepin Co., FN/MAS and VL; 4-11 Morrison Co., LSR; 4-15 St. Louis Co., MMC.

Eared Grebe: 5-3 Becker Co., EGA; 5-24 Lac Qui Parle Co., DB.

Western Grebe: 4-25 Carver Co., RDT; 5-1 Lac Qui Parle Co., BL.

Pied-billed Grebe: 3-22 Dakota Co., BL, RBJ, and Winona Co., BT; 4-12 Aitkin Co., JCG; 4-13 (8) St. Louis Co., MMC.

White Pelican: 4-12 Big Stone Co., DB, BL; 4-13 (100's) Nobles Co., HSH; 4-20 (175) Cottonwood Co., LAF.

Double-crested Cormorant: 3-13 Winona Co., BT; 4-5 (7) Goodhue Co., BL; 4-22 Duluth, PBH; 5-2 (11) Lake Co., MMC.

Great Blue Heron: 3-19 (5) Rice Co., OAR; 3-23 (6) Dakota Co., FN/MAS, VL and Mille Lacs Co., MI; 4-6 Beltrami Co., JM, and Kanabec Co., RHJ.

Green Heron: 4-29 Washington Co., DS; 4-30 Mille Lacs Co., MI; 5-3 Dakota Co., RBJ, and Winona Co., JJ, BT.

Common Egret: 4-1 Wabasha Co., BT; 4-7 Dakota Co., BL, and Hennepin Co.,

FN/MAS; 4-13 (50) Wabasha Co., EIS; 5-25 (29) Washington Co., DS.

LITTLE BLUE HERON: 5-9 and 10 (1 adult) Goodhue Co., Frontenac, RBJ, BL, RG, HFH, and RH.

CATTLE EGRET: 5-17 (1 adult) Salt Lake, Lac Qui Parle Co., R & EC, and (2 adults) Swan Lake, Nicollet Co., HFH.

Black-crowned Night Heron: 4-13 Lac Qui Parle Co., JLS; 4-16 McLeod Co., MHM; 5-3 (276) Nicollet Co., DB; 5-11 (125) St. Paul, MIG.

Yellow-crowned Night Heron: 5-15 (2) Houston Co., FL; 5-17 (3) Houston Co., BT; 5-20 (3 ad., 1 im.) Houston Co., FL.

Least Bittern: 5-6 Winona Co., BT; Duluth, MMC; 5-30 Brown Co., DMF.

American Bittern: 4-5 Hennepin Co., CU; 4-15 Duluth, PBH; 4-19 Chisago Co., FVS; and Anoka Co., BAP; 4-21 Mille Lacs Co., MI.

Whistling Swan: 3-20 Wabasha Co., DWM; 3-30 Hennepin Co., EIS; 4-8 (800) Wabasha Co., BT; 4-10 Duluth, MMC; 4-11 Mille Lacs Co., MI; 4-12 (500) Duluth, Mrs. H. R. Sims, **file** JCG; 4-25 Nicollet Co., DMF; 5-17 Mille Lacs Co., MI; 5-18 Sherburne Co., KP; 5-24 Cook Co., MMC.

Canada Goose: 3-1 Olmsted Co., CCW; 3-10 Ramsey Co., JJ; 4-6 (100+) Wright Co., BAP, and (300) Washington Co., DS; 4-10 Mille Lacs Co., MI; 4-12 Duluth, RL; 5-26 (125) Cook Co., OP.

White-fronted Goose: 3-13 Rochester, Olmsted Co., CCW.

Snow/Blue Goose: 4-6 Washington Co., WWL; 4-12 (50) Mille Lacs Co., MI, and (flock) Nobles Co., HSH; 4-13 (500+) Lac Qui Parle Co., JLS; 4-19 Kanabec Co., JLS.

Mallard: 3-8 Hennepin Co., CKS; 3-17 (100+) Worthington, HSH; 3-24 (80) Watonwan Co., EDK; 4-6 Cass Co., JAM; 4-8 St. Louis Co., MH.

Black Duck: 4-10 Duluth, MMC; 4-12 (4) Aitkin Co., JCG, and Duluth, RL;

4-15 (10) Duluth, PBH; late S., 4-20 Wabasha Co., DWM.

Gadwall: 3-24 Blue Earth Co., HBT; 4-1 Winona Co., BT; 4-5 (20) Waseca Co., WF.

Pintail: 3-18 Carver Co., THH; 3-27 Winona Co., BT; 4-5 (27) Waseca Co., WF; 4-6 (10) Washington Co., WWL; 4-19 St. Louis Co., JGH; 4-25 Aitkin Co., MMC; late E., 5-21 Wabasha Co., DWM; 5-24 Waseca Co., EIS.

Green-winged Teal: 3-22 Wabasha Co., DWM; 3-29 Winona Co., BT; 4-10 (12) Roseau Co., PEB; and Morrison Co., LSR; late E., 5-10 Sherburne Co., CU; 6-3 Ramsey Co., JJ.

Blue-winged Teal: 4-1 Winona Co., BT; 4-5 Freeborn Co., BL, and Blue Earth Co., HBT; 4-18 (14) Watonwan Co., EDK; 4-10 Mille Lacs Co., MI; 4-13 Duluth, JCG.

CINNAMON TEAL: 5-17 (1 m.) Frog Lake, Stevens Co., RBJ, RG, THH.

American Widgeon: 3-29 Winona Co., BT; 4-5 Faribault Co., BL; 4-12 Cass Co., JAM; 4-15 Duluth, PBH; late E., 5-19 Ramsey Co., JJ.

Shoveler: 3-23 Dakota Co., EMB, VL; 4-1 Winona Co., BT; 4-12 Cass Co., JAM, and Mille Lacs Co., MI; late E., 5-21 Lake Co., MMC.

Wood Duck: 3-23 Hennepin Co., DB; 3-27 Minneapolis, VL; 3-30 (12) Le Sueur Co., HBT; 4-8 Mille Lacs Co., MI; 4-9 Roseau, P. G. Watt, PEB.

Redhead: 3-22 Dakota Co., BL, DB, and (24) Wabasha Co., DWM; 4-15 Mille Lacs Co., MI; 4-19 St. Louis Co., JHG; Late E., 5-17 Duluth, JCG.

Ring-necked Duck: 3-17 (20+) Worthington, HSH; 3-18 Rice Co., OAR; 4-5 (40) Waseca Co., WF; 4-8 Mille Lacs Co., MI; 4-12 St. Louis Co., RL.

Canvasback: 3-22 Wabasha Co., DWM; 3-28 Winona Co., BT; 4-6 (12) Carver Co., VL; 4-12 St. Louis Co., RL; 4-15 Mille Lacs Co., MI; 4-17 (8) Duluth, PBH; late E., 5-17 Duluth, MMC.

Greater Scaup: 3-27 Winona Co., BT; 4-9 Duluth, MMC; 4-11 Washington Co., BL; 4-15 (6) Duluth, PBH; 4-17 (100) Duluth, PBH; Late E., 4-26 Stearns Co., DS; 6-1 Duluth, MMC.

Lesser Scaup: 3-17 Nobles Co., HSH; 3-22 Winona Co., BT, Wabasha Co., DWM, Dakota Co., DB & RBJ, and Hennepin Co., DMB; 4-5 (300) Waseca Co., WF; 4-12 St. Louis Co., RL, and Aitkin Co., JCG; 4-25 (500) Wabasha Co., DWM; late E., 5-27 Ramsey Co., EC; 6-9 Duluth, MMC.

Common Goldeneye: 3-9 (20) Dakota Co., VL; 4-12 (15) Washington Co., JAJ; 4-15 (500) Duluth, PBH.

Barrow's Goldeneye: 3-9 (pair) Hennepin Co., across from Black Dog, VL; 4-6 Lake Vadnais, Ramsey Co., LAF (no details) JJ.

Bufflehead: 3-25 Rice Co., OAR; 3-28 Winona Co., BT; 4-12 St. Louis Co., RL; 4-14 (12) Lake Co., JCG; 4-28 Washington Co., DS; 5-11 (30) Duluth, JCG; 6-4 Duluth, MMC.

Oldsquaw: 4-7 (6) Cook Co., RIG; 5-7 (5) Lake Co., RK.

White-winged Scoter: 5-9 Minneapolis, EIS; 5-7 Duluth, MMC; 5-8 Duluth, JCG, PBH; 5-21 (42) Cook Co., MMC; 6-4 to 11 Duluth, JCG; 6-17 Duluth, MMC.

Surf Scoter: 5-6 Duluth, MMC; 5-9 Duluth, JCG; 5-17 Duluth, JCG; 5-19 (7) Duluth, MMC; 5-25 Lake Co., MMC.

Common Scoter: 4-29 (10) Duluth, PBH; 5-5 Duluth, MMC; 5-21 Cook Co., MMC; 5-22, Duluth, PBH.

Ruddy Duck: 3-22 Dakota Co., DB, BL; 3-23 Dakota Co., VL; 4-10 Duluth, MMC; 4-25 (25+) Carver Co., RDT; 5-2 (20) Wabasha Co., DWM.

Hooded Merganser: 3-17 (7) Nobles Co., HSH; 3-21 (7) Wabasha Co., DWM; 3-22 (8) Rice Co., OAR; 4-6 Bemidji, JAM; 4-9 Duluth, MMC.

Common Merganser: Late, 3-22 (100+) Dakota Co., DB; 3-27 (16) Winona Co., BT.

Red-breasted Merganser: 3-16 Nobles

Co., HSH; 3-22 Wabasha Co., DWM; 4-9 (140) Anoka Co., BAP; 4-10 Mille Lacs Co., MI, and Duluth, MMC; 4-22 Minneapolis, FN/MAS; 5-9 (300) Duluth, JCG.

Turkey Vulture: 3-25 (6) Rice Co., OAR; 4-6 Winona Co., BT; 4-19 Kanabec Co., MHM.

Goshawk: 3-2 Wadena Co., R. Olen-schlager, fide JCG; 4-21 Duluth, MMC.

Sharp-shinned Hawk: 3-6 Hennepin Co., DWL; 3-22 Sibley Co., BL; 4-21 Duluth, MMC, and Lake Co., RK; 4-22 Duluth, PBH.

Cooper's Hawk: 3-11 Wabasha Co., DWM; 3-23 Hennepin Co., RBJ; 4-13 Duluth, MMC; 4-21 Lake Co., RK.

Red-tailed Hawk: 3-29 Bemidji, JAM; 4-3 Waseca Co., WF, and Roseau Co., PEB; 4-5 Carver Co., THH; 4-8 Kanabec Co., RHJ; 4-10 (7) Duluth, MMC.

Red-shouldered Hawk: 5-27 (2) Duluth, MMC.

Swainson's Hawk: 4-12 Big Stone Co., BL, DB; 5-3 Goodhue Co., RBJ.

Rough-legged Hawk: Late 4-4 Mille Lacs Co., MI; 4-10 Duluth, MMC; 4-19 Carver Co., KP; 4-23 Washington Co., DMF.

Golden Eagle: 3-30 Winona Co., BT.

Bald Eagle: 3-20 (41) Wabasha Co., BT; 3-23 Duluth, MMC; 3-25 St. Louis Co., NJH; 4-1 (80) Wabasha Co., BT; late 4-7 Wabasha Co., DWM; 4-18 Wabasha Co., DWM.

Marsh Hawk: 3-16 Rice Co., OAR; 3-18 Morrison Co., LSR, and Duluth, JGH; 3-19 Wabasha Co., DWM.

Osprey: 4-1 Winona Co., BT; 4-12 Cass Co., JAM; 4-19 Chisago Co., MIG; 5-3 Goodhue Co., RBJ; and (4) Aitkin Co., RHJ; 5-14 Hennepin Co., DB.

Peregrine Falcon: 4-15 Duluth, J. Brandenberg, fide JCG; 5-2 Winona Co., BT.

Pigeon Hawk: 5-3 Chippewa Co., FN/MAS; 5-27 Washington Co., WFE.

Sparrow Hawk: 4-1 Kanabec Co.,

RHJ, and St. Louis Co., MH; 4-11 (3) Duluth, MMC; 4-19 (3) Lake Co., RK.

Gyr Falcon: 4-24 St. Louis Co., Paul Stein, fide JCG.

Ruffed Grouse: Seen in Wabasha, Anoka, Kanabec, Morrison, Carver, St. Louis, Isanti, Mille Lacs, and Cook Counties.

Greater Prairie Chicken: 3-2 Clay Co., EGA; 3-16 Clay Co., EGA; 5-24 (2) Clay Co., DMF; 5-24 (3) Watonwan Co., DB, KP. ?
mohnomcni

Sharp-tailed Grouse: 3-7 (2) Beltrami Co., BL.

Bobwhite: 1 pr. Rice Co., no date, OAR.

Ring-necked Pheasant: from Wright, Anoka, Swift, Rice, Isanti, Freeborn, Olmsted, Hennepin, Watonwan, Wabasha, Blue Earth, Carver, Nobles, Ramsey, Cottonwood Counties, and 4-1 (pr) St. Louis Co., KS.

Gray Partridge: 3-2 Nobles Co., HSH; 3-18 (2) Dakota Co., EIS, FN/MAS, VL; 3-21 (8) Blue Earth Co., DMF, EDK; 3-22 (2) Blue Earth Co., HBT; 5-7 (2) Faribault Co., EDK.

Sandhill Crane: 4-14 Roseau Co., PEB; PGW; 5-13 Anoka Co., FN/MAS.

Virginia Rail: 5-18 Anoka Co., CKS, and Sherburne Co., DB; 5-25 Watonwan Co., WF.

Sora: 4-13 McLeod Co., DB; 4-23 Carver Co., THH, Waseca Co., WF, and Mille Lacs Co., MI; 5-3 (4) Houston Co., FL, and Bemidji, JAM.

Yellow Rail: 5-24 (2) Mahnommen Co., KP, DB.

Common Gallinule: 5-3 (3) Houston Co., FL; 5-17 Houston Co., BT.

American Coot: 3-20 Dakota Co., RBJ; 3-21 Rice Co., HBT; 4-6 (200) Wabasha Co., DWM; 4-11 St. Louis Co., CLH; 4-17 Duluth, PBH; 4-19 (100's) Chisago Co., FVS.

Semipalmated Plover: 5-1 Lincoln Co., BL; 5-3 (6) Nicollet Co., CKS, KP, DB; 5-8 Duluth, MMC; 5-24 (13) Duluth, PBH; 5-27 Rice Co., FN/MAS; 5-30

Morrison Co., LSR; 6-9 Duluth, MMC.

Piping Plover: 5-24 Duluth, CLH; 6-4 Duluth, MMC.

Killdeer: 3-16 Wright Co., BAP; 3-18 Watonwan Co., DWM, Dakota Co., EIS, FN/MAS, and Rice Co., OAR; 4-4 Duluth, JCG, and Lake Co., RK; 4-7 (10) Roseau Co., PEB; 4-29 (10) Duluth, PBH.

American Golden Plover: 5-6 Waseca Co., WF; 5-7 Watonwan Co., EDK; 5-15 (100's) Lincoln Co., BL; 5-16 (500) Traverse Co., RBJ; 5-21 Duluth, MMC; 5-24 Lac Qui Parle Co., DB; 5-25 Lac Qui Parle Co., JLS.

Black-bellied Plover: 5-1 Hennepin Co., EMB; 5-6 Waseca Co., WF; 5-16 Traverse Co., RBJ; 5-17 (8) Lac Qui Parle Co., PEC; 5-19 Duluth, MMC; 5-24 (13) Beltrami Co., EIS, and Mahanomen Co., DB; 5-25 Lac Qui Parle Co., JLS; 6-3 Carver Co., JH, RDT.

Ruddy Turnstone: 5-16 Traverse Co., RBJ; 5-17 Lac Qui Parle Co., PEC; 5-23 Wabasha Co., DWM; 5-24 (10) Duluth, CLH, and (30) PBH; 5-25 Lac Qui Parle Co., JLS; 5-26 St. Louis Co., RL.

American Woodcock: 3-28 Watonwan Co., EDK, and Rice Co., D. Campbell, **vide** JCG; 4-4 St. Louis Co., JGH; 4-6 St. Louis Co., LTM; 4-11 (5+) Wabasha Co., BL, WWL.

Common Snipe: 3-22 Blue Earth Co., HBT, Scott Co., RBJ, and Dakota Co., EMB; 4-8 Kanabec Co., RHJ; 4-13 (17) McLeod Co., FN/MAS, Mille Lacs Co., MI, and Duluth, MMC; 4-14 (15) Roseau Co., PEB.

Whimbrel: 5-23 (10) Cook Co., MA; 5-24 (22) Duluth, CLH, RL, PBH.

Upland Plover: 5-2 (5) Watonwan Co., EDK; 5-4 Wilkin Co., EC, and Mpls., FN/MAS; 5-5 Duluth, JCG; 5-30 (4) Clay Co., DMF.

Spotted Sandpiper: 4-26 Winona Co., BT; 4-30 Duluth, MMC; 5-1 Lincoln Co., BL; 5-8 Duluth, MMC, and Cook Co., MA; 5-10 (12) Washington Co., WWL; 5-24 (25+) Duluth, CLH.

Solitary Sandpiper: 4-26 Wright Co., EIS; 4-27 Waseca Co., WF; 4-29 (10+) Watonwan Co., EDK; 5-7 Lake Co., RK; 5-8 Cook Co., MA; 5-18 Anoka Co., CKS, and Nobles Co., HSH; 5-25 Washington Co., DS.

Willet: 5-12 Hennepin Co., EIS; 5-15 Lincoln Co., BL; 5-22 Duluth, RL; 5-24 Duluth, CLA, PBH.

Greater Yellowlegs: 4-5 Freeborn Co., BL; 4-8 Carver Co., MHM, FN/MAS; 5-2 Mille Lacs Co., MI; 5-5 (35) Duluth, JCG; 5-14 (18) Goodhue Co., FN/MAS; 5-18 Olmsted Co., CCW; 5-24 Duluth, RL.

Lesser Yellowlegs: 4-13 McLeod Co., FN/MAS, and Duluth, MMC 4-18 Watonwan Co., EDK; 4-19 (50+) Nobles Co., HSH; 5-2 Mille Lacs Co., MI; 5-7 (33) Duluth, HM; 5-14 Goodhue Co., FN/MAS, WKE; 5-20 Cook Co., MA.

Knot: 5-22 Willmar, Kandiyohi Co., DB; 5-22 Mpls., EIS, FN/MAS, RBJ; 5-24 Superior, Wis., CLH; 5-29 Duluth, BL; 6-1 Duluth, MMC.

Pectoral Sandpiper: 4-13 Wabasha Co., DWM, and McLeod Co., FN/MAS; 5-3 (100's) Nicollet Co., KP; 5-7 (100+) Wabasha Co., DWM; 5-23 Wabasha Co., DWM; 5-24 Kandiyohi Co., KP, and Duluth, PBH.

White-rumped Sandpiper: 4-27 Clay Co., EGA (exceptional); 5-11 Winona Co., BT; 5-15 (10+) Lincoln Co., BL; 5-16 Traverse Co., RBJ; 5-24 Kandiyohi Co., DB, and (25) Duluth, CLH; 5-25 (10+) Carver Co., JH, RDT.

Baird's Sandpiper: 5-2 Hennepin Co., EIS; 5-11 (12) Carver Co., VL; 5-24 Kandiyohi Co., DB, and (25+) Duluth, CLH; 5-25 Carver Co., JH, RDT.

Least Sandpiper: 4-26 Cook Co., RIG; (no details) 5-3 Houston Co., FL; 5-4 Hennepin Co., EMB; 5-7 (20+) Watonwan Co., EDK; 5-17 Duluth, MMC; 5-25 Washington Co., DS; 5-30 (20) Pope Co., WH.

Dunlin: 5-4 Hennepin Co., EMB; 5-5 Nicollet Co., BL; 5-20 Duluth, RL; 5-24 (150+) Duluth, CLH, PBH; 5-25 (25+) Carver Co., JH, RDT, and (18) Wash-

ington Co., DS; 5-27 Rice Co., FN/
MAS; 5-31 Pine Co., MIG; 6-1 Duluth,
JCG.

Long-billed Dowitcher: 5-14 Goodhue
Co., WKE; 5-17 (21) Wabasha Co., BT;
5-24 (7) Marshall Co., EIS.

Short-billed Dowitcher: 5-3 (20) Wright
Co., CKS, and Nicollet Co., KP, DB;
5-16 Wilkin Co., RBJ; 5-27 Duluth,
PBH; 6-1 Duluth, JCG.

Stilt Sandpiper: (only reports) 5-15
(4) Lincoln Co., BL; 5-16 (4) Winona
Co., BT.

Semipalmated Sandpiper: 5-4 Carver
Co., VL, and Hennepin Co., EMB; 5-5
Hennepin Co., EIS; 5-24 (50+) Duluth,
CLH, PBH; 5-30 Pope Co., WH; 6-1
(500) Duluth, JCG; 6-3 Ramsey Co.,
JJ; 6-4 Duluth, MMC.

Marbled Godwit: 4-12 Kandiyohi Co.,
BL, DB; 4-20 Lac Qui Parle Co., FN/
MAS; 5-4 Wilkin Co., EC; 5-16 (85)
Wilkin Co., RBJ; 5-30 (10+) Clay Co.,
DMF.

Hudsonian Godwit: 5-16 (5) Wilkin
Co., RBJ; 5-17 (10) Lac Qui Parle Co.,
EC, and Hibbing, HM; 5-24 Beltrami
Co., EIS; 5-31 Pine Co., MIG, 6-4 Du-
luth., MMC.

Sanderling: 5-2 Washington Co., DS;
5-4 Hennepin Co., EMB; 5-19 Lac Qui
Parle Co., BL; 5-22 Duluth, PBH; 5-24
(150+) Duluth, PBH, and (50+) CLH;
5-30 Morrison Co., LSR.

Wilson's Phalarope: 4-27 Waseca Co.,
WF; 4-29 Watonwan Co., EDK; 5-1
(90) Lac Qui Parle Co., BL; 5-18 Anoka
Co., CKS, and Sherburne Co., DB; 5-
21 Cook Co., MMC; 5-24 Mahnomen
Co., KP; 5-31 Clay Co., DMF.

Northern Phalarope: 4-27 Carver Co.,
WHM; 4-30 Carver Co., RDT; 5-4 (4)
Wilkin Co., EC; 5-24 (24) Lac Qui
Parle Co., DB, and Cook Co., MMC.

Glaucous Gull: 3-2 (1 ad.) Lake Co.
MMC; 3-8 (1 juv.) Duluth, JCG; 4-30
(1 juv.) JCG.

Herring Gull: 3-19 Nobles Co., HSH,
and Mpls., EMB; 3-22 Goodhue Co.,

EIS; 4-5 (20) Chisago Co., FVS, St.
Louis Co., NJH, and Mille Lacs Co.,
MI; 4-20 (15) Washington Co., DS; 4-
22 Hibbing, HM; 5-3 Kanabec Co.,
RHJ; 5-24 (10+) Roseau Co., EIS; 5-25
Washington Co., DS.

Ring-billed Gull: 3-19 Dakota Co.,
EMB; 3-20 Wabasha Co., DWM; 4-6
Cass Co., JAM; 4-11 Mille Lacs Co.,
MI; 5-9 (400) Wabasha Co., DWM; 5-27
Wabasha Co., DWM; 5-24 Roseau Co.,
EIS; 6-3 (100) Ramsey Co., JJ.

Franklin's Gull: 4-5 Freeborn Co., BL;
and Nobles Co., HSH; 5-8 (15) Henne-
pin Co., WKE; 5-24 (500+) Marshall
Co., EIS.

Bonaparte's Gull: 4-12 Wabasha Co.,
DWM, and Carver Co., MHM; 5-6 Du-
luth, MMC; 5-8 (2,000) Duluth, KS;
5-12 (2000) Duluth, MMC; 5-14 Mpls.,
CLH; 6-1 (100's) Clearwater Co., Dwain
Warner; 6-4 Duluth, MMC.

Forster's Tern: 4-15 Nobles Co., HSH;
4-17 Hennepin Co., RBJ; 4-26 (7)
Wright Co., EIS; 5-3 Becker Co., EGK.

Common Tern: 4-21 Wabasha Co.,
DWM; 4-30 Hennepin Co., VL; 5-6 Du-
luth, MMC; 5-8 Duluth, PBH; 5-20 (45)
Houston Co., FL; 5-23 Hennepin Co.,
RDT; 5-24 (50+) Beltrami Co., EIS; 5-
27 Wabasha Co., BT.

Caspian Tern: 5-13 Duluth, PBH; 5-22
(47+) Duluth, RL; 5-25 Goodhue Co.,
EMB; and Duluth, MMC; 5-27 Wabasha
Co., BT; 5-29 Duluth, BL; 6-3 Ramsey
Co., JJ.

Black Tern: 5-2 Kanabec Co., RHJ;
5-5 Nicollet Co., BL; 5-6 (30) Carver
Co., THH, Washington Co., WHL, Wa-
basha Co., DWM, Ramsey Co., JJ, and
Mpls., KP; 5-18 (60) Washington Co.,
DS; 5-16 Mille Lacs Co., MI.

Mourning Dove: 3-9 Wabasha Co.,
DWM; 3-13 Washington Co., WHL; 4-
11 Duluth, JCG; 4-19 Cass Co., JAM;
5-10 (20) Rice Co., JAJ; 5-18 (30) Wash-
ington Co., DS.

Yellow-billed Cuckoo: 5-17 Hennepin
Co., VL; 5-20 Hennepin Co., DB, MHM,
EIS; 5-28 Lake Co., JJ.

Black-billed Cuckoo: 5-16 Waseca Co., WF, Winona Co., BT, and Hennepin Co., RBJ; 5-27 (6) Hennepin Co., EIS.

Screech Owl: seen in Hennepin, Morrison, Rice, Washington, and Watonwan Counties.

Great Horned Owl: seen in Blue Earth Carver, Kanabec, Kandiyohi, Mille Lacs, Nobles, Olmsted, Ramsey, Rice, St. Louis, Wabasha, Waseca, Washington, and Winona Counties.

Snowy Owl: 5-9 (1) Duluth, 50th Ave. and Superior St.; LTM and D. Hojnachi *vide* PBH.

Hawk-Owl: 3-23 Zim, St. Louis Co., Bill Martin, *vide* NJH.

Barred Owl: seen in Becker, Goodhue, Hennepin, Rice, Roseau, St. Louis, Wabasha and Winona Counties.

Great Gray Owl: 3-14-15 (1, died) Washington Co., WWL. See also June issue.

Long-eared Owl: 4-11 Winona Co., BT; 4-18 Falcon Heights, Ramsey Co., E. Hallanger, *vide* JCG.

Short-eared Owl: 3-25 (1) Mahnomen Co., DMF, EDK; 5-24 (1) Mahnomen Co., DB.

Boreal Owl: See June issue

Saw-whet Owl: 3-24 (1) Washington Co., Jane Olyphant, *vide* WWL; 5-7 (1) Duluth, JCG.

Whip-poor-will: 5-6 (2) Washington Co., WHL; 5-14 Winona Co., BT; 5-27 Wabasha Co., DWM.

Common Nighthawk: 4-30 Anoka Co., BAP; 5-3 St. Louis Co., NJH; 5-6 Houston Co., BL, Wabasha Co., DM and Washington Co., WHL; 5-17 Becker Co., RBJ; 5-18 (60) Anoka Co., CKS, and (35) Washington Co., DS.

Chimney Swift: 4-24 Jackson Co., HSH; 4-29 Winona Co., BT, and Hennepin Co., KP; 5-1 St. Louis Co., MMC; 5-3 St. Louis Co., NJH; 5-19 (12) Mille Lacs Co., MI.

Ruby-throated Hummingbird: 5-7 Goodhue Co., FN/MAS, and St. Louis

Co., KS; 5-8 Chisago Co., FVS; 5-14 Cook Co., OP.

Belted Kingfisher: 3-15 Hennepin Co., EIS; 3-21 Winona Co., BT; 4-3 Kanabec Co., RJH; 4-10 Duluth, MMC, and Cook Co., RIG; 4-17 (5) St. Louis Co., PBH.

Yellow-shafted Flicker: 3-1 Blue Earth Co., HBT; 3-3 Wabasha Co., DWM; 4-4 Mille Lacs Co., MI; 4-9 Kanabec Co., RHJ and Cook Co., OP.

Pileated Woodpecker: reported from Becker, Blue Earth, Cook, Dakota, Goodhue, Hennepin, Lake, Mille Lacs, Pine, Ramsey, Rice, Wadena, Washington, and Winona Counties.

Red-bellied Woodpecker: reported from Anoka, Blue Earth, Carver, Goodhue, Hennepin, Olmsted, Rice, Waseca, Watonwan, Winona and Wright Counties. Also Nobles Co., HSH, Morrison Co., HD; 3-1 Chisago Co., FVS; 3-17 Kanabec Co., RHJ; 5-10 St. Croix St. Park, Pine Co., BAP; 5-16 Duluth, JCG.

Red-headed Woodpecker: W. or N. only; 3-17 Kanabec Co., RHJ; 5-3 Nobles Co., HSH; 5-8 Pope Co., WH; 5-10 Bemidji, JAM, and Duluth, JCG.

Yellow-bellied Sapsucker: 4-7 Mpls., CLH; 4-8 (3) Hennepin Co., EIS, FN/MAS, VL, and Mille Lacs Co., MI; 4-9 Duluth, MMC; 4-22 (3) Mille Lacs Co., DMF; 5-10 Rice Co., JAJ; 5-18 Cottonwood Co., LAF.

Black-backed Three-toed Woodpecker: 5-24 Itasca Co., HM.

Eastern Kingbird: 5-4 Wabasha Co., DWM, and Nobles Co., HSH; 5-5 Lake Co., RK; 5-17 Beltrami Co., JAM; 5-24 (10) Duluth, CLH.

Western Kingbird: 5-16 Kandiyohi Co., RBJ; 5-17 Wabasha Co., BT, Nobles Co., HSH, Kandiyohi Co., RHJ, EIS, and Kanabec Co., RHJ.

Great Crested Flycatcher: 5-3 Washington Co., DS; 5-4 Hennepin Co., VL; 5-17 (5) Washington Co., DS; 5-19 Kanabec Co., RHJ; 5-24 Itasca Co., HM,

Marshall Co., EIS, and St. Louis Co., NJH.

Eastern Phoebe: 3-27 Winona Co., BT; 4-4 (4) Winona Co., BT; 4-11 Duluth, JGH; 4-12 Aitkin Co., JCG.

Yellow-bellied Flycatcher: 5-4 Becker Co., BAP (no details); 5-14 Mpls., FN/MAS, and Washington Co., WWL; 5-17 Mille Lacs Co., MI; 5-26 Morrison Co., LSR; 5-27 Lake Co., RK; 6-2 St. Paul, MIG.

Trail's Flycatcher: 5-4 Washington Co., WHL; 5-12 Mille Lacs Co., MI; 5-15 Winona Co., BT, and Washington Co., DS; 5-16 Morrison Co., LSR; 5-30 Aitkin Co., EMB; 6-7 Hennepin Co., JH, RDT.

Least Flycatcher: 5-1 Winona Co., BT, and Mpls., DB; 5-4 Morrison Co., LSR; 5-6 Duluth, PBH; 5-16 (5) Washington Co., WHL.

Eastern Wood Pewee: 5-3 Hennepin Co., VL; 5-4 Hennepin Co., EMB, and Morrison Co., LSR; 5-15 Lake Co., RK; 5-17 (6) Kandiyohi Co., EIS; 5-25 (4) Duluth, JCG.

Olive-sided Flycatcher: 5-6 Mpls., DB (exceptional); 5-15 Winona Co., BT, Mpls., FN/MAS, and Mille Lacs Co., MI; 5-19 St. Louis Co., KS; 5-30 Winona Co., EMB; 6-7 Duluth, MMC.

Horned Lark: 2-18 (18) Faribault Co., OAR; 2-24 Washington Co., FVS; 3-1 Morrison Co., LSR, and St. Louis Co., MH; 3-2 (1,000's) Nobles Co., HSH; 3-7 & 8 (100,000's) Beltrami, Marshall, Roseau, Pennington, and Kittson Co.'s, BL.

Tree Swallow: 3-23 Houston Co., FL; 3-26 Winona Co., BT; 4-10 Mille Lacs Co., MI; 4-12 Aitkin Co., JCG, and Duluth, MMC; 5-3 (200) Carver Co., THH; 5-4 Anoka Co., FVS.

Bank Swallow: 4-23 Watonwan Co., EDK; 4-26 Wright Co., EIS; 5-7 (200+) Goodhue Co., FN/MAS, WKE; 5-14 (300+) Goodhue Co., FN/MAS; 5-10 Kanabec Co., RHJ, and Mille Lacs Co., MI.

Rough-winged Swallow: 4-10 Winona Co., BT; 4-23 Carver Co., THH; 5-8

Duluth, PBH; 5-15 Morrison Co., LSR; 5-24 (15) Blue Earth Co., CKS.

Barn Swallow: 4-9 Winona Co., BT; 4-13 Rice Co., OAR; 5-1 Morrison Co., LSR; 5-2 Mille Lacs Co., MI, and Duluth, MMC.

Cliff Swallow: 4-26 Bemidji, JAM; 4-27 Jackson Co., HSH; 4-28 Wabasha Co., DWM; 5-12 Mille Lacs Co., MI; 5-18 (210) Wabasha Co., DWM; 5-24 (200+) Marshall Co., EIS.

Purple Martin: 4-7 Wabasha Co., DWM; 4-9 Olmsted Co., BT; 4-12 Mille Lacs Co., MI; 4-13 (40) Winona Co., BT; 4-21 Kanabec Co., RHJ; 5-3 (20) Wright Co., EIS.

Gray Jay: Reported from Cook, Lake, and St. Louis Counties.

Blue Jay: 3-1 Duluth, MMC; 5-6 Cook Co., MMC, Duluth JCG and (77) PBH; 5-8 (90) Duluth, PBH; 5-19 (76) Cook Co., OP; 5-29 (flock) Cook Co., OP, and (flock) Duluth, JCG.

Black-billed Magpie: 3-27 (2) Red Lake, Beltrami Co., BL.

Common Raven: Reported from Beltrami, Cook, and Lake Counties. Also 5-18 Onamia, Mille Lacs Co., MI.

Common Crow: 3-1 Mille Lacs Co., MI; and Duluth, MMC, JCG; 3-16 (10) Duluth, KS.

Boreal Chickadee: 3-1 (2) Duluth, MMC; 3-24 (4) Duluth, MMC; 4-10 (1) Duluth, MMC.

Tufted Titmouse: Reported from Hennepin, Olmsted, Ramsey, Washington, and Winona Counties.

White-breasted Nuthatch: Reported from Anoka, Blue Earth, Carver, Cook, Cottonwood, Faribault, Jackson, Kanabec, Lake, Mille Lacs, Morrison, Olmsted, Pine, Ramsey, Rice, St. Louis, Wabasha, Waseca, Washington, Watonwan, Winona, and Wright Counties.

Red-breasted Nuthatch: 3-1 Duluth, MMC; 3-8 Hennepin Co., EFH; 3-11 Ramsey Co. JJ; 3-31 (wintered) Hennepin Co., DWL; 4-13 (wintered) Ramsey Co., EL; 5-10 Hennepin Co., KP; 5-22 Hennepin Co., EFH.

Brown Creeper: 3-1 Duluth, MMC; 3-6 (4) Hennepin Co., VL, EIS; 3-16 Mpls., CLH; 4-3 Cook Co., RIG; 5-1 Washington Co., WWL; 5-10 Pine Co., BAP.

House Wren: 4-19 Freeborn Co., RJ; 4-24 Duluth, KS; 4-26 Washington Co., DS, WWL; 4-28 Duluth, MMC; 5-18 (3) Duluth, MMC.

Winter Wren: 4-10 (2) Mpls., EWJ, FN, VL, and Duluth, JCG; 4-11 Hennepin Co., EIS; 4-26 St. Louis Co., NJH; 5-12 St. Paul, MIG; 5-15 Goodhue Co., WKE.

Long-billed Marsh Wren: 4-30 Washington Co., DS; 5-2 Waseca Co., WF; 5-23 St. Louis Co., KS.

Short-billed Marsh Wren: 5-3 Hennepin Co., CLH; 5-10 Goodhue Co., RBJ; 5-12 Mille Lacs Co., MI; 5-14 St. Louis Co., HM; 5-18 (many) Stearns Co., CU; 5-24 (6) Mahnomen Co., DB.

Mockingbird: 4-19 (Nesting site of last year) Royalton, Morrison Co., A. Grewe; 5-8 Tofte, V. Johnson, and Duluth, PBH; 5-9 Mille Lacs Co., TEM; 5-25 Cook Co., MA; 5-27 Duluth, MMC.

Catbird: 4-24 Minneapolis, FN/MAS; 4-25 Hennepin Co., KP; 5-7 Morrison Co., LSR; 5-10 Cook Co., RIG.

Brown Thrasher: 4-18 Wabasha Co., DWM; 4-19 Hennepin Co., EFH; 4-21 Mille Lacs Co., DMF; 4-24 Kanabec Co., RHJ.

Robin: 3-15 Worthington, HSH; 3-16 Watonwan Co., DMF; 3-27 Morrison Co., LSR; 3-29 Kanabec Co., RHJ; 3-23 (100+) Blue Earth Co., HBT; 4-27 (25) Cottonwood Co., LAF.

Wood Thrush: 5-1 Hennepin Co., EFH; 5-3 Winona Co., BT; 5-15 Kanabec Co., RHJ; 5-25 Duluth, JCG.

Hermit Thrush: 4-5 Hennepin Co., CKS; 4-6 Mille Lacs Co., MI; 4-7 Freeborn Co., RJ; 4-13 Mille Lacs Co., JAJ; 4-15 (9) Hennepin Co., FN/MAS; Late S. 4-24 Morrison Co., LSR; 5-22 Ramsey Co., JJ.

Swainson's Thrush: 5-2 Olmsted Co., CCW, and Hennepin Co., DB, FN/MAS; 5-5 Duluth, MMC; 5-9 (10) Watonwan Co., DMF; 5-13 Mille Lacs Co., MI.

Gray-cheeked Thrush: 5-1 Ramsey Co., JJ; 5-2 Minneapolis, FN/MAS; 5-6 Morrison Co., LSR; 5-11 Duluth, JCG; 5-12 (6) Winona Co., BT; 5-24 Olmsted Co., CCW; 5-29 Hennepin Co., EIS; 5-25 St. Louis Co., RL.

Eastern Bluebird: 3-17 Dakota Co., BT; 3-19 Rice Co., OAR; 4-4 (8) Winona Co., BT, and (10) Washington Co., DS; 4-10 Morrison Co., LSR; 4-13 Aitkin Co., RHJ.

Veery: 4-29 Ramsey Co., JJ; 5-5 Nicollet Co., BL, Winona Co.; BT and Washington Co., WHL; 5-7 Mille Lacs Co., MI; 5-10 Pine Co., BAP; 5-13 (5) Hennepin Co., EIS; 5-17 (6) St. Louis Co., RL.

Blue-gray Gnatcatcher: 5-3 Goodhue Co., RBJ; 5-4 Minneapolis, DB.

Golden-crowned Kinglet: 3-22 (10) Hennepin Co., BL, DB; 3-30 Goodhue Co., VL; 4-5 (30) Waseca Co., WF; 4-7 Cook Co., OP; 4-9 Mille Lacs Co., MI; and Duluth, MMC; Late S. 4-17 (20) Winona Co., BT; 4-20 (12) Hennepin Co., JAJ.

Ruby-crowned Kinglet: 4-7 Freeborn Co., RJ, Chisago Co., FVS, Carver Co., THH, and Washington Co., WWL; 4-9 Mille Lacs Co., MI; 4-10 Morrison Co., LSR; 4-27 (40) Winona Co., BT; 5-6 (25) Duluth, PBH; 5-15 Washington Co., DS.

Water Pipit: 4-8 Winona Co., BT; 5-18 Stearns Co., EC.

Bohemian Waxwing: Late N. 3-8 (70) Duluth, KS; 4-9 Duluth, E. Putnam; Late S. 3-30 (150) Carver Co., RBJ; 4-12 (20) Sherburne Co., BL, DB.

Cedar Waxwing: 3-3 Hennepin Co., VL; 3-6 Cottonwood Co., LAF; 3-17 St. Louis Co., NJH; 3-29 (75) Minneapolis, BAP; 3-31 (100) Rice Co., BAP.

Northern Shrike: 3-31 Chisago Co., FVS; 4-2 Cottonwood Co., LAF; 4-12 St. Louis Co., RL; 4-13 Duluth, JCG.

Loggerhead Shrike: 3-22 Faribault, OAR; 4-12 Carver Co., MHM; 5-5 Duluth, MMC; Late N. E. Clay Co., RBJ; 5-26 Morrison Co., LSR.

Bell's Vireo: 5-18 Winona Co., BT.

Yellow-throated Vireo: 5-3 Winona Co., BT; 5-5 Hennepin Co., DB, KP, and Washington Co., WHL; 5-23 Kanabec Co., RHJ; 5-26 Morrison Co., LSR.

Solitary Vireo: 5-2 Watonwan Co., DMF; 5-3 Minneapolis, EMB, and Nicollet Co., KP; 5-6 Morrison Co., LSR; 5-10 Pine Co., BAP; 5-16 Waseca Co., WF; 5-20 Hennepin Co., VL.

Red-eyed Vireo: 5-4 Watonwan Co., DMF; 5-5 Winona Co., BT; 5-14 Mille Lacs Co., MI; 5-17 Beltrami Co., JAM, and St. Louis Co., NJH.

Philadelphia Vireo: 5-5 Winona Co., BT; 5-8 Hennepin Co., JH, RDT; 5-27 Washington Co., DS, and Duluth, MMC; 5-29 Carver Co., MHM.

Warbling Vireo: 5-3 Winona Co., BT, and Houston Co., FL; 5-11 Mille Lacs Co., MJ; 5-12 (12) Winona Co., BT; 5-16 Bemidji, JAM, and Morrison Co., LSR.

Black and White Warbler: 4-28 Carver Co., MHM; 4-30 Minneapolis, DB, and Morrison Co., LSR; 5-2 Mille Lacs Co., MI; 5-25 Goodhue Co., DS.

Prothonotary Warbler: 5-9 Houston Co., FL; 5-15 Goodhue Co., FN/MAS, WKE; 5-17 Swift Co., MHM; 5-28-29 Ramsey Co., MIG.

Golden-winged Warbler: 5-5 Sibley Co., BL; 5-6 Minneapolis, DB, FN/MAS; 5-13 Hennepin Co., EIS; 5-16 Morrison Co., LSR, and Mille Lacs Co., MI; 5-18 Beltrami Co., JAM; 5-21 Washington Co., EC.

Blue-winged Warbler: 5-6 Filmore Co., BL; 5-10 Goodhue Co., RBJ.

Tennessee Warbler: 5-4 Hennepin Co., DB, FN/MAS; 5-5 (10) Winona Co., BT; 5-15 (20+) Hennepin Co., CLH; 5-15 Duluth, PBH; 5-16 Mille Lacs Co., MI, and Kanabec Co., RHJ; 5-22 (20) Ramsey Co., JJ; 5-24 Cottonwood Co., LAF, and St. Louis Co., NJH; 5-27 Ramsey Co., MIG.

Orange-crowned Warbler: 4-22 St. Louis Co., PBH; 4-25 Hennepin Co., RDT; 4-26 Hennepin Co., CLH, JAJ, and Mille Lacs Co., MI; 5-9 Carver Co., THH, and Hennepin Co., WKE;

5-19 Kanabec Co., RHJ.

Nashville Warbler: 4-30 Hennepin Co., RDT; 5-1 Winona Co., BT, and Hennepin Co., DB; 5-4 St. Louis Co., NJH; 5-7 St. Louis Co., KS; 5-8 (100) Washington Co., WWL; 5-12 (12) Winona Co., BT.

Parula Warbler: 4-15 (2) Watonwan Co., DF (Exceptional); 5-2 Hennepin Co., RDT; 5-10 Goodhue Co., RBJ, and Hennepin Co., VL; 5-15 St. Louis Co., PBH, and Goodhue Co., WKE; 5-17 Beltrami Co., JAM.

Yellow Warbler: 5-1 Winona Co., BT; 5-3 St. Paul, BL, Goodhue Co., RBJ, Houston Co., FL, and Albert Lea, RJ; 5-5 Duluth, MMC; 5-10 Mille Lacs Co., MI; 5-11 (20) Goodhue Co., WWL; 5-22 (8) Duluth, PBH.

Magnolia Warbler: 5-1 Washington Co., WWL; 5-4 Hennepin Co., VL; 5-6 Morrison Co., LSR; 5-10 Isanti Co., CU; 5-20 Olmsted Co., CCW, and Hennepin Co., MHM.

Cape May Warbler: 5-5 Hennepin Co., RDT; 5-6 Waseca Co., WF; 5-9 Mille Lacs Co., MI; 5-11 (5) Goodhue Co., WWL; 5-13 Duluth, PBH; 5-18 (5) Cook Co., MA; 5-25 Goodhue Co., DS; 5-31 Ramsey Co., EC.

Black-throated Blue Warbler: 5-11 Goodhue Co., WWL; 5-24 Cook Co., MMC; 5-25 Goodhue Co., DS.

Myrtle Warbler: 4-6 Cook Co., OP; 4-8 Hennepin Co., EIS, FN/MAS, VL; 4-9 Mille Lacs Co., MI; 4-13 Wright Co., BAP; 5-7 (50) Rice Co., OAR; 5-17 Wabasha Co., DWM; 5-24 (50) Duluth, PBH.

Black-throated Green Warbler: 5-2 Hennepin Co., WKE, RDT; 5-3 Carver Co., THH; 5-17 St. Louis Co., NJH, and (41) Hennepin Co., CLH; 5-19 Cook Co., MA; 5-20 Anoka Co., FN/MAS; 5-24 Dakota Co., FL.

Cerulean Warbler: 5-14 Houston Co., FL, and Goodhue Co., DB, WKE, FN/MAS; 5-15 Winona Co., BT, and Goodhue Co., JH, RDT.

Blackburnian Warbler: 5-4 Morrison

Co., LSR; 5-5 Hennepin Co., DB, RDT, VL, WKE; 5-6 Minneapolis, FN/MAS; 5-12 Kanabec Co., RHJ; 5-21 (6) Washington Co., WWL; 5-24 Cottonwood Co., LAF; 5-25 Goodhue Co., EMB.

Chestnut-sided Warbler: 5-4 Hennepin Co., DB, VL; 5-5 Nicollet Co., BL, and Hennepin Co., WKE; 5-6 Mille Lacs Co., MI; 5-15 Duluth, PBH, and Lake Co., RK; 5-22 Blue Earth Co., HBT; 5-24 Goodhue Co., DS, and (20) Duluth, PBH.

Bay-breasted Warbler: 5-4 Hennepin Co., DB; 5-7 Goodhue Co., FN/MAS; 5-17 St. Louis Co., NJH; 5-18 Mille Lacs Co., JAJ, and Beltrami Co., JAM; 5-24 Dakota Co., FL, and Duluth, PBH; 5-25 Goodhue Co., DS; 5-27 Duluth, PBH.

Blackpoll Warbler: 5-1 (5) Washington Co., WWL; 5-4 Hennepin Co., RDT, VL, Nicollet Co., JJ, and Waseca Co., WF; 5-6 Mille Lacs Co., MI; 5-13 Morrison Co., LSR; 5-21 (15) Mille Lacs Co., MI; 5-25 Goodhue Co., DS; 5-26 Mille Lacs Co., MI; 5-27 Minneapolis, FN/MAS; 5-31 Clearwater Co., BAP.

Pine Warbler: 4-26 Pine Co., DB, and Mille Lacs Co., MI; 5-2 Goodhue Co., DWM; 5-4 Hennepin Co., VL; 5-24 Hennepin Co., VL; 5-25 Goodhue Co., DS.

Palm Warbler: 4-10 Minneapolis, FN/MAS; 4-29 Winona Co., BT, and Hennepin Co., EIS, MHM; 4-30 Mille Lacs Co., MI; 5-4 St. Louis Co., NJH; 5-13 Duluth, PBH, and Minneapolis, VL.

Ovenbird: 4-27 Minneapolis, DB; 4-29 Hennepin Co., EIS, FN/MAS; 5-3 (12) Washington Co., DS; 5-8 Mille Lacs Co., MI; 5-10 Bemidji, JAM; 5-15 (6) Duluth, PBH.

Northern Waterthrush: 4-29 Hennepin Co., EIS, FN/MAS; 4-30 Minneapolis, VL; 5-3 Mille Lacs Co., MI; 5-6 Morrison Co., LSR; 5-13 (10) Washington Co., DS; 5-14 Goodhue Co., WKE.

Louisiana Waterthrush: 5-2 Winona Co., BT, and Minneapolis, EWJ; 5-5 Washington Co., WHL; 5-10 Washington Co., WWL; 5-21 Minneapolis, EWJ.

Connecticut Warbler: 5-11 Minneapolis, FN/MAS; 5-19 (7) Cook Co., MA; 5-22 Minneapolis, EIS, and Hibbing, HM; 5-23 Minneapolis, BL; 5-25 Waseca Co., WF.

Mourning Warbler: 5-15 Minneapolis, DB; 5-16 Goodhue Co., JH, RDT, and Morrison Co., LSR; 5-24 Itasca Co., HM; 5-25 Waseca Co., WF; 5-27 Minneapolis, FN/MAS, St. Paul, MIG, and Hennepin Co., MHM.

Yellowthroat: 4-23 Hennepin, EFH; 5-3 Dakota Co., RBJ; 5-5 Mille Lacs Co., MI; 5-9 Morrison Co., LSR; 5-24 (15) Duluth, PBH.

Yellow-breasted Chat: 5-5 Olmsted Co., CCW; 5-6 Waseca Co., WF. Two reports only.

Wilson's Warbler: 4-30 Minneapolis VL (Exceptional); 5-4 Winona Co., BT, and Carver Co., MHM; 5-13 Morrison Co., LSR; 5-15 Mille Lacs Co., MI; 5-17 (6) Minneapolis, JAJ; 5-22 Duluth, PBH; 5-24 Itasca Co., HM; 5-25 St. Paul, MIG.

Canada Warbler: 5-11 Goodhue Co., WWL; 5-15 Minneapolis, FN/MAS, VL, DB; 5-16 Morrison Co., LSR, and Lake Co., RK; 5-25 Waseca Co., WF, and Goodhue Co., EMB; 5-27 St. Paul, MIG.

American Redstart: 5-3 Rice Co., BAP; 5-4 Carver Co., THH; 5-10 Pine Co., MMC, and Cook Co., RIG; 5-16 (35) Winona Co., BT; 5-17 (100) Washington Co., DS.

Bobolink: 5-2 Nobles Co., HSH; 5-3 Nicollet Co., DB, and Dakota Co., RBJ; 5-10 Kanabec Co., RHJ; 5-12 Mille Lacs Co., MI; 5-18 (20) Washington Co., DS, and (10) Sherburne Co., JAJ.

Eastern Meadowlark: 3-5 Wabasha Co., DWM; 3-17 Mille Lacs Co., MI; 3-18 Rice Co., OAR; 4-6 Duluth, JCG; 5-25 (29) Cottonwood Co., LAF.

Western Meadowlark: 3-8 Winona Co., BT; 3-16 Sibley Co., VL; 3-19 (100+) Nicollet Co., HBT; 3-22 (41) Winona Co., BT; 4-1 Cook Co., OP; 5-13 Beltrami Co., JAM.

Yellow-headed Blackbird: 4-2 Winona Co., BT; 4-10 Minneapolis, FN/MAS; 4-19 (100+) Jackson Co., HSH, 4-22 (30) McLeod Co., MHM; 4-27 Mille Lacs Co., MI; 5-4 (1-m) Cook Co., OP; 5-6 (fe) Lake Co., RK; 5-13 Beltrami Co., JAM; 5-15 (2-fe) Cook Co., OP, and (fe) Lake Co., RK; 5-16 (1-fe) Cook Co., OP, and Lake Co., RK.

Red-winged Blackbird: 3-4 Minneapolis, VL; 3-11 Hennepin Co., FN/MAS; 3-22 (250) Winona Co., BT; 3-30 (250) Freeborn Co., RJ; 4-7 Beltrami Co., JAM, and Lake Co., RK.

Orchard Oriole: 5-2 Winona Co., BT; 5-17 Clay Co., RBJ; 5-18 Pope Co., WH; 5-20 Watonwan Co., EDK; 5-23 (2) Wabasha Co., DWM.

Baltimore Oriole: 5-1 Carver Co., DB, and Hennepin Co., EIS; 5-3 (5) Winona Co., BT, and (5) Hennepin Co., CLH; 5-5 Morrison Co., LSR; 5-9 Mille Lacs Co., MI; 5-18 (23) Washington Co., DS.

Rusty Blackbird: 3-22 Winona Co., BT, and Sibley Co., DB, and Dakota Co., EIS; 3-26 (100+) Nicollet Co., HBT; 4-15 (40) Cook Co., OP; 4-26 Duluth, KS; 5-10 Whitewater, JJ.

Brewer's Blackbird: 3-20 (100's) Nobles Co., HSH; 5-22 Winona Co., BT, and Fillmore Co., EIS; 4-11 Mille Lacs Co., MI; 4-15 Duluth, PBH.

Common Grackle: 3-15 Hennepin Co., MHM; 3-19 Goodhue Co., DWM, and (400) Nicollet Co., HBT; 3-21 Duluth, KS; 4-6 (300) Washington Co., WWL, and Mille Lacs Co., MI.

Brown-headed Cowbird: 3-21 Cottonwood Co., LAF, and Hennepin Co., VL; 4-10 Duluth, KS, MMC; 4-11 Duluth, JGH; 4-12 (20) Washington Co., WWL; 4-24 (300) Lake Co., RK.

Scarlet Tanager: 5-4 Winona Co., BT; 5-8 Sibley Co., DMF; 5-16 Morrison Co., LSR, and Cook Co., OP; 5-28 Waseca Co., WF; 6-7 Carver Co., THH.

Cardinal: Wright, Rice, Anoka Winona, Olmsted, Hennepin, Nicollet, Goodhue, Blue Earth, Jackson, Ramsey, Cottonwood, Carver, Freeborn,

and Washington Counties. Only 1 report north: 5-24 Duluth, Anne K. Arndt *vide* JCG.

Rose-breasted Grosbeak: 5-2 Ramsey Co., EC, and Hennepin Co., EFH; 5-8 Duluth, KS; 5-9 Mille Lacs Co., MI; 5-13 (20) Washington Co., WWL; 5-15 (15) St. Louis Co., PBH.

Indigo Bunting: 5-4 Winona Co., BT; 5-5 Olmsted Co., CCW; 5-16 Duluth, JCG, KS, LTM; 5-18 (8) Washington Co., DS; 5-29 (9) Washington Co., WWL.

PAINTED BUNTING: 5-28 (1 M captured and later died—photo taken) Mountain Lake, Cottonwood Co., LAF.

Dickcissel: 5-4-6 Tofte, Cook Co., OP; 5-6 Watonwan Co., EDK; 5-12 Watonwan Co., DMF; 5-24 Marshall Co., EIS and Two Harbors, Lake Co., RK; 5-30 (many) Nobles Co., HSH; 5-31 Cass Co., BT.

Evening Grosbeak: Present all winter into March and April in most eastern counties; to May in Washington Co., N. E. counties and Clearwater Co. 4-20 (40) Duluth, JCG; 5-1 (300) Duluth, MMC.

Purple Finch: 4-8 (100's) Ramsey Co., EC; Early North: 4-9 Morrison Co., LSR, Cook Co., OP, Roseau Co., PEB, and Mille Lacs Co., MI; Late S. E.: 5-10 Hennepin Co., EIS; 5-21 Ramsey Co., MIG.

Pine Grosbeak: 3-6 (6) Wabasha Co., BT; 4-10 St. Louis Co., W. Arndt *vide* JCG.

Hoary Redpoll: Late dates: 4-3 Cook Co., MA, and Winona Co., BT; 4-6 Chisago Co., FVS.

Common Redpoll: 3-7-8 (1,000's) N. W. Counties, BL; 3-14 (100+) Washington Co., WWL; Late dates: 4-10 Hennepin Co., EIS; 4-12 Carlton Co., JCG; 4-15 Minneapolis, FN/MAS; 5-3 (8) Duluth, F. Fox *vide* JCG.

Pine Siskin: 3-2 Morrison Co., LSR; 4-10 St. Louis Co., W. Arndt *vide* JCG; 5-6 (15) Blue Earth Co., HBT, and (12) Washington Co., WWL; Late South: 5-26 Minneapolis, EWJ; 5-31 Minne-

apolis, FN/MAS.

American Goldfinch: 3-28 (50+) Hennepin Co., EIS; 3-11 (25) Ramsey Co., JJ; Early North: 4-21 (12) Duluth, MMC; 5-5 Mille Lacs Co., MI, and Duluth, PBH.

Rufous-sided Towhee: 4-13 Hennepin Co., EFH; 4-21 Winona Co., BT; 5-2 (6) Winona Co., BT; 5-4 Mille Lacs Co., MI; 5-18 Cook Co., MA; 5-25 (10) Watonwan Co., DMF.

Lark Bunting: 6-4 (31) Rock and Nobles Co.'s, BL; 5-24 Nobles Co., HSH.

Savannah Sparrow: 4-9 Winona Co., BT; 4-10 Carver Co., RBJ; 4-12 (10) Winona Co., BT; 4-21 Cook Co., OP; 4-29 Duluth, RL, and Lake Co., RK.

Grasshopper Sparrow: 5-1 Lincoln Co., BL; 5-3 Jackson Co., HSH; 5-10 Carver Co., THH, and Rice Co., OAR; 5-17 Winona Co., BT, and Clay Co., RBJ; 5-18 (10) Washington Co., DS; 5-23 Kanabec Co., RHJ; 5-24 Clay Co., KP; 5-31 (3) Clay Co., DMF.

Le Conte's Sparrow: 4-24 Anoka Co., BAP; 4-27 Hennepin Co., DB; 4-29 Hennepin Co., EIS; 5-10 Goodhue Co., RBJ; 5-24 Roseau Co., EIS.

Henslow's Sparrow: 5-16 Winona Co., BT; 5-18 (8) Winona Co., BT.

Sharp-tailed Sparrow: 5-24 Mahanomen Co., DB.

Vesper Sparrow: 4-4 Olmsted Co., CCW; 4-7 Washington Co., DB; 4-9 (14) Winona Co., BT; 4-15 Cook Co., OP, and Lake Co., RK; 4-16 Lake Co., RK; 4-29 Cook Co., OP; 5-13 Kanabec Co., RHJ; 5-18 (20) Washington Co., DS.

Lark Sparrow: 5-4 Jackson Co., HSH, and **Two Harbors**, RK; 5-6 **Two Harbors**, RK; 5-4 Jackson Co., HSH, and Clay Co., RBJ.

Slate-colored Junco: Earliest North: 3-27 Mille Lacs Co., MI; 3-31 Kanabec Co., RHJ; 4-8 (100) Mille Lacs Co., MI; 4-10 (50) Hennepin Co., DWL; Late Duluth and S.: 5-28 Cook Co., JJ; 6-2 Duluth, B. Hojnacki *fide* JCG.

Oregon Junco: 1-1 (2) Winona Co., BT; 3-16 Carver Co., MHM; 4-7 Carver Co., THH; 4-9 Cook Co., OP; 4-12 Duluth, MMG; 4-14 Cook Co., MA; 4-20 Cook Co., MA; 5-2 Washington Co., WWL.

Tree Sparrow: Early: 4-8 Duluth, KS; 4-9 Morrison Co., LSR; 4-27 (15) Watonwan Co., LAF; 4-30 Washington Co., WWL; 5-14 Lake Co., RK; 5-17 Cook Co., OP.

Chipping Sparrow: 4-5 Rice Co., OAR; 4-8 Minneapolis, FN/MAS; 4-9 Morrison Co., LSR; 4-15 (6) Winona Co., BT, and (75) Duluth, JCG.

Clay-colored Sparrow: 5-3 Dakota Co., RBJ, and Washington Co., DS; 5-4 Duluth, JCG, and Mille Lacs Co., MI; 5-17 (5) Washington Co., DS.

Field Sparrow: 4-4 Winona Co., BT; 4-12 Washington Co., KP.

Harris Sparrow: 5-2 Waseca Co., WF, Pope Co., WH, and Lake Co., RK; 5-3 Dakota Co., RBJ; 5-4 Cook Co., OP, and Mille Lacs Co., MI; 5-5 (10) Nicollet Co., BL; 5-14 Nobles Co., HSH; 5-20 Duluth JCG, and Cook Co., RIG; 5-21 OP; 5-26 Wabasha Co., DWM.

White-crowned Sparrow: 4-21 Washington Co., WWL; 4-27 Jackson Co., HSH; 4-29 (61) Ramsey Co., JJ; 5-1 Mille Lacs Co., MI, and Lake Co., RK; 5-16 Kandiyohi Co., RBJ; 5-22 (4) Hennepin Co., CKS; 5-18 (8) Lake Co., RK; 5-24 Duluth, PBH; 5-29 Duluth, MMG.

White-throated Sparrow: 4-8 Carver Co., FN/MAS; 4-9 Hennepin Co., EFH; 4-12 Duluth, MMC; 4-13 Kanabec Co., RHJ; 5-1 (50) Hennepin Co., EFH; 5-11 (75) Washington Co., DS; 5-13 Minneapolis, WL.

Fox Sparrow: 3-24 Hennepin Co., EFH; 4-2 Minneapolis, FN/MAS, and Duluth, KS; 4-7 (20) Carver Co., THH; 4-12 Cook Co., MA, Duluth, MMC, and Lake Co., RK; 4-19 Hennepin Co., EFH; 4-22 Ramsey Co., JJ; 5-7 Duluth, MMC; 5-25 Duluth, JGH.

Lincoln's Sparrow: 4-11 Carver Co., MHM; 4-12 Lake Co., MMC; 4-13 Mor-

rison Co., LSR; 4-17 Winona Co., BT; 5-10 Minneapolis, VL, Carver Co., THH, and Hennepin Co., WKE; 5-17 Duluth, RL; 5-20 Duluth, JCG.

Swamp Sparrow: 4-5 Wabasha Co., BT; 4-7 Blue Earth Co., EDK; 4-16 Lake Co., RK; 4-19 Duluth, RL.

Song Sparrow: 3-23 Carver Co., MHM; 3-24 Olmsted Co., CCW; 4-7 Mille Lacs Co., MI; 4-10 Lake Co., RK; 4-12 (5) Lake Co., MMC.

Lapland Longspur: Early North: 3-2 Clay Co., EGA; 3-8 Beltrami Co., BL; 4-4 (100's) Swift Co., HSH; 4-7 (150+) Watonwan Co., DMF; 4-19 Wright Co., CKS; 5-17 Cook Co., OP.

Chestnut-collared Longspur: 5-17 Clay Co., RBJ; 5-24 (2) Clay Co., DB, KP.

Snow Bunting: Late South, 3-20 Winona Co., BT; Late North, 3-7, 8 (100,000's) Kittson, Marshall, Pennington, Roseau Co.'s, BL; 3-18 (18,000) Clay Co., EGA; 3-28 St. Louis Co., NJH; 4-26 St. Louis Co., NJH.

Seventy observers reported on about 284 species this last spring. Many reports included comments on the unusual scarcity of a particular species but nothing to indicate a definite trend. The Common Grackle seems alarmingly prevalent in most places especially the southeast and observations of many people in the Twin Cities area and suburbs confirm this trend.

It is noteworthy that there were no Baird's Sparrows reported, only 2 Henslow's and 1 Sharp-tailed Sparrow reports, and that the 6 Mockingbirds reported were all in the North—4 in the Duluth (including Tofte) area.

Addenda: The Boreal Owl record for February 15, 1969 (*The Loon* 41:39)

should read Locke Park, Fridley, Anoka County **not** Ramsey County.

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Route 4, Excelsior, Minnesota

FIRST CASPIAN TERN NESTING IN MINNESOTA

by Dwain W. Warner and Donald A. Beimborn

On July 9, 1969, with the field ornithology class from the University of Minnesota Biological Station, we visited Gull Island in Leech Lake, Cass County, Minnesota. Gull Island, less than an acre in size, is located five miles from the southern shore of the lake near Pelican Island. Gull Island appears to be a misnomer, since the island has a colony of at least 500 pairs of Common Terns nesting on it in those years when the water level in the reservoir is low enough to permit some land to remain above water.

Two Caspian Terns were observed near the middle of the island. One of these settled on a nest while the other stood nearby and called at the Common Terns which dove at it. The bird

sitting on the nest was banded. A third Caspian Tern landed among some sparse vegetation and also settled on a nest. Later examination disclosed two Caspian Tern nests, each with two eggs. The eggs were marked much like those of the Common Tern, but were much larger. A single egg was found partly buried in sand about three feet from the nest which was located in the vegetation. This egg was collected. A group of about 15 immature Caspian Terns were loafing on the shore of nearby Pelican Island with about 50 Ring-billed Gulls in various plumages.

The fifth edition of the **American Ornithologists Union Check List of North American Birds** (1967), lists the



Caspian Tern on nest. Leech Lake, Cass County. Photo by James L. Smith



Caspian Terns, Gull Island, Leech Lake. Photo by James L. Smith

nearest nesting sites as Gravel Island in Lake Superior off the coast of Wisconsin, Lake Winnepeg in Manitoba, and on Beaver Islands in Green Bay of Lake Michigan. The occurrence of nests and eggs of the Caspian Tern in

Leech Lake on July 9, 1969, can be regarded as the first recorded nesting of this species within the State of Minnesota. **James Ford Bell Museum of Natural History, Department of Zoology, University of Minnesota, Minneapolis, Minnesota**

BALD EAGLE-OSPREY STATUS REPORT, 1969

by John E. Mathisen

Bald Eagle and Osprey nesting populations of the Chippewa National Forest have been evaluated for the seventh consecutive year. Once again, we were able to use an airplane for both eagle and Osprey observations. The Osprey flights were made possible through the excellent cooperation of the Bureau of Sport Fisheries and Wildlife.

The nests were observed twice from the air. The first check, during the

incubation period, indicated if the nest was occupied. The second check of previously occupied nests showed if young were present. In no case were incubating birds unduly alarmed by the aircraft, and only one or two flushed from the nest.

BALD EAGLE

New Nests and Nest Losses

Fifteen eagle nests were added to the records since the 1968 report.

Eighteen had either blown down or were considered permanently abandoned. This brings the total of known nests on the Chippewa to 139. This is the first year that a net loss of eagle nests has been recorded. It is possible that we now have most of the existing nests recorded for the first time since we began the eagle work in 1963.



*Young Bald Eagle
banded on the Chippewa Forest.*

If this assumption is correct, 1969 is the year from which we can determine if the population is increas-

ing, decreasing, or static. Prior to this time, the nesting summary was confused by a large number of unknown nest locations, often alternate nest sites, which appears to be a common occurrence among the eagle pairs breeding here.

Nesting Success

The eagle flights were made on April 10 and June 26, requiring about 14 hours flying time in a Cessna 180. One hundred and seventeen nests were observed from the air. Sixty, or 51%, were considered to be active (occupied by at least one adult). Of the 60 occupied nests, 29 or 48% were successful in rearing young. This is the lowest nesting success record on the Chippewa since 1964. We observed 44 eaglets, or 1.5 per nest. It may be noteworthy that for the first time we noticed a considerable variation in size of the eaglets, indicating that laying and/or hatching was delayed for some pairs.

Table 1 shows 1969 nesting data for each Ranger District. Table 2 compares nesting data for seven years.

TABLE 1. Bald Eagle Nesting Data, 1969

District	Known Nests	Observed Nests	Active Nests	Successful Nests	Number of Young
Bena	36	30	17	10	14
Blackduck	12	11	8	4	7
Walker	13	12	3	1	1
Remer	6	4	3	2	4
Marcell	9	3	5	3	3
Cass Lake	32	26	11	4	7
Cut Foot Sioux	31	26	13	5	8
FOREST TOTAL	139	117	60	29	44
Percent		84%	51%	48%	1.5/nest

TABLE 2. Comparison of Bald Eagle Nesting Data, 1963 - 1969

Year	Nests	Observed Nests	Active No.	Nests %	Successful No.	Nests %	Young Per Nest
1963	48	31	20	64	6	30	1.7
1964	55	46	30	65	12	40	1.2
1965	76	58	39	67	22	56	1.3
1966	107	70	52	74	19	61	1.5
1967	135	67	49	73	21	55	1.4
1968	142	105	52	49	33	63	1.5
1969	139	117	60	51	29	48	1.5

Analysis of our data indicates about 99 known eagle territories (or eagle pairs) on the Chippewa. Seventy-five of these were checked in 1969. Fifty-six, or 74% were active, and twenty-nine or 52% were successful in raising young.

Other Observations

An effort was made to band eagle nestlings this year to determine where Chippewa eagles spend the winter and perhaps solve the mystery of where sub-adult eagles go after leaving the nest. We were able to band 15 nestlings and one adult (the adult was injured and released near Duluth after a stay in the Duluth Zoological Park). A color-marking project for field identification of individuals was also initiated in cooperation with Thomas Dunstan of the University of South Dakota. We color-marked seven birds by various color combinations of paint on secondary flight feathers and tail feathers. Tissue samples for pesticide analysis were also obtained.

Joel Kussman, University of Minnesota, also initiated an eagle research project on the Chippewa which will eventually involve radio-telemetry.

Two unhatched eagle eggs were collected and shipped to the Patuxent Wildlife Research Center for pesticide analysis. We were able to provide nesting success histories for every year since 1963 for one of these pairs, and since 1965 for the other.

An autopsy report of an eagle collected here in 1967 showed death was due to pesticide accumulation in the brain (9.5 ppm dieldrin) with various amounts of similar hydrocarbons in other organs. One adult mortality was reported this year, apparently from an automobile collision.

We received four reports of color-marked eagles (red tails) during the spring period. These birds were captured and marked by the National Audubon Society in Southern Illinois last winter. We were not able to establish, however, that any of these were breeding birds.

OSPREY

New Nests and Nest Losses

Twenty-seven new Osprey nests were found since the 1969 survey. Eleven had blown down since last observed, bringing the total number of known Osprey nests on the Chippewa to 89. There are undoubtedly many more Osprey nests to be located. They are difficult to find compared to eagle nests and their preference for dead trees make an up-to-date inventory exceedingly difficult because they are prone to wind destruction.

Nesting Success

The Osprey survey was flown on May 19th and 20th for the occupancy check, and July 23 for the reproduction check. The survey required 13 hours of flying in a Cessna 206, furnished by the Bureau of Sports Fisheries and Wildlife, Refuge Division.

This was the second year than an intensive effort was made to evaluate Osprey nesting success on the Chippewa. We feel confident that an intensive aerial search would reveal a large number of additional Osprey nest sites.

Young were about half-grown at the time of the second check and additional losses may have occurred from wind storm after the survey was completed.

Table 3 shows the results of the Osprey survey.

TABLE 3. Results of Osprey Survey, 1968 & 1969

Year	Known Nests	Observed Nests	Active No.	Nests %	Successful No.	Nests %	No. of Young	Young Per Nest
1968	73	56	40	71	13	32	19	1.5
1969	89	69	49	71	23	47	50	1.7

The same proportion of the Osprey nests were occupied (71%) as last year, but nesting success was considerably higher in 1969 (47%). Only two of the unsuccessful nests were

the result of blowdown, so failure of over one-half the population to produce young was due to unknown causes. **Cass Lake, Minnesota.**

SURVEY OF NESTING BIRDS IN ST. YON VALLEY ST. MARY'S COLLEGE, WINONA, MINNESOTA

by Brother Theodore Voelker, F.S.C.

Sisters Ann Gregory Augustine, S. P., and Julia Huelskamp, P.H.J.C., graduate students in the Biology Department, arrived at St. Mary's June 10, 1969 to begin their study of the bird population in St. Yon Valley, which comprises part of the college property. They began mist-netting and banding birds on June 13 and continued their work until August 5. Their ordinary day started at day-break and ended at dusk every day, weather permitting, with the exception of Sundays. Allowing time for meals, they often spent 16 hours a day in the field. With the shortening of daylight hours as the summer progressed, their working time was naturally decreased to fewer hours per day. Rain, unless very heavy, was not much of a deterrent to their netting. Most of the summer the two Nuns spent their nights sleeping in a tent set up near the back of the valley so they could begin work early in the morning and continue late at night.

They used ten mist nets of three different mesh sizes; the nets varied in length from 12 meters down to 6 meters. These were spread between iron conduit poles with one pointed end driven into the ground. They visited the nets continuously during the daylight hours and a pedometer worn by Sister Julia registered 674 miles for the season. Needless to say both Nuns were in splendid physical condition by the end of the study.

The study area of approximately 45 acres which had once been a farm is now uncultivated and with this rainy

summer had become a tangle of overgrown grasses and 52 other species of plant life. By the end of the seven weeks much of the vegetation stood well over their heads. The open field part of the valley is surrounded by heavily wooded hills bordered by abundant shrubs. Along the two-branched ditch in the area, cottonwood trees and various shrubs are growing. The number of species of trees and shrubs counted during the survey was 26. The most abundant trees are oaks, maples and box elders. Among the shrubs honeysuckle, sumac, elderberry and black raspberry predominated. The main grasses were timothy, red clover, yellow sweet clover, great bluestem and brome grass. The preponderance of flowers was made up of thistles, curly dockweed, vervain, birdsfoot trefoil, goldenrod, daisy fleabane, bergamot, mustards and wild lettuce.

Since the acquisition of the property by the college about ten years ago, a dam about 20 feet in height has been built across the bottom of the valley to prevent erosion. Below this dam is a natural three-sided amphitheater surrounding several acres of level ground used for playing fields. A small apple orchard and a grape arbor were planted on the northeast slope of the hill; the farm buildings and the house have been razed. With the above description one can readily realize what a paradise this is for nesting birds. There are also deer, raccoon, and fox in the area and the large birds of prey not captured but

seen or heard this summer were the Barred Owl and a pair of Red-tailed Hawks.

For a few days more than seven weeks, the Nuns mist-netted and banded 802 individual birds of 42 different species. Although known to be nesting in the area but not netted were Hairy Woodpeckers, Warbling Vireos, Yellow-billed Cuckoos, Whip-poor-wills, Rufous-sided Towhees, Mourning Doves and Common Crows. Although a number of Short-billed Marsh Wrens nested in the valley last year there were none this year. Sister Ann had planned a special study of them this year and was quite disappointed they had not returned.

The most abundant species netted and handled were 181 Catbirds, 159 House Wrens, 43 Robins, 26 Yellowthroats, 46 Rose-breasted Grosbeaks, 24 Indigo Buntings, 53 American Goldfinches, 44 Field Sparrows, 50 Song Sparrows, 21 Downy Woodpeckers, 18 Black-capped Chickadees, and 15 Eastern Phoebes. Unusual in later weeks of July was the capture of four immature Swainson's Thrushes, 9 Tennessee and 8 Nashville Warblers. None of these three species was heard singing in the valley since May 24, so we must conclude these birds were early migrants from their more northern nesting grounds. Most unusual was a Pine Siskin female with an active brood patch and one female Yellow-breasted Chat with no evidence of breeding plumage. The capture of one immature Veery also suggests a migrant into the area as no adults were heard singing there at any time during the summer. Veerys have been known to nest this far south but only quite rarely.

The greatest number of repeats (banded birds caught a second or third time) were 25 House Wrens, 47 Catbirds, 28 Yellowthroats, 14 Indigo Buntings, 27 American Goldfinches, 27 Field Sparrows and 49 Song Sparrows. Of the 802 individuals banded 252 were caught in the nets more than once.

One of the original aims of the study was to determine territorial area of certain species, but with the dense luxuriant growth of the summer's vegetation, it was almost impossible to find nests. Besides the Sisters were kept so busy banding and making a vegetation survey that there wasn't enough time to accomplish all they had hoped to do in the seven short weeks time. However, the study will be followed-up next summer by two other graduate students. It will be most interesting to note how many of the original adult birds will return to the valley and especially if there will be a return of the young birds banded there this year. The concentration of numbers of certain species such as the Catbird and House Wren was most surprising but it does not necessarily mean all the young were raised there. They may have moved in from other nesting sites. Unless the latter is true the banding of 181 Catbirds in that limited area would suggest that this bird is quite tolerant of its own species in a given territory. The study made this summer by the two Nuns opens the way for other diversified and interesting studies. Life histories of separate species might now be inaugurated. As director of this summer's work, my plan for the future is to have many varied follow-up research projects.

Species	New Bandings	Repeats
1. Black-billed Cuckoo	4	0
2. Ruby-throated Hummingbird	1	0
3. Red-bellied Woodpecker	1	0
4. Downy Woodpecker	21	6
5. Great Crested Flycatcher ..	4	0
6. Eastern Phoebe	15	4
7. Traill's Flycatcher	2	0
8. Least Flycatcher	6	0
9. Eastern Wood Peweee	3	0
10. Blue Jay	3	0
11. Black-capped Chickadee	18	4
12. White-breasted Nuthatch	2	0
13. House Wren	159	25
14. Catbird	181	47
15. Brown Thrasher	5	0
16. Robin	43	3
17. Wood Thrush	4	0
18. Swainson's Thrush	4	0
19. Veery	1	0
20. Eastern Bluebird	2	0
21. Cedar Waxwing	2	0
22. Red-eyed Vireo	5	1
23. Blue-winged Warbler	6	2
24. Tennessee Warbler	9	0
25. Nashville Warbler	8	1
26. Yellow Warbler	3	0
27. Yellowthroat	26	28
28. Yellow-breasted Chat	1	0
29. House Sparrow	1	0
30. Red-winged Blackbird	1	0

31. Brown-headed Cowbird	12	5	38. American Goldfinch	53	27
32. Baltimore Oriole	7	0	39. Vesper Sparrow	1	0
33. Scarlet Tanager	1	0	40. Chipping Sparrow	11	2
34. Cardinal	11	0	41. Field Sparrow	44	27
35. Rose-breasted Grosbeak	46	14	42. Song Sparrow	50	49
36. Indigo Bunting	24	14	Total	802	252
37. Pine Siskin	1	0	Biology Department, St. Mary's College, Winona, Minnesota		

Notes of Interest

PAINTED BUNTING AT MOUNTAIN LAKE—The Southeastern Minnesota Nature Club has a very interesting discovery in being able to see and observe a male Painted Bunting. Mrs. Loren Feil called me early on May 28 and told me that Mrs. Orlando Fuller had a Painted Bunting so I quickly hurried over to see it as I had never seen one before. Mrs. Fuller had it in a regular canary cage and it was a most healthy looking bird. It had the exact coloration of the bird shown in the Peterson Field Guide and the Audubon Book. There was no question of the kind of bird it was. In Roberts "Birds of Minnesota" it said that the last sighting had been in 1897 and that it was a female and was in the University of Minnesota, Museum of Natural History collection. Mrs. Fuller struck by the bright colors had been sure it was a tame bird that had escaped from some neighbor's cage, so she called around after picking the bird up after striking the screen door in her house. She told me that it had hit it once and then got up again and hit it the second time. With the help of her husband they captured it by putting a clay plant pot over it. They later placed it in a cage for two days waiting to band it before releasing it.

Mrs. Fuller took careful care of the bird by putting it in the shade of some weeds and fed it dandelion seeds and bugs caught in spider webs in the corner of her home. She kept fresh water in front of it at all times and it ate and drank right along. When I saw it, it was real spry and very much alive and hopped around the cage and ate and drank while I observed it for about 20 minutes. I took five pictures of it with colored slides and I hope they turn out well, but taking pictures in a cage is a real handicap.

In the afternoon of that day, the 28th, a reporter from the Fairmont Sentinel came to take some pictures and get the story. In his anxiety to get a good picture he poked the bird and fussed with it and Mrs. Fuller said after about an hour of this picture taking with flash bulbs the bird appeared to droop and lose strength. They figured it needed more food so they fed it angleworms cut in small bits and the bird ate this but without any further apparent trouble it just died. She then took the bird in, froze it and will see that the University of Minnesota, Duluth gets the specimen.

Those from the Southwestern Minnesota Nature Club who saw and observed the bird were: Mr. and Mrs. Loren Feil, Mrs. Ruth Mattison, Mr. and Mrs. Frank Jungas all of Mountain Lake. Mr. and Mrs. Morton Smith, Windom, and our President Ross Wagner and his wife saw the bird after it had died. **J. Morton Smith, Windom, Minnesota.**

Editors Note: The above record is the third observation for this species in Minnesota. Besides the 1897 record mentioned above a single male bird was seen at Schroeder, Cook County on May 12 to 16, 1965 by several observers. (The Loon 37:150).

WORM-EATING WARBLER SEEN — On May 18, 1969, my family attended the open house of the Science Museum Nature Center at Camp Wilder, Washington County. Under par with a bronchial infection, I set out alone

at my own pace, for birding. I entered quietly "the dell," (the study area where a number of cages are kept) for the trees and open area were active with birds and light conditions good. A movement about 20 feet up in a small oak, less than 50 feet away and down a slight incline, appeared vireo-like, but as I put my glasses on it the bold head patterning of stripes 'jumped out' at me. I verified the bill as slender, then concentrated on the clear view given me of creamy unmarked breast, olive drab back and wings—with no bars—and was able then to study the head. Its black stripes passed, one through the eye and one above, with a creamy tint between (not as white as I had first thought). The bird moved fairly slowly over the limb, only fluttering out and back again to the some general area, and I remember being amazed at being allowed so leisurely a viewing. I knew I had myself a "first" and turned then to Peterson for verification. Satisfied I had a Worm-eating Warbler, I had another minute or so to watch the bird move slowly about the tree before it flew into trees well behind me. My health being worse by the time I rejoined my family, I reported to them of my luck and we headed home. It was not until May 22 that I felt well enough to follow up my sighting with reading and it was not till then that I realized I had seen a bird rare in Minnesota and should have reported it immediately to Mr. Fashingbauer there at the Nature Center. **Mrs. E. D. Maurer, 310 4th Street, White Bear Lake, Minnesota.**

CINNAMON TEAL SEEN NEAR ALBERTA — On May 17, 1969 Ray Glassel, Father Hoffman and myself were birdwatching in the Morris area of Stevens County. We had just turned south off of State Highway 28 onto a county road heading for Frog Lake when we spotted two ducks in a flooded pond. We immediately stopped as we noticed something different about one of the birds. The two ducks were standing on a mud bar in the pond, one was obviously a male Blue-winged Teal, the other bird, which was the same size as the Blue-wing was a deep cinnamon-red color, confirming our opinion that the bird was a Cinnamon Teal. After observing the bird for about ten minutes, we flushed it and watched it in flight with the Blue-winged Teal. The blue speculum and dark coloration made it easy to identify. The birds circled overhead for several minutes and then landed out of sight in a grassy marsh about one-half mile away. **Robert B. Janssen, 14321 Prince Place, Hopkins, Minnesota.**

MATING BEHAVIOR OF RED-TAILED HAWKS — On Sunday, March 16, 1969, I was in the yard tending my feeders when I looked up and saw two Red-tailed Hawks circling overhead. As they rode the air currents about 60 feet up, their circle of flight became smaller and smaller until finally the two hawks were face to face with each other. They then grasped each other's beaks and spiralled toward the earth, whirling so rapidly with wings outstretched that when they hit the ground they bounced a foot. After they had come to rest, they mated and leisurely flew off toward the hills to the south where they had nested in previous years. I noticed the female had several primaries missing in her right wing, so I was able to recognize her for several weeks.

A few days later, Brother Charles, F.S.C. of our Biology department was leaving the house after noon lunch. As he opened the kitchen door, he saw two Red-tailed Hawks mating on the black-top road about 20 feet from each of three campus buildings. He hurriedly called me from lunch but by the time I reached the door they were already flying off. However, I recognized the female with her missing feathers. I suspect the birds became so interested in their special mating procedure, they didn't realize they were

landing in such close proximity of man. The pair was frequently seen soaring in the vicinity during the rest of March.

The same behavior was observed by Dr. William Green, U. S. Fish and Wildlife Service, Winona, who reports: "While driving along Highway 35 near Marshland, Wisconsin, on the afternoon of March 2, I noticed three Red-tailed Hawks going through aerial acrobatics apparently in courtship ritual. While I watched, two of them flew together and either grasped each other by the bills or feet. I could not be certain. This union was made about 75 feet from the ground. Thus clasped together the birds spiraled rapidly downward with their wings outspread, and actually hit the ground before releasing each other. The force of hitting the ground did not appear to bother them, for they flew away together as though nothing had happened." This is the first time I have been witness to this courtship ritual and would be interested in knowing if others have ever seen Red-tails mating in a similar manner. **Brother Theodore Voelker, F. S. C., St. Mary's College, Winona, Minnesota.**

FOURTH LITTLE BLUE HERON RECORD—During the week of May 5, 1969 a Little Blue Heron was reported in the Frontenac, Goodhue County area. On May 10 I went down to the marsh, which is located along Highway 61, just north of Frontenac, to see if I could find the bird. I arrived at approximately 7:00 a.m. on a cold (temperature 45 degrees), cloudy, windy day. I met Harding Huber and after several hours of searching we found the bird in a far corner of the marsh. The bird was an adult, slaty blue all over with a darker bluish head. The head and neck were not the reddish-purple color shown in the current Field Guides. The head, only around the crown, appeared to be a deeper blue color. This plumage resembled the illustration in Peterson's Field Guide much more closely than any of the other books. The greenish-blue legs and light bill with the dark tip and plumes on the head were also noted. The size of the bird was between that of a Green Heron and a Black-crowned Night Heron. **Robert B. Janssen, 14321 Prince Place, Hopkins, Minnesota.**

HIGH EASTERN KINGBIRD NEST — I thought you might be interested in learning of an Eastern Kingbird nest that I came across recently. It was 63 feet high, built in the corner structure of the Plum Creek fire tower, located 2 miles west of Hwy. 6 on Hwy. 1 in Koochiching County. The nest contained one live chick and one egg. Both parents were present. The nest was found by me on July 19, 1969. **James Schneeweis, Area Game Manager, International Falls, Minnesota.**

UNUSUAL BLUEBIRD NESTING SITE — On the afternoon of July 6, 1969, I was taking a "bird walk" in the Pine Beach area near Gull Lake in Cass County. In this area directly west of and across the road from the golf course is a church. I walked around the church to see if there was any evidence of bird nestings in the vicinity of the church. Immediately behind the church is an electric service line. I saw an Eastern Bluebird with an insect in its beak perched on the line. Guessing that there was a nest in the area, I watched the bird for some minutes to see where it might go. I thought that possibly it might be nesting somewhere in a small clump of trees to the northwest of the church. However, apparently the bird saw me and would not move from the wire as long as I was in view. I circled around the church and returning to the rear of the church saw that the bird was gone. Just then, however, I saw a bluebird flying from the rear wall of the church. In examining the rear wall of the church from where the bird had

come, I found that about 20 feet above the ground there was a Cliff Swallow's nest. The entrance of this nest had apparently been broken open or enlarged so that it was about twice the size of a normal entrance for such nests. After examining the rear wall of the church carefully I came to the conclusion that the only place from which the bird could have come was this nest. The nest was too high for me to examine and I did not hear the sounds of any small birds in the nest, but I am reasonably sure that this nest was being used by a pair of Eastern Bluebirds. I shortly thereafter saw two bluebirds in the area. Roberts, in **Birds of Minnesota**, mentions that bluebirds have been found nesting in Bank Swallow nests. There were other Cliff Swallow nests on the other sides of the church and most of these appeared to be being used by Cliff Swallows. **Charles L. Horn, Jr., 5100 Juanita Avenue Minneapolis, Minnesota.**

FIRST RECOVERY OF BALD EAGLE BANDED IN MINNESOTA — On June 10, 1968 two Bald Eagle nestlings were banded in Itasca County, Minnesota. One of these birds was "found dead" 16 miles south of Llano, Texas, on October 10, 1968. This bird migrated a straight linear distance of approximately 1,185 miles from the site of banding and it is not known whether it followed major river systems or meandered from a straight line flight. The person reporting the band (no. 599-01998) did not see the carcass of the bird but did mention that the cause of death was unknown. To date two banded Bald Eagles have been recovered within the state. One was banded near Cedar Grove, Wisconsin, on October 29, 1954 and was found injured south of Fairmont, Minnesota, on December 2, 1954 (Berger, **Flicker**. 27:40, 1955). The other was banded at Union County Refuge, Illinois, on February 24, 1966 and was found dead near Hastings, Minnesota, on April 15, 1968 (Ligas, mimeo. National Audubon Society. 7p, 1968). Both of these birds were classed as immatures when banded. In 1968 eight color-marked birds were sighted in the Chippewa National Forest region of Minnesota, and one additional bird was sighted in Itasca County, Minnesota (Ligas, *loc. cit.*). These birds were color-marked at Union County Refuge in 1968. During the 1969 breeding season this author initiated a study of the migration patterns of Minnesota Bald Eagles. Nestlings were color-marked and also banded with U. S. Fish and Wildlife Service bands. People seeing color-marked birds are asked to contact this author.

Acknowledgements: This work was funded in part by grants for Bald Eagle Research from the Society of Sigma Xi Grants-in-Aid to Research, and the National Audubon Society. **Thomas C. Dunstan, Department of Biology, University of South Dakota, Vermillion, South Dakota.**

AN EASTERN GRAY TREEFROG LIVING IN AN OSPREY NEST — On September 9, 1967 a female eastern gray treefrog was found 2 cm below the materials lining the inner bowl of an Osprey nest which was located on the top of a 2.5m dead section of a 14.5m red pine. The air temperature was 16 C and 2 cm below the inner bowl surface where the frog was located the temperature was 20 C. The inner bowl was lined with pieces of lichens, bulrush, Hornwort, Potamogeton, to a depth of 12 cm and numerous fish scales and opercular bones were present. The nesting site was actively used by a pair of Osprey until departure from the area on August 29 and is located on the edge of a bog bordered by green alder, and large-toothed aspen. Upon discovery the frog made three jumps before being captured and then assumed the "death-feigning" position described by Banta (1967). The frog resumed normal activity two minutes after being placed in a collecting jar.

LITERATURE CITED

Banta, B. H. 1967. Death-Feigning Behavior in Eastern Gray Treefrogs, *Hyla versicolor versicolor*. *Herpetologica*, 23(4):317-318.
Thomas C. Dunstan, Department of Biology, University of South Dakota, Vermillion, South Dakota.

BOBWHITE QUAIL OBSERVATION — On July 9, 1969, Roger N. Johnson and Randy Schlosser heard what they believed to be a Bobwhite at the Game Research Center located about 5 miles southwest of Madelia in Watonwan County. Upon checking further they found the Bobwhite "singing" atop a vacant building. They contacted Edward Hessler and me and the four of us, in a pickup truck approached the bird. Using a telephoto lens on my camera, I photographed the bird. The bird then flew into an adjacent hayfield when we approached to within about 100 feet. Several hours later, R. Schlosser "whistled" to the Bobwhite and shortly received an answer from it in the hayfield. The bird has not been seen or heard since July 9 but is still believed to be in the vicinity. **Earl D. Kopischke, Game Research Center, Madelia, Minnesota.**



A NESTING RECORD OF LINCOLN'S SPARROW — On June 21, 1969 I accompanied Dennis Meyer to a bog area near Meadowlands in St. Louis County. The trip had been made with the hope of finding nests of birds for which there were few state records. We had hoped to find the nest of the Palm Warbler because Dennis had on a previous visit found evidence that they bred in this particular bog (Meyer: *Loon*, 36:4 pg. 137). We were unsuccessful in this effort, although we found one fledgling being fed and two other pairs that may have been feeding young which had left the nest. In our search for Palm Warblers we found a pair of Lincoln's Sparrows feeding young and after about a two hour period we were able to pinpoint the general site of the nest. After a short search Dennis located the nest itself. The nest was situated in a tussock of Cotton Grass (*Eriophorum*) resting on a pad of Sphagnum Moss. It was well-concealed, sunk some six inches below the apparent bog surface, and was loosely woven of the dried grasses and sedges of the area. Five young were in the nest, all of an

age where on discovery they left the nest. Although we attempted to replace them in the nest we could not make them stay so the nest was collected and is now a part of the collection at the University of Minnesota, Duluth. As far as I could determine from a somewhat cursory search of the literature, this nest may have been only the second reported for Minnesota and the first collected. Mrs. W. Powell Cottrille, I believe, reported the first Minnesota nest of Lincoln's Sparrow, one found in Lake County in 1963. (Cottrille: **The Loon**, 36:1 pg. 22).

Other nesting evidence found in the bog included a nest of the Nashville Warbler containing three young of an estimated age of five days; White-throated Sparrows feeding young out of the nest; a Slate-colored Junco with young out of nest and past the bobtailed plumage; and Myrtle Warblers and Ruby-crowned Kinglets carrying food, but to what age young we did not determine. **P. B. Hofslund, Biology Dept., University of Minnesota, Duluth.**

WINTERING RED-HEADED WOODPECKER IN MILLE LACS COUNTY —
Two Red-headed Woodpeckers spent the winter of 1968-69 at "Amundsen's Wood" along the eastern edge of Onamia. I saw one of them for the first time on November 27, 1968 at the house of Mr. A. Mohler who often saw a Red-headed Woodpecker on his premises during winter months. Later the bird headed across the highway into "Amundsen's Wood" where I saw him frequently and believed it was always the same bird. But I soon realized that I was seeing two birds because their behavior differed. While one was rather tame and friendly, the other was shy and would not permit me to approach closer than 30 yards. Mr. L. Norine who also lives in that wood made the same observation, when the woodpeckers visited his bird feeders, one at a time. Besides differing in behavior they differed in color. The head of one was bright red whereas the head of the other was darker. In March we sometimes saw both woodpeckers in the same part of the wood but they seemed to evade each other. In early May one or both started calling and on May 9 I saw them paired. On May 17 they were copulating. Mr. L. Norine who has lived in that wood for six years did not see any Red-headed Woodpeckers there until 1967-68 when one or two of them wintered there. Although his bird feeders were always full of suet and sunflower seeds the woodpeckers foraged extensively in trees and old telephone poles. This year on March 11 I watched a woodpecker for several hours while he picked up spilled corn along the shoulder of the highway from bare spots where snow had melted. Then he deposited the corn in crevices of nearby trees and an old cracked telephone pole. Several days later I saw him taking some corn out of his caches, inserting it into a split electric light pole, then breaking it into pieces and eating it. Another Red-headed Woodpecker has spent the winters from 1966-1969 at a bird feeder about a mile southwest of "Amundsen's Wood." And a third one stayed last winter 7 miles S. W. of Onamia at W. Heidelberger's farm. **M. Ivanovs, Onamia, Minnesota.**

REQUEST FOR INFORMATION

A study is being conducted to determine the migration routes of Bald Eagles breeding in Minnesota and Bald Eagles wintering in South Dakota. Both immature and mature birds have been color-marked yellow, green turquoise, or in combination. Information desired: color and portion of wing or tail that is marked, date of sighting, location, and activity of the bird. Exact time of sighting and name of person making the observation is also necessary. Send information to: Thomas C. Dunstan, Dept. of Biology, Univ. of South Dakota, Vermillion, South Dakota 57069.

M. O. U. ENDOWMENT FUND CAMPAIGN

With this issue of *The Loon*, you will receive a letter asking for a contribution to the Minnesota Ornithologist's Union Endowment Fund. The principal of this fund will be held in trust; while the income will be available to aid Minnesota birds and birding on a continuing basis.

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The
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The LOON

Organ of the Minnesota



Henslow's Sparrow.
Photo by William
Drazkowski. Taken
in June, 1968 East
Burns Valley, Wi-
nona.

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PURPOSE OF THE M.O.U.

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 M.O.U. officers wish to point out to those interested in bird conservation that any or all phases of the M.O.U. program could be expanded significantly with gifts, memorials or bequests willed to the organization.

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The President Writes . . .

THE OLD AN NEW DECADES

What was the most important development of the 1960's? Was it the war in Viet Nam? Strife in other parts of the world? Several spectacular assassinations? Rising militancy of minorities? Leftward movement of governments? Trips to the moon?

Certainly all of these were important. Yet I believe that history will remember the 1960's primarily as the time when at last our species became aware of the serious trouble we have made for ourselves by overpopulating, plundering, and polluting our planet. This trouble affects everybody and every living thing. It is pertinent here because the swelling of human numbers, the using up of our resources, and the defiling of the earth have had and must continue to have grave consequences for birds and other life.

*In 1962 the publication of Rachel Carson's book *Silent Spring*, came at just the right time. It was a most persuasive and convincing book, and its title was pure magic. So, even though damn-the-consequences advocates of the exploitation of the earth found fault with her book, it nevertheless became tremendously influential. Discussion of the book, pro and con, set people thinking; and in the end an avalanche of other books and articles in similar vein came forth, and they made people aware of how battered and sick we have made our world. For that reason I feel that publication of *Silent Spring* may have been one of the most important events of the 1960's.*

Starlings and native blackbirds probably increased during the 1960's, but many species of native American birds must have continued to decline in numbers. This general decrease of many species is a thing that many old-timers feel strongly about, but, lacking much quantitative evidence to support this conviction, we mostly keep silent lest we be accused of old fogeyism.

Membership in bird clubs and other conservation groups has increased tremendously during the 1960's. For that we can thank Roger T. Peterson's wonderful field guides and later similar books by others. The National Audubon Society has got bigger, and the rise of the Sierra Club and the National Wildlife Federation has been dramatic. Here in Minnesota the MOU and its affiliated clubs have grown in membership and influence. The Bell Museum of Natural History has thrived and increased its good work. These and similar developments we must applaud.

What lies ahead for the 1970's? Environmental problems and public awareness of them will grow, and we can hope that some of the bad trends in environmental deterioration can be reversed. Certainly birdwatchers and conservation-minded people will become more numerous. Additional splendid books on nature will be published. Young people, eager for something to protest, will turn on their militancy against pollution and the despoilation of the environment. Let's hope that many of these protesters will also contribute some positive, constructive answers and actions.

Under careful stewardship, some of our best-publicized rare species will cling to existence. I think that the Whooping Crane and the Ivory-billed Woodpecker will survive the seventies, but I doubt that the California Condor will. Less spectacularly but more importantly, many of our common native birds will become less common as we continue to work havoc on our environment.

Can you think of ways to preserve nature in the 1970's? It is latter than we realize.

Robert E. Turner
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Shafer, Minn. 55074

BIRDS IN WINONA COUNTY

by Brother Theodore Voelker

Winona County situated in the southeast corner of Minnesota, comprises 620 square miles. It is bounded on the north by Wabasha County, on the east by the Mississippi River, on the south by Houston and Fillmore Counties and on the west by Olmsted and Wabasha Counties. The county is divided into twenty townships, the county seat being the city of Winona.

The county could be described as a high plateau of farmland about 500 feet above the Mississippi River, cut by valleys formed through glacial action and the erosion of creeks, all of which eventually make their way into the Father of Waters. Most of the valleys run in a north-south direction, their creeks flowing north. Some of the other valley creeks run south or southeast into Rush Creek and the Root River which traverses Houston County. The Whitewater River whose source is in Winona County travels north into Wabasha County before entering the Mississippi.

Quite a few valleys were once sources of springs and creeks but are now dry runs due to the lowering of the water table through the years. Almost all the valleys were farmed to a greater extent than they are today. Some farms have been abandoned, some are placed in soil banks; others have been sub-divided into lots for building homes, particularly those situated near the city of Winona. Almost all of the Whitewater Valley farms no longer exist. Because of erosion they were gradually vacated, and the area was made a state park and refuge.

A good example of the changes which have taken place in the terrain of the county is Pickwick Valley. The transformations which have occurred in the valley were vividly described to me by Karl Olson, father of Clara Olson Haake of Winona. When making

my bird studies at the upper end of the valley, I spent two weeks at the Haake cottage on Trout Creek for two consecutive summers. Each evening "grandpa" Olson shared my humble supper of trout, freshly caught in the creek, and rewarded me with his talks of the early Norwegian settlers and the changes which had taken place in his lifetime. When he was a youth, the dead end of Pickwick Valley, beginning at the point where the old upper schoolhouse stood until 1968, used to have two more farm homes above the Ed Olson place. The Ole Petersons and the Gilbert Johnsons lived in the closed end of the valley and had their farms on top of the hills. An old windmill and the remains of a log cabin are all that is left except for a few aged apple trees and lilac bushes. To the north the next farms were situated where the valley begins to open up and the owners were Tom Olson, Gilbert Nelson, and Matt Huff (step-father to Karl Olson). They worked their fields along the creek and each of them had acreage on top of the bluffs as well. Each farmer had to build a road from his home up the rocky, tree-covered hillside to his holdings on the ridge, and this was by no means an easy task as related by Mr. Olson. Across the creek from where the Haake summer cottage now stands was another small farm, whose owner I was unable to uncover. The cottage once stood at least twenty feet from the creek; erosion has now cut the distance down to about eight feet. Down the road apiece, where the Ed Erickson Stone Roller Inn later stood was the Henry Johnson forty.

Today only two of the original farms are still in operation. One is the Gilbert Nelson farm presently run by Glen Quinn, and the old Tom Olson farm now owned by Elvin Rolfson. Since much of the land is no longer under cultivation, a great deal of it is overgrown with weeds, brush and

trees. Bird life has changed considerably. The Bobwhite of Karl Olson's youth, once numerous, is no longer there. Of course the Ruffed Grouse population has been reduced. However, in the past ten years with better cover and feed, the grouse is increasing but has not reached the number there in pioneer days. There are still Great Horned, Barred, and Screech Owls although the latter are now rare, and the Great Blue and Green Herons are still using the creek as a source of food. A small pond up the valley attracts Mallards and Wood Ducks. Old buildings, no longer used, are nesting sites for Eastern Phoebes and Barn Swallows. The creek banks provide nesting holes for Bank and Rough-winged Swallows and Belted Kingfishers. The Tufted Titmouse, Cardinal and Starling invaded the valley between 1914 and 1927 and are increasing in numbers, but the House Sparrow population has gone down, most likely due to lack of horses and small grain. Red-tailed Hawks raise their families there each year and, until the construction of the new highway in the lower valley removed the tree, a Red-shouldered Hawk nested in this same tree for six consecutive years. The thick stand of young willows along the creek offers cover for the American Woodcock who probes among the roots for his food and nests there. Spotted Sandpipers have always teetered along the creek bed looking for crustaceans. Although all five woodpeckers nest in the area, it seems the Starlings have reduced their numbers by taking over their nesting holes. Rufous-sided Towhees and Wood Thrushes seem not to have changed in numbers over the years. Along the roads are numerous Indigo Buntings, Yellow Warblers and American Goldfinches, the wild canaries of Grandpa Olson's day. He told me the Eastern Bluebird was much more numerous than it is today; again, I suspect the Starlings as the disturbing factor. Song Sparrows, Field Sparrows and Robins are everywhere; the latter nest even in the deep woods of the upper end of the valley. The Robin could be carrying on a pattern

of nesting near where homes used to stand, even though the buildings are now missing. Common Grackles have increased in great numbers throughout the valley. The total list of birds observed during my population study of Pickwick Valley was seventy-eight (78) species. My reason for singling out this valley for detailed report is because I believe it is characteristic of all Winona County valleys which have running water.

Between my trips made as a boy with my brother Jake, and those I took with him on my visits home, and birdwatching with my friends over the past nineteen (19) years, I have been on practically every road in the county—as a matter of fact we travelled over roads which have since been abandoned. So I have done bird study in all twenty townships, the least work having been done in the townships of Saratoga, Fremont, and Pleasant Hill. About 84% of the 398,720 acres of Winona County is actually in farmland including pasturage, but only 55% of the total acreage is tilled. So there is abundant and varied habitat remaining to attract birds. Winona County has the Mississippi River bottomlands along its route, marshes, ponds, open farmland, prairies, forests, brushy hillsides, sheltered ravines, wooded hills, meadowlands, and a large area of state refuge and wildlife area. Although there is a lack of potholes, the farmers' reservoirs and some of the shallower creeks do attract some shore birds in migration, but our sandpiper records are not numerous.

Whitewater refuge and the Mississippi near Wabasha County border do attract both Golden and Bald Eagles in winter and Turkey Vultures each summer; there are a few winter records for the latter. There are many nesting Red-tailed Hawks throughout the county, but fewer Red-shouldered Hawks, who most often nest near rivers. The Sparrow Hawk is rather a common nester; more sparsely present are resident Cooper's and Sharp-shinned Hawks. Migration of Rough-leg-

ged, Marsh, and Broad-winged Hawks is fairly abundant most years. Peregrine Falcons, though once common dwellers on the river cliffs, are no longer in evidence. In the past fifty years, the Common Egret has made a remarkable comeback. For some years in the early 1900's the egret disappeared entirely from our area; then in the '30's it came in late summer to feed in the sloughs; now it is a fairly common nester on the islands in the river. Egrets can be seen throughout the nesting season along the Mississippi or at the Dorer pools in Whitewater.

Not many ducks nest in our area now, except for the Wood Duck, a few Mallards and perhaps some Blue-winged Teal. Years ago there were nesting teal, but since the early teal hunting season a few years back, I have not actually found a nest. Some Canada Geese use the Mississippi flyway as a migration route both spring and autumn. Most years a sprinkling of Snow and Blue Geese are mixed in with the Canada's as they stop to feed and rest. Occasionally the Rochester resident Canada's make a visit to our county. Some Hooded Mergansers nest in the vicinity. Red-breasted Mergansers are often seen on Lake Winona in migration and the Common Merganser and Common Goldeneye are regular winter visitors on the river.

Both Herring and Ring-billed Gulls feed at Lake Winona and Whitman Dam in migration. Bonaparte's Gull is a rare visitor and Franklin's Gull goes through the Winona area only in fall migration. Caspian, Forester's, Common and Black Terns migrate through the region; only the Black Tern sometimes nests here.

Common Loons and Horned Grebes occasionally make a stop at Lake Winona and there is one report of a Western Grebe four years ago. Pied-billed Grebes and American Coots are common on Prairie Island, Mud Lake and the river bottoms; some of the former nest in the vicinity. I have records of American Coots nesting near Winona during the '50's. The Whistling

Swan, all the puddle ducks, most of the diving ducks and Double-crested Cormorants using the Mississippi flyway stop to rest and feed in the refuge near Minneiska, just north of the Winona County line. Fifteen years ago cormorants had a nesting colony along the Burlington tracks south of Winona together with Great Blue Herons, but this rookery is no longer active. The latter have nested for some years now on an island a little north of Minnesota City.

The American Bittern was a common nester around Lake Winona, when it was surrounded by marshes, and in the river sloughs before the 1920's; today this bird is a rarity. Black-crowned Night Herons are seen here in migration; the Yellow-crowned which nests in neighboring Houston County has made its appearance in the Winona area but so far there are no reports of nests.

The farmlands atop the bluffs and the untilled land of Prairie Island support a few Ring-necked Pheasants as do some of the valleys but this imported bird is not abundant. Although the Gray Partridge was planted in our county many years ago, the only reports now are from nearby Wabasha County, near Plainview and Elgin. Bobwhites are seldom seen here in recent years, although at one time they were fairly common throughout the county. Ruffed Grouse are in the ascendancy at the present time due to more ungrazed woodland. Whitewater furnishes habitat for the Common Gallinule, Wood Duck and Common Snipe. Killdeer are present everywhere in the county during the summer, and some years they winter at the springs on Prairie Island together with Common Snipe and some species of ducks. Great Horned and Barred Owls are quite common; the rare Saw-whet Owl is reported almost every year. The once common Screech Owl has become rather scarce.

All cities in the county provide habitat for Chimney Swifts and Common Nighthawks, and there is scarcely a

valley that does not have Whip-Poor-Wills. This summer a Killdeer nested on top of a garage in Winona. My Grandfather used to tell about the huge flocks of the now extinct Passenger Pigeon which when migrating darkened the sky in the late 1800's; today its relative the Mourning Dove is found in all available habitats throughout our region.

A wide variety of wild flowers attracts the Ruby-throated Hummingbird; the abundant supplies of water are sources of food for the Belted Kingfisher. Almost every winter this bird winters here if open water is found. All the woodpeckers, except the two northern varieties, make their homes here in summer; even some of the Red-headed are permanent residents. There is a pair of Pileated Woodpeckers living in almost every county valley. There are a few nesting Yellow-bellied Sapsuckers. The Eastern Kingbird population has been down for some years, although they used to be common in all valleys as well as on the ridge land. The last two summers especially there was a noticeable lack of these birds. We have one record of the Western Kingbird in Middle Valley. The Yellow-bellied and Olive-sided Flycatchers are fairly abundant spring migrants; all the other flycatchers are common nesters: Traill's near water, the Least near the woods, Eastern Phoebe under most bridges, even in valleys without water, and the Eastern Wood Pewee in the forest edges.

All the Minnesota swallows nest somewhere in Winona County. Last summer there were huge colonies of Bank Swallows in the Whitewater area and the road-cuts down the river. The Cliff Swallows besides nesting under the bridges in Whitewater has now begun to use many of the small township bridges over creeks. The Blue Jay, Common Crow, Black-capped Chickadee, White-breasted Nuthatch and the Tufted Titmouse are common residents. The Red-breasted Nuthatch passes through in migration, and the

past two winters has made invasions in great numbers.

Among the wrens, the nesters are House, Long-billed, and Short-billed; the Winter Wren is a rare visitor. All the thrushes of the state are here in spring; those nesting in the county are: Robins, Eastern Bluebirds, and Wood Thrushes. There are a few records of the nesting Veery. Mr. Gordon Baab of Winona, with his bluebird housing project in our vicinity, has succeeded in producing a great increase of this beautiful birds.

Cedar Waxwings nest in the county. Bohemian Waxwings are rare winter visitors especially when we have a good hackberry year. Last year the Cedar Waxwing was absent all winter although usually we have some winter visitants. All Minnesota vireos migrate through the county. Those nesting here are the common Red-eye, and Warbling, and the rarer Yellow-throated and Bell's.

Although most of the warblers are present in years when migration is good, only the Yellow, Yellowthroat, Cerulean, Ovenbird, Blue-winged, Louisiana Waterthrush and American Redstarts nest in our area; the Yellow-breasted Chat has made several appearances, once in Schulz's valley and twice at Whitewater refuge. To my knowledge the Black-throated Blue Warbler has never been seen in the county. The Prothonotary Warbler nests on islands in the river. Blue-gray Gnatcatchers nest in Whitewater, Farmers Community Park and a few valleys.

The Eastern Meadowlark is found in our valleys; its western counterpart prefers the upland farms which he shares with the Bobolink and most years the Dickcissel. Here, too, the Horned Lark is present for most of the year. If winters are very severe the lark may migrate farther south in December or January. Hundreds of larks ordinarily spend the late months of winter feeding on weed seeds along the roadsides or in manure-spread fields on the ridges.

Each year finds colonies of Yellow-headed Blackbirds somewhere near Winona. When I used to walk to school in Winona over fifty years ago, they were common nesters in the marsh along the Mankato Avenue dike where the Winona Community Memorial Hospital now stands. At that time the Red-winged Blackbird for the most part was also a marsh dweller. Today as the marshes continue to disappear, there is no road or field on the hilltops or in the valleys without nesting Red-wings. The other two blackbirds migrate through here; the Brewer's has been known to nest some years. Common Grackles have increased in prodigious numbers, perhaps because of the increase of conifers which they seem to prefer for bringing up a family. The Brown-headed Cowbird seems to be thriving.

American Goldfinches are abundant during the nesting season; some are permanent residents who join with the diversified winter visitations of Bohemian Waxwings, Evening and Pine Grosbeaks, the White-winged and Red Crossbills, Common Redpolls, Pine Siskins, Slate-colored Juncoes (among them a few Oregon), Tree Sparrows, and Purple Finches. The past two years have been poor redpoll winters; three years ago there was a tremendous number wintering in our weedy fields. Lapland Longspurs and Snow Buntings appear most winters in small numbers most often feeding along with the Horned Larks on the hills.

In summer there are abundant Catbirds, Brown Thrashers, Rose-breasted Grosbeaks, Rufous-sided Towhees, Scarlet Tanagers, and Indigo Buntings in all our valleys. Baltimore Orioles are common; the Orchard Oriole is seen somewhere in the county each year but it is by no means abundant. At least one pair nests on our campus each year.

Most sparrows of the state migrate through Winona County. Those which nest here are the Savannah, Grasshopper, and Vesper Sparrows on the

ridges, the uncommon Henslow's nesting on the ridges as well as valleys, Song Sparrows in the valley. Chipping Lark, Field, and a few Swamp Sparrows. Last spring was my first record of migratory Clay-colored Sparrows in Winona although they next regularly across the river in Wisconsin.

In May 1965, two Cattle Egrets were seen in a flooded field near Winona. In other flooded areas that spring we saw a number of shore birds. This spring again proved to be good for sandpipers because of high water conditions. There are two sight records for the Kentucky Warbler, a few Mockingbird sightings; two Little Blue Herons, one Western Grebe, a Scissor-tailed Flycatcher, one White-fronted Goose, and the Goshawk have been recorded. On several occasions the Snowy Owl and once the Black-backed Three-toed Woodpecker made winter appearances on Prairie Island. Upland Plover records are rare although at one time the bird was quite common on the ridges. My total count for an area, within a two mile radius of Saint Mary's College for all seasons, over a period of twenty years is 146 species, 93 of which were nesting. For Winona County, the Hiawatha Valley Bird Club listed 236 species, either as resident or migrant birds; of these there are 115 nesting species.

My birdwatching began in 1914 in West Burns Valley near Winona when I was ten years of age. My brother Gerry and I had a collection of bird eggs representing 58 species most of which we found near our home. After entering the Christian Brothers in 1923, I failed to pursue my hobby in Winona County for many years. During the 1950's I spent seven summers at Saint Mary's and resumed my studies of birds in the area. For the past two years I have lived at the college, conducting field trips and engaging in personal research involving birds. My impression spanning from childhood to the present day has not been a matter of strict scientific study but I do believe there are less birds in

general than there were when I was a boy. Farmers in the area back me up in this belief. I think the House Sparrow is holding his own, but Common Grackles, Starlings, and Red-winged Blackbirds are on the increase. Observations over some years indicate a decrease of the Indigo Buntings and the Eastern Kingbird. Roadside

spraying, destruction of hedge rows, as well as over-grazing and erosion have taken their toll of birds in certain areas. My favorite, the Eastern Bluebird, harbinger of spring is definitely on the increase; on this heartening note ends my report of birds in Winona County. **St. Mary's College, Winona, Minnesota.**

THE SUMMER SEASON

by Robert P. Russell, Jr.

Summer weather varied from June's cold and wet to August's hot and dry conditions. June was the coldest June on record for the state with a mean temperature of 58.4. Temperatures ranged from a low of 24° at Cotton (St. Louis Co.) to 97° at Albert Lea on the 5th. Rainfall was above normal for most of the state with heavy rains in the south (11.8 inches at Worthington and 7.6 at Winona for the month). Only the northwest was dry (Bigfork, 1.36 inches). Moderate storms racked the southwest on the 28th and 29th with some hail and Pipestone Co. had tornadoes on the 26th. The peak of the nesting season, though, seemed to get by without widespread storms. July was on the cool side, especially in the north, and averaged 1 to 3 degrees below normal for most of Minnesota. Highest temperatures were surprisingly in the north where on the 12th, Thief River Falls registered a 98° and an unofficial thermometer at Greenwood Lake north of Two Harbors on the 13th registered 95°, a bad day for birds and men. July rainfall was spotty and a bit on the wet side (heaviest at Canby, Yellow Medicine Co. with 8.4 inches). August was hot and dry with some areas of the western prairies (Beardsley) receiving no rain the entire month. On the 6th the most severe storms of the season caused \$1.2 million loss of timber and \$2.0 million loss of crops in the counties of Aitkin, St. Louis, Itasca, and Cass. There were 12 confirmed tornadoes

and a waterspout, with moderate loss of life. Nesting season was past for most species, although locally many were probably killed. Damage is expected to eagle and Osprey nests in the storm's vicinity but data will not be in until next year's nesting survey.

Special thanks goes to Kim R. Eckert who helped in the preparation of this material and to Bedford P. Brown Jr. of the United States Weather Bureau, Chicago Office, who obtained the weather information.

Common Loon: nested in Chisago, Ramsey, Wright, Becker, and St. Louis Co.'s; also reported in Beltrami, Lake, Morrison, Clearwater, Mahnomen, Cass, Anoka, Crow Wing, Pope, Mille Lacs, and Ottertail. Non-breeding pairs present on Lake Superior in June and July with 17 at Duluth on 6-6 (JJG).

Red-throated Loon: 6-4 & 5, Duluth, MMC.

Red-necked Grebe: nested in Wright County. Good number of reports from Clearwater, Marshall, Mahnomen, and Ottertail Co's in the north and from Wright and Carver Co's in the south.

Horned Grebe: 6-1 (1) late migrant at Duluth (JJG) and 6-13 from Pennington Co. (JJG).

Western Grebe: 6-13 Agassiz Refuge, Marshall Co. (6) RBJ. Swan Lake, Nicollet Co., 5 on 7-25 (RBJ) and 17 there

on 6-19 (FL) and an unusual eastern record from Lake Waconia, CARVER CO., 1 on 6-4 (TH).

Pied-billed Grebe: nested in Morrison, Pope, Washington, and Watonwan Co's. Reported from Marshall, Clearwater, Mahnomen, Clay, Hennepin, Carver, Sherburne, Meeker, Ramsey, Crow Wing, and Ottertail Co's.

White Pelican: 6-13, 3, Marshall Co. RBJ; 6-22, 12, Milan, Chippewa Co., BAH and 6-16 & 6-23, 1 in Jackson Co. HH. Rather scarce this summer.

Double-crested Cormorant: reported from Lac Qui Parle (50, FL), Marshall, Chippewa, Anoka (6-7, 1 bird), and Swift Co's. Also 7 (migrants) at Duluth on 6-1 (JJG) and 1 there on 7-19 (KE). The breeding colony at Lake Johanna, Pope Co., was again active this summer (BAH).

Great Blue Heron: reported by 32 observers throughout the state. The colonies at Lake Johanna, Pope County and near Cold Spring, Stearns Co. were active this year.

Green Heron: nested at the northern limits of its breeding range in Crow Wing Co. at Crosby Beach, 7-6, 2y out of nest, JB. Two other exceptionally northern reports: 6-12 Lower Rice Lake, CLEARWATER Co., JJG and Trout Lake, ST. LOUIS Co., 7-16, RBJ, the latter record being the most northern report on record for the state. Also reported from Hennepin, Wright, Dakota, Morrison, Rice, Stearns, and Ramsey Co's.

Common Egret: well represented in reports from the central counties including Kandiyohi, Swift, Chippewa, Carver, Scott, Ottertail, Pope, Sherburne, and Grant. Present along the Mississippi in Ramsey, Goodhue, Wabasha, and Dakota Co's.

Black-crowned Night Heron: nested in Hennepin Co. Reported from Marshall, Hennepin, Chippewa, Dakota, Pope, Freeborn, Cottonwood, Nobles, Swift, Watonwan, Ramsey, and Ottertail Co's.

Yellow-crowned Night Heron: 8-1, 2 in Winona Co. (BT) and 3 at La Crescent, Houston Co., (FL).

Least Bittern: reported from Nicollet, Sibley, Wabasha, Wright, and Goodhue Co's. Slight increase in reports this year.

American Bittern: reported from Beltrami, Marshall, Mahnomen, Clay, Pennington, Clearwater, Mille Lacs, Crow Wing, Ottertail, Blue Earth, Hennepin, Kandiyohi, Dakota, Morrison, Ramsey, Rice, Nobles, and Wright. Good numbers this summer.

Canada Goose: nested in Marshall and Stearns Co's. Reported from Winona, Hennepin, Anoka, and Carver Co's and 20 at Sand Point Lake, St. Louis Co. on 7-14. Southern records may be semi-feral birds.

Mallard: 40 nests recorded from Itasca, Anoka, St. Louis, Ramsey, Cook, Beltrami, Wabasha, Lake, Morrison, Becker, Mille Lacs, Wright, Hennepin, Hubbard Co's. Brood size ranged from 2 to 17, averaging about 8 per nest.

Black Duck: nested in Cook Co. Reported from Ramsey Co.

Gadwall: nested in Lac Qui Parle Co. Reported from Nicollet, Marshall ("many in June"), and 1 male on Mille Lacs Lake, 6-24 (MI).

Pintail: nested in Watonwan and Beltrami Co's. Reported from Marshall, Mahnomen, Clay, Clearwater, Swift, Nobles, Nicollet, Wilkin, and Becker Co's.

Green-winged Teal: reported from Marshall Co., the Sherburne Refuge, and Green Lake, Kandiyohi Co.

Blue-winged Teal: nested in Nobles and Crow Wing Co's. Reported from Cass, Marshall, Mahnomen, Sibley, Stearns, St. Louis, Watonwan, Clay, Carver, Cottonwood, Swift, Nobles, and Mille Lacs Co's.

American Widgeon: reported only from Lac Qui Parle, Marshall, and Mille Lacs Co's.

Shoveler: reported only from Cottonwood, Beltrami, and Marshall Co's.

Wood Duck: nested in Morrison Co. where DF found an impressive 39 nests with many having 17, 18, & 19y. Also nested in Washington, Wabasha, Ramsey, Nobles, and Hennepin Co's. Reported from Rice, Winona, Hubbard, Chippewa, Cass, Carver, Blue Earth, Mahnomen, Marshall, Mille Lacs, and Ottertail.

Redhead: nested in Hennepin Co. Recorded from Carver, Nicollet, Marshall, Nobles, and Jackson Co's.

Ring-necked Duck: two nests reported from Morrison Co. by DF, one of which was on a prairie pothole, an interesting habitat for this forest duck. Also reported from Beltrami (5 reports), Sherburne, Cass, Mahnomen, Marshall, and 6-7, Swift Co., 4, HH (possibly late migrants?) and 6-4, Carver Co.

Canvasback: Upper Rice Lake, Clearwater Co., 6-14, 10y (JJG). Also reported from Mahnomen, Pennington, Marshall, and Pope Co's.

Common Goldeneye: nested in Cook Co., also reported from St. Louis, Marshall, and Clearwater Co's (6-14, Upper Rice Lake (1) and Lower Rice Lake (9) JJG).

Lesser Scaup: reported from Duluth in June and July, Marshall Co., Clearwater Co., 6-9 Crow Wing, and 8-1, Winona Co. (BT).

GREATER SCAUP: two pairs closely observed by JJG and RBJ at Agassiz National Wildlife Refuge, Marshall Co. on 6-13 are very noteworthy. Nearest breeding area is the shores of Hudson Bay in northern Manitoba and Ontario (Godfrey, *The Birds of Canada*, Ottawa, 1956). Late migrant recorded at Duluth, 6-1 (JJG).

BUFFLEHEAD: 6-14 Upper Rice Lake, Clearwater Co., 2 males courting one female (RBJ, JJG). Summer records are scarce for this species and more information is needed to ascertain its status at this season.

White-winged Scoter: 6 (4-11) Duluth, 2 migrants (FL, JJG).

Ruddy Duck: nested in Pope Co.; also reported from Cottonwood, Pope, Ramsey, Wright, Meeker, Carver, Nicollet ("common") and Watowan Co's. where 16 (14 males) were recorded on 6-10 (EK).

Hooded Merganser: nested in Morrison (4 nests—10y, 10y, 7y, & 1 nest destroyed), and Itasca Co's.; reported in Marshall, Clearwater, and Winona Co's. also.

Common Merganser: nested in St. Louis and Cook Co's.; reported from OTTERTAIL Co. (Lida Lake 6-7, 1, DS).

Red-breasted Merganser: nested in St. Louis and Cook Co.; reported from Lake Co.

Turkey Vulture: reported from Beltrami, Winona, Houston, Cass, Goodhue, and St. Louis Co's.

Sharp-shinned Hawk: reported from St. Louis (2 areas), Mille Lacs, and Cook Co's.

Cooper's Hawk: reported only from the central counties including Morrison, Crow Wing, Wright, and Mille Lacs. Recent sharp decrease in the East cautions us to report all observations from Minnesota and watch for any trends.

Red-tailed Hawk: reported from 22 counties including Cottonwood, Becker, Norman, Pennington, Wright, Freeborn, Crow Wing, Rice, Morrison, Sherburne, Ramsey, Polk, Marshall, Stearns, Watowan, Isanti, Carver, Blue Earth, Beltrami, Mahnomen, Mille Lacs, and Nobles.

Red-shouldered Hawk: May, Collegeville Stearns Co., female incubating on nest (Dr. Norman Ford, St. John's University). Northernmost breeding for state. 6-28 & 7-19, St. Francis, Anoka Co. (CH); also recorded in Winona, Goodhue, and Wabasha Co's.

Broad-winged Hawk: nested in Clearwater, Ottertail Co.; reported from

Crow Wing, Isanti, St. Louis, Marshall, and Mille Lacs Co's.

Swainson's Hawk: 7-3 Rosemount, DAKOTA Co., 1 carrying rodent in talons at University of Minnesota Research Farm (BAH).

Bald Eagle: 60 active nests in the Chippewa Forest produced 44 young this season (**The Loon**, Vol. 41, No. 3). The species was also recorded in St. Louis Co. (Crane Lake and Lac La Croix) and WINONA Co., 7-28, 2 birds (BT).

Marsh Hawk: nested in Morrison Co.; also reported from Rice, Hennepin, Ramsey, Sherburne, Cass, Carver, St. Louis, Rock, Ottertail, Isanti, Clay, Mahnomen, Wright, Cook, Mille Lacs, Nobles, and Stearns.

Osprey: 49 active nests in the Chippewa National Forest produced 50 young this season (**The Loon**, Vol 41, No. 3). Also reported from St. Louis (Little Long Lake, Lake Vermillion, and Duluth) and Crow Wing Co's.

Pigeon Hawk: 6-11, DULUTH (MMC); 7-10, Lac La Croix, St. Louis Co. (MMC); and 6-12, BELTRAMI Co. (ME).

Sparrow Hawk: nested in Morrison Co.; reported from Freeborn, Stearns, Marshall, Cook, Mahnomen, Becker, Polk, Beltrami, Watonwan, Isanti, Carver, Blue Earth, St. Louis, Mille Lacs, Nobles, Cass, Wright, Wabasha, Pope, Dakota, Pennington, Cottonwood, Rice, Hennepin, Anoka, Winona, Ramsey, and Crow Wing.

Ruffed Grouse: nested in Cook, Pine, Beltrami, and Cass. Also reported from St. Louis, Mille Lacs, Crow Wing, Clearwater, Morrison, Red Lake, and Winona.

Sharp-tailed Grouse: 6-14 Marshall Co. 9, JJG.

Greater Prairie Chicken: CLAY Co. (1 ad, 8 imm.) 7-19 DB. Also reported from Becker and Mahnomen Co's.

Bobwhite: 7-9 Madelia, Watonwan Co., 1, *vide* Earl D. Kopischke.

Ring-necked Pheasant: nested in Dakota, Ramsey, Hennepin, and Nobles Co's.; reported also from Carver, Blue Earth, Washington, Watonwan, St. Louis, Brown, Cottonwood, Rice, Wabasha, Rock, Kandiyohi, and Isanti Co's.

Gray Partridge: reported from Watonwan, Blue Earth, Rock, Nobles, Rice, and Wabasha Co's.

SANDHILL CRANE: 6-24 Buckman, Morrison Co., pair (EC).

Virginia Rail: nested at Crosby Beach, Crow Wing Co.; at Sugar Lake, Wright Co.; and in Watonwan Co. New nesting locale was PINE Co. (along Route 23), 1y in the road, VL. Also reported in Anoka, Sibley, Mahnomen, and Nicollet Co's.

Sora: nested in Isanti and Crow Wing Co's.; also reported from Stearns, Carver, Hennepin, Mahnomen, Todd, Polk, Ramsey, Wright, Mille Lacs, Brown, Clay, Marshall, Clearwater, Nicollet, and COOK Co's. (7-8 Grand Portage 1 heard, JJG).

Yellow Rail: 6-10 Waubun, usual spot, 1 seen, 3+ heard FL; 6-12 Waubun 2-3 JJG; 6-11 Felton, CLAY Co., call heard (EA).

Common Gallinule: only record, 7-24 Winona, 7, BT.

American Coot: nested in Nicollet, Nobles, and Watonwan Co's., the latter in which birds were nesting as early as 4-29. Reported from Marshall and Mahnomen Co's. east to Crow Wing and Mille Lacs Co's and south to Hennepin, Wright, and Ramsey Co's.

Piping Plover: nested at Park Point, Duluth and recorded in June and July by RR, RL, and MMC.

Killdeer: nested in Anoka, Meeker, Nobles, Pope, Wabasha, St. Louis, Ramsey, Hennepin (2 nests), and Dakota. Reported by most observers throughout the state.

American Woodcock: nested in Mille Lacs (5 reports), Kanabec, Pine (7 re-

ports), and Morrison (6-11 4y at Hillman Creek DF). Also reported from St. Louis and Cook Co's.

Common Snipe: nested in Mille Lacs Co.; reported from Swift, Nobles, Wilkin, Clearwater, Beltrami, Crow Wing, Cass, Isanti, Scott, Marshall, Mahnomen, and Pennington. Records from the prairie counties are significant.

Spotted Sandpiper: nested in Anoka, St. Louis Co's. and reported by most observers throughout the state.

Upland Plover: nested in Rock and Watonwan Co's.; reported from Freeborn (3 areas), Stearns, Mahnomen, Polk, Pennington, Anoka, Morrison, Clay (2 areas), and St. Louis Co's. (Mt. Iron, one found dead on 6-2 BAH, migrants?).

Marbled Godwit: reported from Clay, Mahnomen, Wilkin, Becker, Polk, and Pennington.

Wilson's Phalarope: reported from Clay (40, 8-9 EA (probably gathering for migration), Wilkin, Becker, and Sherburne Co's. (6-15 Sherburne Refuge, CU—the species is rather scarce here).

PARASITIC JAEGER: 6-1 Duluth, 1 immature found in desiccated condition JYG.

Herring Gull: reported from St. Louis, Cook, Lake, Wright, Mille Lacs, and Nobles Co's.

Ring-billed Gull: reported from Carver, Ramsey, Clearwater, Wright, Mille Lacs, Clay, Ottertail, and Duluth, St. Louis Co's.

Franklin's Gull: reported from Chipewewa, Lac Qui Parle, Traverse, Ottertail, Nobles, Pope, Stearns, Wilkin, Lincoln, Crow Wing, Kandiyohi, and Marshall Co's.

Bonaparte's Gull: late migrants reported from Duluth on 6-1 (25, JYG) and 6-5 (10, RL).

Forster's Tern: reported from Ottertail, Wright, Jackson, Nobles, Hennepin, and Marshall Co's.

Common Tern: nested in Mille Lacs Co.; reported from St. Louis (Duluth and 7-11 Lac La Croix MMC), Crow Wing, Hennepin, Morrison, Beltrami, and Clearwater Co. (6-14, Red Lake, 30 JJG).

CASPIAN TERN: 7-9 Gull Island, Leech Lake (Cass Co.) 2 nests with 2 eggs in each, Dwain Warner et. al. (See *The Loon*, Vol. 41, No. 3 for more detailed account). First recorded nesting for the state. Also reported from Duluth (6-3, 16 RL and 6-28, 2 RL); 7-5 Lida Lake, Ottertail Co. 5 DS; and Lake Vadnais, Ramsey Co. 6-3, 1 JJ.

Black Tern: nested in Wabasha Co.; also reported from Benton, Stearns, Carver, Hennepin, Ottertail, Waseca, Hubbard, Wabasha, Nobles, Rice, Morrison, Clay, Watonwan, St. Louis, Ramsey, Wright, Mille Lacs, Beltrami, Cottonwood, Winona, Sherburne, Pope and Isanti.

BAND-TAILED PIGEON: first state record; an individual observed near Morris, Stevens Co., during much of July, Ernest H. Stubbe et. al. (See *The Loon*, Vol. 41, No. 3 for an account).

Mourning Dove: nested in Wabasha Co. (bird used unfinished Robin's nest!); also reported from Stearns, Carver, Hennepin, Ottertail, Watonwan, Blue Earth, St. Louis, Winona, Ramsey, Wright, Mille Lacs, Crow Wing, Cottonwood, Beltrami, Hubbard, and Isanti Co's.

Yellow-billed Cuckoo: reported from Stearns, Traverse, Rock, Rice, Hennepin, Ramsey and Wabasha Co's. Reported by JYG on 6-13 from Polk, Red Lake, and Marshall Co's.

Black-billed Cuckoo: reported from Wright, Mille Lacs, Crow Wing, Pope, Dakota, Isanti, Stearns, Carver, Hennepin, Carlton, Washington, Marshall, Ramsey, Cottonwood, Rock, Morrison, and St. Louis (7-3 Duluth 2 MMC; 6-22 MEADOWLANDS, specimen to UMD, MH) Co's.

Screech Owl: nested Worthington, Nobles Co. (HH) and Little Falls, MOR-

RISON Co., 6y banded on 6-11 DF; also reported from Freeborn and Rice Co's.

Great Horned Owl: nested in Wabasha and Hennepin Co's.; also reported from Mahnomen, Winona, Ottertail, Hennepin, Marshall, Crow Wing, Rice, Cass, Isanti, St. Louis, Mille Lacs, and Becker Co's.

Barred Owl: nested in Ramsey and Wabasha Co's.; also reported from St. Louis, Rice, and Mille Lacs Co's.

LONG-EARED OWL: 7-26 Isanti Co. CU; this species is seldom recorded at this season although probably present in small numbers throughout the forested areas.

Short-eared Owl: 6-12 Waubun, Mahnomen Co., 4 RBJ; 6-14 Pennington Co. 1 RBJ; and 6-13 Becker Co., 1 JJG; also seldom recorded during summer but probably resident in undisturbed marsh and prairie areas of the state.

Whip-poor-will: scarce, reported only from Wabasha and Marshall Co's.

Common Nighthawk: reported from Hennepin, Wabasha, Rock, Anoka, Morrison, Cottonwood, Ramsey, Mahnomen, Nobles, Hubbard, Winona, Rice, Stearns, St. Louis, Red Lake, Polk, Cook, Hubbard, Morrison, Watonwan, and Crow Wing Co's.

Chimney Swift: reported from Hennepin, Wabasha, Ramsey, Winona, Morrison, Rice, Wright, Mille Lacs, Cook, Cottonwood, Stearns, Ramsey, St. Louis, Nobles, Freeborn, Blue Earth, Washington, Carver, and Crow Wing.

Ruby-throated Hummingbird: nested in Cook and Beltrami Co's. (2y fledged there as late as 8-30); also reported from Marshall, Clearwater, St. Louis, Hubbard, Cass, Goodhue, Wabasha, Mille Lacs, Crow Wing, Morrison, Mahnomen, Cottonwood, Ramsey, Sherburne, Isanti, Blue Earth, Ottertail, Wright, Houston, and Pope Co's.

Belted Kingfisher: nested in Cook Co.; reported from Hennepin, Carver, Wabasha, Wright, Lake, Mille Lacs, Winona, Washington, Rice, Beltrami,

Ramsey, Isanti, Brown, St. Louis, Red Lake, Pope, Cottonwood, Morrison, Crow Wing, and Nobles.

Yellow-shafted Flicker: nested in Pope, St. Louis, and Hennepin Co's.; reported from Carver, Wabasha, Lake, Rock, Dakota, Ramsey, Sherburne, Mille Lacs, Cook, Crow Wing, Hubbard, Winona, Morrison, Rice, Beltrami, Cottonwood, Isanti, Nobles, Marshall, Watonwan, Blue Earth, Washington, Wright, and Mahnomen Co's.

Pileated Woodpecker: reported from Hennepin, Wright, Anoka, Rice, St. Louis, Crow Wing, Cook, Washington, and Blue Earth (5 mi E of Amboy, 6-1 to 7-31 DMF) Co's.

Red-bellied Woodpecker: nested in Hennepin (Bloomington) Co.; also reported from Wabasha, Wright (Pulaski), Winona, Washington, Rice, Goodhue, Ramsey, and Isanti Co's.

Red-headed Woodpecker: nested in Becker and Blue Earth Co's.; also reported from Hennepin, Carver, Wabasha, Mille Lacs, Winona, Morrison, Pope, Clearwater, Crow Wing, Anoka, Rice, Beltrami, Cottonwood, Stearns ("more common"), Washington, ("increased"), Ramsey, Sherburne, Watonwan, Nobles ("increased"), and St. Louis Co's. Apparently a population peak for this species.

Yellow-bellied Sapsucker: nested in St. Louis and HENNEPIN Co's.; also reported from Marshall, Clearwater, Lake, Mille Lacs, Isanti, Cook, Winona, Beltrami, Crow Wing, and Red Lake Co's. in the north and 6-2 Fairbault, Rice Co. OR and 7-22 Goodhue Co. RL and Ramsey Co's. in the south.

Hairy Woodpecker: nested in Hennepin, Wabasha, and Ramsey Co's.; also reported from Red Lake, Pennington, Carver, Wright, St. Louis, Mille Lacs, Hubbard, Cook, Winona, Morrison, Rice, Washington, and Crow Wing Co's.

Downy Woodpecker: nested in Hennepin (5 reports), Cook, Ramsey, and St. Louis Co's; reported by most observers from throughout the state.

Eastern Kingbird: nested in Rock, Wright, Hennepin, and Nobles Co's.; reported by most observers throughout the state.

Western Kingbird: nested in Rock Co. and Morrison Co.; also reported from Ottertail, Mahnomen, Wilkin, Clay, Norman, Anoka, Lac Qui Parle, Wright, Nobles, Sherburne, and Meeker Co's.

Great Crested Flycatcher: reported from Polk, Red Lake, Marshall, Wabasha, Winona, Morrison, Hennepin, Watonwan, Wright, Anoka, Rice, Ramsey, Isanti, St. Louis, Washington, Brown, Mahnomen, Roseau, Nobles, Mille Lacs, Crow Wing, and Beltrami.

Eastern Phoebe: nested in Pine, Hennepin, Clearwater, Carver, Anoka, and St. Louis Co's.; also reported from Mahnomen, Roseau, Beltrami, Wabasha, Rice, Mille Lacs, Winona, Morrison, Clay, Goodhue, Ramsey, Wright, Crow Wing, Isanti, and Washington.

Yellow-bellied Flycatcher: 6-5, 9, 27 Duluth, 2 singing males JJG, MMC; 6-11 Morrison Co., 1 banded LR (late migrant); 6-21 Toivola, St. Louis Co., 3 singing males PH.

Trail's Flycatcher: reported from Mahnomen, Clay, Red Lake, Marshall, Roseau, St. Louis, Cook, Morrison, Rock, Carver, Hennepin, Ramsey, and Winona.

ACADIAN FLYCATCHER: 6-15 Beaver Creek Valley State Park, Houston Co., female incubating eggs EC; 6-30 Beaver Creek 1 egg, 7-11 incubating (different nest?) FL.

Least Flycatcher: nested in Becker Co.; reported from Winona, Lake, St. Louis, Cook, Morrison, Hennepin, Crow Wing, Ramsey, Cass, Beltrami, Isanti, Mille Lacs, Norman, Clay, Red Lake, and 6-4, 7-25 Mountain Lake, Cottonwood Co. LF (possibly late and early migrants?) and Nobles Co's.

Eastern Wood Pewee: reported from Polk, Red Lake, Carver, St. Louis, Mille Lacs, Winona, Crow Wing, Mahnomen, Norman, Cook, Morrison, Anoka,

Rice, Beltrami, Ramsey, Watonwan, Nobles, Roseau, Pope, Washington, Hennepin, Wright, Freeborn, and Brown.

Olive-sided Flycatcher: 6-1 Hennepin (late migrant); 6-14 Carver Co., TH, exceptionally late migrant for south; 6-(1-13) Mille Lacs Co., MI; also reported from Duluth, Lake, and Marshall Co's in June.

Horned Lark: nested in Dakota Co.; also reported from 17 other counties.

Tree Swallow: nested in St. Louis, Pine, Hennepin, Wabasha, and Rice (where DR found 22 nests, half successful, others destroyed by predators, vandals, sparrows, wrens, and bluebirds) Co's.; also reported by most observers throughout the state.

Bank Swallow: reported from 22 counties throughout the state.

Rough-winged Swallow: reported from Winona, Goodhue, Washington, Ramsey, Rice, Swift, Nobles, Cottonwood, Morrison, Mille Lacs, and Clay, Mahnomen, and St. Louis Co's., in the north.

Barn Swallow: nested in Anoka, Wright, Hennepin, and Rock Co's.; reported by most observers throughout the state.

Cliff Swallow: nested in Wright, St. Louis (Split Rock KE), and Beltrami Co's.; also reported from St. Louis, Cook, Lac Qui Parle, Pennington, Brown, Mille Lacs, Crow Wing, Swift, Marshall, Sherburne, Wadena, Cass, Beltrami, and Wabasha Co's.

Purple Martin: nested in Wright and Wabasha Co's.; also reported by numerous observers throughout the state.

Gray Jay: nested in Cook and St. Louis Co's.

Blue Jay: nested in Hennepin, Wabasha, and St. Louis Co's.; also reported by most observers throughout the state.

Common Raven: reported from Cook, Marshall, Beltrami, St. Louis; 6-1 Hinckley, PINE Co. 2, RBJ and "June"

Onamia, MILLE LACS Co. 1, MI.

Common Crow: nested in Pine Co.; reported by most observers throughout the state.

Black-capped Chickadee: nested in St. Louis, Hennepin, and Carver Co's.; also reported by numerous observers throughout the state.

Boreal Chickadee: 6-29 Duluth 2, RL, VL, only report.

Tufted Titmouse: 2 nests reported from Hennepin Co.; also reported from Houston and Rice.

White-breasted Nuthatch: reported by numerous observers north to Lake, St. Louis and Beltrami Co's.

Red-breasted Nuthatch: 7-2 Bloomington, HENNEPIN Co., 2y out of nest being fed by adult, EH also nested in St. Louis Co. (Hibbing and Duluth); reported from Cook, Hennepin (all June, VL).

Brown Creeper: nested in St. Louis Co.

House Wren: nested in Beltrami, Hennepin, Wright, Chisago, Washington, Rice, Wabasha, and Freeborn Co's.; also reported by most observers throughout the state.

Winter Wren: reported from St. Louis and Cook Co's.

Long-billed Marsh Wren: reported from Watonwan, Meeker, Nicollet, Hennepin, Ramsey, Sibley, Carver, Wright, Freeborn, Crow Wing, Cook, Mahnomen, Marshall, Pennington, Winona, Wabasha and Polk Co's.

Short-billed Marsh Wren: reported from Watonwan, Carver, Wright, Mille Lacs, Cass, Cook, St. Louis, Mahnomen, Marshall, Isanti, Ramsey, Hennepin, Beltrami, Winona, and Polk Co's.

MOCKINGBIRD: 8-20 Royalton, Morrison Co. 4 eggs hatching, 2nd nesting of the year and second reported Minnesota nesting record, EC; 7-(4-9) Hollow Rock, Grand Portage, Cook Co., one in juv. plumage, JJG.

Catbird: nested in Hennepin Co.; reported from 32 counties throughout the state.

Brown Thrasher: nested in Hennepin and Blue Earth Co's.; also reported from 28 counties throughout the state.

Robin: nested in St. Louis, Lake, Wright, Aitkin, Rock, Wabasha, Hennepin, Washington, Watonwan and Morrison Co's.; reported by most observers throughout the state.

Wood Thrush: reported from Winona, Rice, and Hennepin Co's., in the south and from Crow Wing (JB, BAH), St. Louis (Duluth RL, JJG; ROSE LAKE 7-19 MMC) and 7-5 Farm Lake, LAKE Co., BAH. Appears to be spreading north in recent years.

Hermit Thrush: reported from Beltrami, St. Louis, Lake, and Cook Co's.

Swainson's Thrush: reported from Marshall, St. Louis, and Cook Co's. Also 7-24 Winona Co., 4 banded TV (very early fall migrants).

Veery: nested in Clearwater, Mille Lacs Co.; also reported from usual forested areas of Cook, Lake, St. Louis, Beltrami, Hubbard, Marshall, Roseau, Polk, Pennington, Mahnomen, Clay, Cass, Crow Wing, Isanti, Morrison, Ramsey, Rice, and Hennepin Co's.

Eastern Bluebird: nested in St. Louis, Pine, Pope, Anoka, Hennepin, Ramsey, and Rice (12 nests, OR) Co's.; also reported from Carver, Washington, Blue Earth, Watonwan, Wright, Mille Lacs, Crow Wing, Swift, Nobles, Beltrami, Marshall, Mahnomen, Hubbard, Isanti, Wabasha, Wadena, Cass, Benton, Stearns, Morrison, and Winona. Holding their own with increases noted locally.

Blue-gray Gnatcatcher: 6-15 Houston Co., several nests EC; also reported from Winona Co.

Golden-crowned Kinglet: reported from Cook, St. Louis, and Marshall (6-14 JJG, RBJ) Co's.

Ruby-crowned Kinglet: June, Deerwood, CROW WING Co., found nest-

ing JB; also reported from Cook, St. Louis (Duluth PH and Normana Twp. RL 6-29), 6-14 Marshall and Beltrami Co's JJG, RBJ.

Sprague's Pipit: 6-13 usual spot near Felton, Clay Co., singing male JJG, RBJ; 6-10 Buffalo River State Park, Clay Co. 2 VL.

Cedar Waxwing: reported from 28 counties throughout the state including Kandiyohi, Pope, Nobles, and Cottonwood Co.s in the southwest.

Loggerhead Shrike: nested in Morrison Co.; also reported from Clay, Carver, Wright, Benton, Ramsey, Dakota, Wabasha, and Rock Co's. More reports than usual.

Bell's Vireo: 8-3 Winona Co. TV, only report.

Yellow-throated Vireo: reported from Beltrami, Red Lake, Clay, Mahnomen, Crow Wing, and Morrison Co's.

Solitary Vireo: reported from Cook, St. Louis, Clearwater, and Red Lake Co's.

Red-eyed Vireo: reported from 21 counties throughout the state.

Philadelphia Vireo: 7-12 Grand Portage, Cook Co., 4 and 7-13 Deronda Bay, Cook Co., 1 JJG; 6-(1, 2, 4, 9) Duluth 1 singing male MMC. Early migrant: 7-30 Hennepin Co. GES.

Warbling Vireo: nested in Cottonwood Co. (parasitized by cowbird); also reported from 28 counties throughout the state. Increased reports this year.

Black-and-white Warbler: reported from Cook, Lake, St. Louis, Beltrami, Roseau, and Marshall Co's; also 7-10 Mille Lacs Co. MI; 7-9 Morrison Co. LR.

Prothonotary Warbler: 6-24 Hennepin Co. GES, only report.

Golden-winged Warbler: 6-14 Pine Co. DB; 6-28 Rts. 2+31, St. Louis Co., 2, VL; 7-17 Crow Wing Co., 2 juv.; 8-2 Mille Lacs BAH.

Blue-winged Warbler: reported from Winona and Houston Co's.

Tennessee Warbler: reported from Cook and St. Louis Co's. Early fall migrants reported from Duluth 7-25 MMC; Winona 7-28 TV; and Morrison 7-21 LR.

Nashville Warbler: nested in St. Louis Co. (Toivola and Bear Head Lake St. Pk.); also reported from Crow Wing Clearwater, Beltrami, Roseau, Marshall, Cook, Lake and Morrison Co's. 7-21 Winona Co. TV early migrant.

Parula Warbler: nested in Cook Co.; also reported from St. Louis Co. (Burntside Lake, 6-20, JJG).

Yellow Warbler: nested in St. Louis Co.; also reported from 24 counties throughout the state.

Magnolia Warbler: 7-11 Lac La Croix, St. Louis Co. MMC, RL; 6-29 Duluth VL; 7-12 Gooseberry Falls, Lake Co., one singing male KE, RR, also reported from Cook Co.

Cape May Warbler: 6-20 White Iron and Burntside Lakes; St. Louis Co. JJG.

Black-throated Blue Warbler: "June" Grand Portage, Cook Co., 4 localities JJG.

Myrtle Warbler: reported from St. Louis, Cook, Roseau, Clearwater Co's; also 7-21 Carlton Co. DB; 7-6 Gull Lake, Cass Co., one male CH.

Black-throated Green Warbler: reported from Cook, Lake, St. Louis and Clearwater Co's.

Cerulean Warbler: 6-2 Wright Co. DB; also reported from Houston Co.

Blackburnian Warbler: reported from St. Louis, Cook and Clearwater Co's.

Chestnut-sided Warbler: nested in Cass Co.; also reported from St. Louis, Mille Lacs, Crow Wing, Cook, Lake, Morrison and Beltrami Co's. Late spring migrant 6-3 from Mountain Lake, Cottonwood Co. LF.

Bay-breasted Warbler: reported from St. Louis Co. (Crane and White Iron Lakes) and Cook Co. (Mineral Center).

6-14 Hennepin Co. (fide DB). Very late migrant.

Pine Warbler: 7-22 CROW WING Co., adult feeding young, EC; 6-14 Skime, ROSEAU Co., JJG, RBJ; 6-10 Buffalo River St. Pk., CLAY Co., VL (good details: probably too late for a spring migrant; prairie record seems hard to explain at this season); also nested in St. Louis Co.

Palm Warbler: 6-21 Toivola-Meadowlands, St. Louis Co., 3 pairs feeding young, PH; 7-19 Cook, St. Louis Co. RBJ.

Ovenbird: nested in Clearwater and Lake Co's.; also reported from Mahnomen, Cook, Beltrami, Roseau, St. Louis, Winona, Morrison, Rice, Crow Wing, Cass, Isanti and Marshall Co's.

Northern Waterthrush: 6-15 Jacobson, Aitkin Co. JJ, only report.

Connecticut Warbler: 6-14 Skime, Roseau Co., 3 singing males, JJG, RBJ.

Mourning Warbler: nested in Lake and St. Louis Co's.; also reported from Roseau, Beltrami, Cass, Cook and Crow Wing Co's.

Yellowthroat: nested in St. Louis, Pine, and Hennepin Co's.; also reported by numerous observers throughout the state.

Yellow-breasted Chat: 7-24 Winona Co., 1 female, no brood patch TV, only report.

Canada Warbler: reported from Cook and St. Louis Co's. (7-6 Bear Head Lake BAH and 7-13 Duluth KE, RR).

American Redstart: nested in Wright Co.; also reported from Cook, St. Louis, Beltrami, Cass, Crow Wing, Ottertail, Mille Lacs, Morrison, Rice, Winona, Wabasha, Goodhue, and Stearns.

Bobolink: reported from 26 counties throughout the state.

Eastern Meadowlark: reported from Hennepin, Rice, Anoka, Winona, Freeborn, Dakota, Wright, Wabasha, Ramsey, Blue Earth, Watonwan, Washing-

ton, Mille Lacs, St. Louis, Cook (7-13 Deronda Bay JJG), Hubbard? (7-14 RP) and Beltrami? MK. Northwestern records open to question.

Western Meadowlark: nested in Rock Co.; also reported from Winona, Wabasha, Dakota, Ramsey, Hennepin, Rice, Cottonwood, Stearns, Morrison, and Beltrami Co's.

Yellow-headed Blackbird: nested in Watonwan, Wabasha Co's., also reported from 24 counties east to Mille Lacs and Wabasha Co's.

Red-winged Blackbird: nested in Wabasha, Ramsey, Hennepin, Carver and Chippewa Co's; also reported by most observers throughout the state.

Orchard Oriole: nested in Nobles (HH) Co.; also reported from Wabasha (DWM) and Winona (TV) Co's.

Baltimore Oriole: nested in Wabasha, Hennepin, Washington, Anoka, Morrison, and Beltrami; also reported throughout the state by numerous observers.

Brewer's Blackbird: reported from Washington, Clay, Norman, Polk, Pennington, and Marshall Co's. Should be more reports for this species. Overlooked?

Common Grackle: nested in Washington, Wright, and Watonwan; reported by most observers throughout the state.

Brown-headed Cowbird: nested in Hennepin (parasitized Tree Swallow, House Sparrow, Redwinged Blackbird, and Song Sparrow); also reported by numerous observers throughout the state.

Scarlet Tanager: reported from Winona, Ramsey, Hennepin, Rice (Nerstrand Woods, OR) Isanti, Carver, Mille Lacs, Morrison, Crow Wing, Cass, Mahnomen, Beltrami, St. Louis and Cook Co's.

Cardinal: nested in Hennepin (4-6 early); also reported from Winona, Wabasha, Dakota, Washington, Ramsey, Rice, Freeborn, Le Sueur, Wright, Carver, and Stearns Co's.

Rose-breasted Grosbeak: nested in Hennepin, Carver, and St. Louis Co's.; also reported by numerous observers

throughout the state; also 6-27 to 7-7 Minneapolis, albino seen: "very white except for the striping on the head and chest which was a light rufous colour," EH.

BLUE GROSBEAK: 7-6 Rock Co., DB, species returned after one year's absence.

Indigo Bunting: nested in Hennepin Co.; also reported from 15 counties north to Roseau and Beltrami Co's.; also reported from Cook Co. JJG.

Dickcissel: reported in 18 counties north to Isanti and POPE (WH) Co's.

Evening Grosbeak: nested in St. Louis and Crow Wing Co's.; also reported from Cook, Lake, Cass, and Beltrami Co's.

Purple Finch: reported from St. Louis, Lake, Cook, Carlton, Mille Lacs, Crow Wing, Beltrami, Isanti, Cass Hubbard, Morrison and BENTON (MC) Co's. Increased reports could be connected with later winter invasion.

Pine Siskin: major invasion: reported from the south as follows: 7-9 Goodhue Co., 25-30, MHI; 7-22 Vasa, Goodhue Co. VL; 7-28 Winona Co., female with brood patch banded, TV; 7-21 to 8-19 Hennepin Co. RT; 7-16 Anoka Co. WHL; 7-30 Ramsey Co., 6, JJ; north reports: Hubbard Co., 20 in July and 50 in August, RP; 7-30 Duluth 100, MMC; also reported from Carlton, Crow Wing, Cook and Beltrami Co's. Unprecedented summer numbers.

American Goldfinch: nested in Beltrami, Wright, Nobles, and Hennepin Co's.; also reported by numerous observers throughout the state.

RED CROSSBILL: 7-11 Lac La Croix, St. Louis Co., 4 young, MMC, second nesting record for state; two unusual southern records: Pope Co. WH (no details); 6-30, one adult and one young, Mountain Lake, Cottonwood Co. (nested? LF; 7-(23-28), 30+ seen at same location; small flocks reported from Cook Co. (early July, Grand Portage and Lucille Island), Duluth (first seen 6-10, PH, and again in late June and

July, 20-30); also reported from Beltrami Co.

WHITE-WINGED CROSSBILL: 6-27 Duluth, 6, JJG; 7-6 Bear Head Lake, St. Louis Co., 20+, BAH; flocks of 10-20 in Cook Co., JJG. No reports last summer.

Rufous-sided Towhee: reported from Crow Wing, Anoka, Winona and Wabasha Co's. Few reports this summer.

LARK BUNTING: 6-10 Felton, Clay Co., 6 photographed, FL.

Savannah Sparrow: reported by numerous observers throughout the state.

Grasshopper Sparrow: nested in Rock Co.; reported from Ramsey, Freeborn, Nobles, Pope, Polk, Mahnomen, Clay, Rice, Winona and Dakota Co's.

Le Conte's Sparrow: 6-11 Clay Co. EA; 7-(8, 9, 13) Hollow Rock, Cook Co., singing male, JJG; 7-19 Becker Co. DB; also reported from Beltrami, Mahnomen, Roseau, Polk, and Marshall ("many") Co's.

Henslow's Sparrow: only report, 7-6 Winona Co. 2 TV.

Sharp-tailed Sparrow: 6-11 Felton, Clay Co's. EA; 6-12 Waubun, Mahnom- ev Co. 2 JJG, RBJ; 7-19 Becker Co. DB.

Vesper Sparrow: nested in Pine, Pope, and Morrison Co's.; also reported from Ramsey, Washington, Wright, Freeborn, Crow Wing, Nobles, Wabasha, Dakota, Rice, Mahnomen, Clay, Polk, Pennington, Red Lake, Marshall, Anoka, Hennepin, Cottonwood, Winona, Isanti, and Carver.

Lark Sparrow: reported from Wabasha, Sherburne, Red Lake (RBJ, JJG), and Pennington (RBJ, JJG) Co's.

Slate-colored Junco: 6-21 Toivola, St. Louis Co. nest with 1y PH; also reported from Cook, Beltrami, and Duluth (6-2, 30, 7-6, 21 BH).

Chipping Sparrow: nested in Anoka, Cook, Blue Earth, St. Louis, Swift, Pine, Chisago, and Hennepin; report-

ed by most observers throughout the state.

Clay-colored Sparrow: nested in St. Louis Co. (6 nests found in young white spruce plantations); widely reported this summer from Washington, Hennepin, Mille Lacs, Crow Wing, Beltrami, Clay, Polk, Sherburne, Ramsey, Anoka, Stearns, Marshall, and Red Lake Co's.

Field Sparrow: nested in Watonwan and Hennepin Co's.; also reported from Washington, Wright, Freeborn, Swift, Houston, Anoka, Rice, Winona, Wabasha, and Carver Co's.

White-throated Sparrow: nested in St. Louis Co.; also reported from Cook, Marshall, Roseau, Beltrami, Clearwater, and Lake Co's.

LINCOLN'S SPARROW: 6-21 Toivola, St. Louis Co., 5y PH.

Swamp Sparrow: reported from Washington, Nicollet, Carver, Wright, Mille Lacs, Watonwan, Crow Wing, St. Louis, Cook, Clearwater, Marshall, Beltrami, Ramsey, Isanti, Rice, Morrison, Winona, and Mahnomen Co's.

Song Sparrow: nested in Cook, St. Louis, Pine, Hennepin, Rice, and Wabasha Co's.

Chestnut-collared Longspur: 6-13 Clay Co., 3 pr. JYG, RBJ; 7-19 Clay Co., 7 DB. Both observations in usual spot SE of Felton. Species has been in low numbers last two years perhaps caused by mowing of area or increased rainfall locally which might limit this western species at its eastern limits.

Migrant Shorebirds

Semipalmated Plover: 6-4 St. Louis Co. JYG; 6-14 Clearwater Co. JYG (very late spring migrant); fall migrants: 7-18 Dakota and Clay Co's.; 7-25 Sibley Co., RBJ; 7-27 Rock Co. EC.

American Golden Plover: 6-1 Waubun, MAHNOMEN Co. WF (very late inland record); 6-1 Duluth JYG; 6-4 (5) Duluth MMC; 8-8 Clay Co. 3 WF.

Black-bellied Plover: 6-1 Duluth 30 JYG, 6-17 Duluth MMC.

Ruddy Turnstone: 6-1 Duluth 75 JYG; 6-4 Duluth, MMC; 6-4 Lyon Co., HCK; 6-11 Duluth 3 FL.

Whimbrel: 6-2 St. Louis Co. 4 JYG; 6-29 Duluth 3 RL; 7-1 Duluth 2 RL. Latter two records perhaps extremely early fall migrants?

Solitary Sandpiper: 6-9 Duluth, MMC; 7-12 Sibley Co. DB, then late July records from Mille Lacs, Wright, and Dakota Co's.

Greater Yellow-legs: 7-19 Clay Co. DB; 7-22 Dakota Co. VL; then records later in July from Mille Lacs, Cook, and Wilkin.

Lesser Yellow-legs: 7-18 Clay Co. EA; 7-27 Dakota Co. VL.

Knot: 6-1 Duluth 15 JYG; 6-5 Duluth 2 RL; 6-11 Duluth FL.

Pectoral Sandpiper: 7-18 Dakota Co.; 8-9 Clay Co. 30 EA.

White-rumped Sandpiper: 6-11 Duluth FL; 6-14 Clearwater Co. 15 JYG.

Least Sandpiper: 8-8 & 9 Clay Co. 15 EA.

Dunlin: 6-1 Duluth 4 JYG; 6-5 Duluth 4 RL; 6-9 Duluth MMC; fall: 8-8 Clay Co. EA.

Short-billed Dowitcher: 6-1 Duluth JYG.

Dowitcher (sp.): 8-8 Clay Co. 40 EA.

Stilt Sandpiper: 7-19 Clay Co. DB; 8-8 Clay Co. EA.

Semipalmated Sandpiper: 6-1 Duluth 500 JYG; 6-2 St. Louis Co. 5 JYG; 6-24 Mille Lacs MI; fall: 7-22 Dakota VL; 8-8 Clay 30 EA.

Sanderling: 6-1 Duluth 500, JYG; 6-11 Duluth 30 FL; 7-18 Clay Co. EA.

American Avocet: only report; 8-9 Clay Co. 4 EA.

Northern Phalarope: 7-25 Taconite Harbor, COOK Co. one male, JYG.

SUMMARY: Over 65 observers this summer gathered data on 218 species

of birds of which breeding evidence was found for 118 species, lower figures than previous years but the quality appeared much better. Most exciting was the addition of the Band-tailed Pigeon to the state list but many other "less exciting" but more ornithologically significant, events occurred. Among these were the return of the Mockingbird to Morrison Co. where it had first nested in Minnesota last year; the first nesting record of the Caspian Tern for the state; the summering of Greater Scaup in the northwest, far south of its breeding range; and the nesting of Lincoln's Sparrow, Red Crossbill, and numbers of Evening Grosbeaks in the northern forests. Cool June weather may have been the cause for the presence of several species of northern ducks and the presence of migrant warblers lingering on until mid-June in the central portion of the state. Hot July weather apparently had the opposite effect and few migrants were detected in late July on their return flight.

The Green Heron, Red-shouldered Hawk, Eastern Meadowlark, and Wood Thrush showed strength at the northern limits of their range and will probably continue to spread northward into suitable habitat. Apart from finches, a few northern species were recorded at the southern limit of their range or even extended it. The Common Raven, Ruby-crowned Kinglet, and Pigeon Hawk exemplified this trend. Concentrations were found of two warblers usually considered rare: The Black-throated Blue Warbler was found to be rather common in northeastern Minnesota (Cook County) and the Connecticut Warbler was found to be in good numbers in the northwest (Roseau County). In all, 27 species of warblers were found, an impressive total for summer but missing were the Wilson's and Louisiana Waterthrush.

Several species were noteworthy by their absence; no Goshawk, Peregrine, Willet, King Rail, Spruce Grouse, or Carolina Wren were recorded. Birders this year concentrated on the prairie

regions and the northeast forest and southwest river bottoms were only minimally covered. Vast areas of the state are not covered during the breeding season and while slashing one's way through a mosquito-infested tamarack bog may not be one's idea of fun, the ornithological knowledge gained may be quite rewarding. The transitional zone counties like Pine, Mille Lacs, and Morrison; the great bogs north of Red Lake; the lakes and potholes of Todd and Wadena counties; and the western prairies and southeastern woods are all areas with few reporters that hopefully will be birded in the coming summers.

The presence of Red Crossbills, Pine Siskins, and Purple Finch in large numbers this summer and on occasion out of their normal range heralded the large winter invasion of these species that is taking place this winter in many midwestern areas. Perhaps increased study of these species during summer will serve as an early indication of impending invasions.

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ADDITIONS TO THE SEASONAL REPORT

Horned Grebe: 4-8-69, Morrison Co., DF; 4-13-69 Duluth, JCG; 4-30-69 (500) Duluth-Knife River, JCG.

Ruddy Duck: 4-22-69 (85), Marshall, Lyon Co., HCK.

Broad-winged Hawk: 4-5-69, Waseca Co., WF; 4-30-69 (200 in 10 min.), Superior, Wis., and 5-6-69 (674), Duluth, MMC.

Rough-legged Hawk: 5-6-69, Cook Co., MMC.

Golden Eagle: 4-5-69 (2), Lake Marshall, Lyon Co., HCK.

Whimbrel: 5-18-69 (7), Agassiz Refuge, Marshall Co., Lloyd Paynter; 5-24-69, Aitkin Co., JB.

Hudsonian Godwit: 5-24-69 (5), Aitkin Co., JB.

Sanderling: 6-1-69 (500), Duluth, JCG; 6-9-69, Duluth, MMC.

Screech Owl: 3-7-69, Morrison Co., LR; 4-12 & 20-69, Little Falls, Morrison Co., DF.

Whip-poor-will: 5-31-69, Askov, Pine Co., HFH.

Red-headed Woodpecker: 2-16-69, Morrison Co., DF.

Black-backed Three-toed Woodpecker: 3-8-69, Deerwood, Crow Wing Co., JB.

Least Flycatcher: 4-27-69, Hennepin Co., HFH.

Loggerhead Shrike: 4-3-69, Morrison Co., DF; 4-7-69, Duluth, MMC.

Tennessee Warbler: 5-18-69 (100's), Washington Co., DS.

Myrtle Warbler: 5-18-69 (100's), Washington Co., DS.

Ovenbird: 5-4-69, Morrison Co., DF.

Common Redpoll: 5-1-69 (10), Morrison Co., DF.

Grasshopper Sparrow: 4-23-69 (5), Lyon Co., HCK.

Chipping Sparrow: 4-19-69 Goodhue Co., HFH.

CORRECTIONS TO SEASONAL REPORT

Pine Siskin: 5-23-68, Mille Lacs Co. should read 3-23-68.

Yellow-crowned Night Heron: 8-11-68, Stearns Co. should be deleted.

Common Redpoll: 10-6-68, Itasca Co. should be deleted.

Red Crossbill: 10-6-68, Itasca Co. should be deleted.

Lark Sparrow: 9-12-68, St. Louis Co. should be deleted.

Double-crested Cormorant: 3-13-69, Winona Co. should read 4-13-69.

Red-throated Loon: 5-21-69, St. Louis Co. should read Cook Co.

Barrow's Goldeneye: should read 4-6-69, Lake Vadnais, Ramsey Co. JJ.

Red-breasted Merganser: 4-9-69 (140) should read (18).

Gyr Falcon: 4-24-69 should be deleted.

Greater Prairie Chicken: 5-24-69, Watonwan Co. should read Mahnomen Co.

Knot: 5-22-69, Kandiyohi Co. should read 5-24-69.

Short-eared Owl: 3-25-69, Mahnomen Co. should read Watonwan Co.

Baltimore Oriole: 5-1-69, Carver Co., DB, should read Hennepin Co., DB.

Chipping Sparrow: 4-9-69, Morrison Co. should read 4-26-69; 4-15-69 (75), Duluth should read 5-15 & 16-69 (75), Duluth.

Contributor BAP (Spring, 1969) should read BAH, Bruce A. Hitman.

Least Bittern: 5-6-69, Duluth should

be deleted.

Yellow-bellied Flycatcher: 5-4-69 Becker Co. should read Rice Co.

FOOD HABITS OF MINNESOTA PHEASANTS

by Earl D. Kopischke and Stanley W. Harris

Ring-necked Pheasant crops were collected by Division of Game and Fish personnel incidental to other duties from 1957 through 1962. A total of 533 crops from adult pheasants and 26 crops from juvenile pheasants were obtained which contained food items. Identification and volumetric measurements of foods found in the crops were done by students under the direction of Dr. Stanley Harris at Humboldt State University, Arcata, California. The data were separated into four time periods; spring (March-May), summer (June-August), fall (September-November), and winter (December-February).

RESULTS

Annual Diet of Adults. Although 57 different items were identified in 533 crops, 83.9 percent of the total volume of food was made up of only four items; corn, oats, soybeans, and wheat (Table 1). Corn alone made up 61.9 percent of the volume and was present in 75.0 percent of the crops. Thus, agricultural crops were the major food items of adult pheasants throughout the year. Similar findings were reported by Dalke (1937) in Michigan, Fried (1940) in Minnesota, Munroe (1940) in North Dakota, Hiatt (1946) in Montana, Mohler (1949) and Swenk (1930) in Nebraska, Trautman (1952) and Severin (1935) in South Dakota, Stollberg and Hine (1952) in Wisconsin, and Korschgen (1964) in Missouri.

Wild plant materials, mostly seeds, made up about 8.2 percent of the volume. Grass, chaff, and vegetation fragments made up 3.0 percent of the

volume and appeared in 27.4 percent of the crops checked. The most prevalent plants by volume were yellow foxtail (3.0 percent in 27.4 percent of crops), green foxtail (0.7 percent in 17.8 percent of crops), wolfberry (1.2 percent in 1.9 percent of crops), and ragweed (0.5 percent in 9.0 percent of crops). Only six other plants (*Prunus* sp., *Polygonum* spp., acorns, millet, rose hips, and burdock) individually constituted 0.1 percent or more of the volume. In addition, at least 28 other wild plants occurred in amounts less than 0.1 percent of the total volume.

Animal matter made up only about 1.5 percent of the volume. The animal matter consisted largely of grasshoppers (1.4 percent of volume in 9.9 percent of crops) and snails (0.1 percent of crops) while beetles, spiders, and miscellaneous unidentified insects constituted less than 0.1 percent of the volume.

Seasonal Diet of Adults. Corn was the most prevalent food during all seasons (Table 2); the percent by volume ranged from 58.4 in summer to 65.7 in winter. Agricultural crops were least used in fall and most used in spring but always comprised over 80 percent by volume.

The utilization of weed seeds (wild plants) was highest in the fall reflecting their greater availability during fall. The most prevalent wild plant seeds found in the crops during summer and fall was foxtail (*Setaria* spp.). As might be expected, animal matter was also most prevalent during the summer and fall seasons.

The volume of grit remained at 0.5 during all seasons. Earlier studies on grit consumption by pheasants (Kopischke 1966) indicated that female pheasants ingest a greater volume of grit during the egg-laying months of May and June. Thus, grit in crops of pheasants does not appear to be a good measurement of total grit consumption.

Summer Diet of Juveniles. Only 26 crops from juvenile pheasants (collected during June, July, and August) were analyzed for food items. Fifteen

different items were identified (Table 3). Oats, yellow foxtail, and corn comprised 83.7 percent of the volume. Other plants made up 13.4 percent of the volume. Animal matter (beetles, grasshoppers, and snails) constituted the remaining 2.9 percent. This small percentage differs from that found by Dalke (1935) who reported that animal matter made up 24 percent of the food of juvenile pheasants, decreasing from 90 percent for one-week old pheasants to about 2 percent for 12-week-olds.

Table 3. Foods of juvenile pheasants in Minnesota based on 26 crops collected during June, July, and August

FOOD ITEMS	PERCENT OF OCCURRENCE	PERCENT OF VOLUME
Yellow foxtail (<u>Setaria glauca</u>)	61.5	27.2
Oats (<u>Avena sativa</u>)	34.6	29.5
Corn (<u>Zea mays</u>)	26.9	27.0
Grass & chaff	30.8	1.0
Green foxtail (<u>Setaria viridis</u>)	23.1	1.3
Wheat (<u>Triticum aestivum</u>)	15.3	3.0
Soybeans (<u>Glycine max</u>)	3.8	2.7
Field dodder (<u>Cuscuta pentagona</u>)	3.8	tr
Canary grass (<u>Phalaris</u> sp.)	3.8	4.6
Barley (<u>Hordeum vulgare</u>)	3.8	0.4
Crowfoot (<u>Ranunculus</u> sp.)	3.8	tr
Spike-rush (<u>Eleocharis</u> sp.)	3.8	tr
Beetles (<u>Coleoptera</u>)	38.5	1.3
Grasshoppers (<u>Orthoptera</u>)	19.2	1.0
Snails (<u>Gastropoda</u>)	15.4	0.6

121 Table 2. Comparison of foods found in the crops of adult pheasants in Minnesota, by season of year

December 1969

FOOD ITEMS	<u>SPRING (198 crops)</u>		<u>SUMMER (48 crops)</u>		<u>FALL (155 crops)</u>		<u>WINTER (132 crops)</u>	
	Percent Occurrence	Percent Volume	Percent Occurrence	Percent Volume	Percent Occurrence	Percent Volume	Percent Occurrence	Percent Volume
<u>Agricultural Crops</u>		<u>89.5</u>		<u>86.4</u>		<u>81.1</u>		<u>88.9</u>
Corn	75.2	60.5	60.4	58.4	74.2	60.1	81.1	65.7
Oats	35.9	9.6	31.2	11.2	14.2	9.2	28.0	6.8
Soybeans	34.3	9.2	20.8	3.0	25.8	8.8	31.8	9.3
Wheat	23.2	7.2	14.6	10.3	2.6	0.5	20.4	3.9
Barley	15.7	1.5	14.6	3.5	3.2	1.9	14.4	3.0
Other	8.5	1.5	--	--	7.7	0.6	12.3	0.2
<u>Wild Plants</u>		<u>5.8</u>		<u>7.7</u>		<u>13.1</u>		<u>3.6</u>
Yellow foxtail	14.6	0.5	18.8	5.2	60.6	9.0	10.6	0.2
Green foxtail	4.5	tr	12.5	2.5	44.5	1.5	8.3	0.4
Ragweed	7.1	0.3	--	--	16.8	1.1	6.1	0.2
Wolfberry	3.5	2.7	--	--	--	--	2.3	0.8
Other (31 spp.)	24.1	2.3	6.3	tr	59.6	1.5	26.7	2.0
<u>Animal Matter</u>		<u>0.8</u>		<u>4.1</u>		<u>3.9</u>		<u>tr</u>
Grasshoppers	4.5	0.3	12.5	3.9	24.5	3.9	--	--
Beetles	3.5	0.1	8.3	tr	0.6	tr	--	--
Snails	6.6	0.4	8.3	0.2	2.5	tr	0.8	tr
Other	7.1	tr	6.3	tr	1.2	tr	--	--
<u>Miscellaneous</u>		<u>3.7</u>		<u>1.7</u>		<u>1.6</u>		<u>7.4</u>
Chaff, grass, etc.	33.8	3.2	31.2	1.2	27.7	1.1	22.7	6.9
Grit	20.2	0.5	10.4	0.5	7.7	0.5	11.4	0.5

Table 1. Principal foods found in the crops of 533 adult pheasants in Minnesota

ITEM	% OCCURRENCE	% VOLUME
Corn (<u>Zea mays</u>)	75.0	61.9
Oats (<u>Avena sativa</u>)	27.2	8.7
Soybeans (<u>Glycine max</u>)	30.0	8.8
Wheat (<u>Triticum aestivum</u>)	15.8	4.5
Barley (<u>Hordeum vulgare</u>)	11.6	2.2
Clover (<u>Melilotus</u> sp.)	3.2	tr
Alfalfa (<u>Medicago</u> sp.)	0.9	0.4
Flax (<u>Linum usitatissimum</u>)	2.2	0.1
Grass, chaff, & vegetation fragments	29.1	3.7
Grit	13.5	0.5
Green foxtail (<u>Setaria viridis</u>)	17.8	0.7
Yellow foxtail (<u>Setaria glauca</u>)	27.4	3.0
Unidentified weed seeds	4.5	0.6
Buckwheat (<u>Fagopyrum sagittatum</u>)	0.2	tr
<u>Prunus</u> spp.	0.8	0.2
<u>Polygonum</u> spp.	8.8	0.3
Ragweed (<u>Ambrosia</u> spp.)	9.0	0.5
Oak acorns (<u>Quercus</u> sp.)	0.8	0.2
Millet (<u>Panicum</u> sp.)	0.8	0.2
Wolfberry (<u>Symphoricarpos</u> sp.)	1.9	1.2
Rose hip (<u>Rosa</u> sp.)	0.9	0.1
Burdock (<u>Arctium</u> sp.)	0.8	0.3
Nightshade (<u>Solanum</u> spp.)	2.4	tr
Unidentified legume	0.2	tr
Beggar tick (<u>Bidens</u> sp.)	1.3	tr
Vetch (<u>Vicia</u> sp.)	0.9	tr
Thistle (<u>Cirsium</u> sp.)	0.4	tr
Dodder (<u>Cuscuta</u> sp.)	0.8	tr
Pigweed (<u>Amaranthus</u> spp.)	1.3	tr
Grape (<u>Vitis</u> sp.)	0.8	tr
Lamb's Quarters (<u>Chenopodium</u> sp.)	2.1	tr
Barlyard grass (<u>Echinochloa crusgalli</u>)	1.3	tr
Avens (<u>Geum</u> sp.)	1.5	tr
Sunflower (<u>Helianthus</u> sp.)	0.8	tr
Hog-peanut (<u>Amphicarpa</u> sp.)	0.2	tr
Dock (<u>Rumex</u> sp.)	0.4	tr
Tick-trefoil (<u>Desmodium</u> sp.)	0.2	tr
Crowfoot (<u>Ranunculus</u> sp.)	0.2	tr
Scouring rush (<u>Equisetum</u> sp.)	0.2	tr
Russian thistle (<u>Salsola pestifera</u>)	0.2	tr
Spike-rush (<u>Eleocharis</u> sp.)	0.2	tr
Catnip (<u>Nepeta</u> sp.)	0.2	tr
Stickseed (<u>Lappula</u> sp.)	0.6	tr
Locust (<u>Robinia</u> sp.)	6.2	tr
Canary grass (<u>Phalaris</u> sp.)	0.2	tr
Mistard (<u>Brassica</u> sp.)	0.4	tr
Cane (<u>Sorgum vulgare</u>)	0.6	tr
Rye (<u>Secale cereale</u>)	0.4	tr
Vervain (<u>Verbena</u> sp.)	0.2	tr
Grasshoppers (<u>Orthoptera</u>)	9.9	1.4
Bettles (<u>Coleoptera</u>)	2.2	tr
Misc. insects, unidentified	2.8	tr
Snails (<u>Gastropoda</u>)	4.1	0.1
Spider (<u>Arachnida</u>)	0.2	tr
Unidentified worm	0.2	tr
Bone	0.2	tr
Egg shell	0.2	tr

SUMMARY

Corn, oats, soybeans, and wheat were the major foods found in the crops of 533 adult Minnesota pheasants obtained from 1957 through 1962 even though 57 different food items made up the annual diet. The four major foods, by volume, made up 83.9 percent of the total annual diet. Wild plant materials made up 8.2 percent of the volume and were most prevalent during summer and fall. Animal matter made up 1.5 percent of the annual diet, being most prevalent in summer and fall which reflects the greater availability during these periods. The major foods found in the crops of 26 juvenile pheasants were corn, yellow foxtail, and oats.

ACKNOWLEDGEMENTS

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REFERENCES

- Dalke, P. D. 1935. Food of young pheasants in Michigan. *American Game* 24(3):36, 43-46.
- 1937. Food habits of adult pheasants in Michigan based upon crop analysis method. *Ecology* 18 (2):199-213.
- Fried, L. A. 1940. The food habits of the ring-necked pheasant in Minnesota. *Wildl. Mgmt.* 4(1):27-36.
- Hiatt, R. W. 1946. The relation of pheasants to agriculture in the Yellowstone and Big Horn Valleys of Montana. *Montana Fish and Game Comm. Bull.* 72 pp.
- Kopischke, E. D. 1966. Selection of calcium and magnesium-bearing grit by pheasants in Minnesota. *J. Wildl. Mgmt.* 30(2):276-279.
- Korschgen, L. J. 1964. Foods and nutrition of Missouri and midwestern pheasants. *Trans. N. Am. Wildl. Conf.* 29:159-181.
- Mohler, L. L. 1949. Foods of the pheasant in Nebraska. *Wildl. Mgmt. Notes, Nebraska Game, Forestation and Parks Comm.* 1(7):27-30.
- Munroe, J. A. 1940. The ring-necked pheasant. Fall and winter feeding habits in southeastern North Dakota. *North Dakota Agr. Expt. Sta. Bi-Monthly Bull.* 2(4):7-8.
- Severin, H. C. 1936. A summary of an economic study of the foods of the ringneck pheasant in South Dakota. *Proc. South Dakota Acad. Science* 16:44-58.
- Stollberg, B. P. and Ruth L. Hine. 1952. Food habit studies of ruffed grouse, pheasant, quail and mink in Wisconsin. *Wisconsin Cons. Dept. Tech. Wildl. Bull. No. 4.* 22 pp.
- Swenk, M. H. 1930. The food habits of the ringneck pheasant in Central Nebraska. *Nebraska Agr. Expt. Sta. Res. Bull.* No. 50. 33 pp.
- Trautman, C. G. 1952. Pheasant food habits in South Dakota. *South Dakota Dept. Game, Fish and Parks Tech Bull. No. 1,* 89 pp.

**Minnesota Division of Game and Fish,
Game Research Center, Madelia, Minn.**

THE 1968 CHRISTMAS COUNT IN MINNESOTA

by Robert B. Janssen

There were two less counts taken in Minnesota during the 1968 count period than there were during 1967. This may have been a factor in the lesser number of species being recorded, 87 in 1968 as compared to 92 in 1967. However, the fewer counts was not a factor in the numbers of individual birds seen, approximately 10,000 more birds were seen in 1968 than in 1967.

The most unusual bird seen on the 1968 Count was the Common Loon on the Fergus Falls Count. This is only the second time that the Common Loon has been recorded on a Christmas Count in Minnesota.

Other unusual species recorded were the Whistling Swan on the Excelsior Count, Pintail on the Excelsior Count, the American Widgeon, also on the Excelsior Count. This is only the third time the widgeon has been recorded. Other unusual species included the Canvasback at Fergus Falls, the Barrows Goldeneye for the third year in St. Paul, the Bobwhite at Winoona, the Long-eared Owl at Madelia, the Brown Thrasher also at Madelia for only the fifth time on a Minnesota Christmas Count. The Hoary Redpoll, White-throated Sparrow and Fox Sparrow, unusual species in the winter were also recorded.

The Varied Thrush was recorded for the fourth time on a Minnesota Count and for the first time at two different localities, Duluth and Moorhead.

Concerning numbers of birds Christmas Counts can be very misleading especially when comparing figures from year to year. Weather conditions, area covered, the number of people

taking the Count, hours spent in the field and many other factors can cause wide variance in Counts from year to year. However, some very wide generalizations can be made. For instance, 1968 was much more of a redpoll year, 8,308 individuals were recorded against only 199 in 1967. Blue Jays showed a large jump from 740 in 1967 to 2,150 in 1968. It certainly could be called a mild invasion when 105 Red-breasted Nuthatches are recorded. Only 19 were counted in 1967. It was not a grosbeak year, only half as many Evening Grosbeaks were seen in 1968 but the Pine Grosbeak recovered from a low of 8 individuals in 1967 to a respectable 183 in 1968. The totals on two species, the House Sparrow and Starling, when the two years are compared provide some interesting speculation. House Sparrow numbers went down and the Starling increased. It would be most interesting to know if these are real trends in this area. As a final note on numbers, notice the few hawks recorded. One wonders if this is due to the early heavy snow or actual reduction in numbers.

Once again the Excelsior Count had the highest number of species at 45, Afton and St. Paul (Northeast) were tied for second with 39. Special mention must be given to Fergus Falls Count which provided 38 species and considerably boosted the waterfowl list in both species and numbers. For the second straight year it was disappointing not to receive a Count from Rochester. We are missing many interesting birds from this area. Can't someone reinstate the Rochester Count? **14321 Prince Place, Hopkins, Minnesota.**

	Afton	Bloomington	Cedar Creek	Collegeville	Cottonwood	Duluth	Excelsior	Fergus Falls	Hibbing	Little Falls	Madelia	Minneapolis	Moorhead	Northfield	Red Wing	St. Paul (North)	St. Paul (Northeast)	Taylor Falls	Wabasha	Walker	Willmar	Winona	Totals		
Glaucous Gull						3																	3		
Herring Gul						708																	708		
Mourning Dove	10						12				34	1			2	16	2		1	2			23	103	
Screech Owl		2																						2	
Great Horned Owl				5	1			4			1						2					2	2	17	
Snowy Owl																			1					1	
Barred Owl			1				2			1							2						4	10	
Long-eared Owl											1													1	
Short-eared Owl								1			2													3	
Belted Kingfisher	2			1										2									2	7	
Yellow-shafted Flicker			1	1	3						12							1	1			3	3	25	
Pileated Woodpecker	2	2	1	1			2	3					1				5						4	21	
Red-bellied Woodpecker	12	3					5				1				7	1	14	1	3				24	71	
Red-headed Woodpecker	2		9	2						2	2						9		1					13	40
Hairy Woodpecker	28	16	10	6	1	14	42	21	9	3	1	7	5	1	2	20	63	4	4	14	6	17	28	294	
Downy Woodpecker	50	18	23	17	10	29	53	18	18	4	12	8	6	3	11	27	77	3	6	17	21	28	459		
Horned Lark	52	112		62	63			2			422			3	4		2		5		38	48		813	
Gray Jay						7			2												1			10	
Blue Jay	230	40	521	115	3	16	161	16	61	101	9	118	1	16	28	102	403	9	20	41	15	124		2150	
Common Raven			2			47			18												1			68	
Common Crow	209	18	13	1	10	4	109	3		1	90	9	48	7	32	26	115	8	6		3	43		775	
Black-capped Chickadee	252	102	177	112	16	227	295	51	160	17	63	89	43	49	21	247	353	22	35	61	37	113		2542	
Boreal Chickadee						5			3															8	
Tufted Titmouse	6	28					4							3	2	1	3						4	51	
White-breasted Nuthatch	51	32	22	27	5	10	87	21	4	11	19	15	6	10	4	36	133	8	10	23	17	44		595	
Red-breasted Nuthatch	7	5	1			6	25		4	1				6	1	25	13		1	8			2	105	
Brown Creeper	5	4	2	2			3	3				1	2	1		5	5					12		45	

Notes of Interest

MOCKINGBIRDS NESTING AT ROYALTON, MINNESOTA IN 1968—Several years ago a strange bird came to stay in our yard. Most amazing to us was its night songs. The only bird fitting its description was a Mockingbird. We couldn't believe it nor could we convince anyone in the ornithology field that it was true. This summer our claims were vindicated. Our pair of Mockingbirds was first spotted on Memorial Day morning. They spent the next week carrying twigs and sticks. They had chosen a round trimmed cedar in the yard for their nest which was located approximately five feet above the ground near the very top of the tree. Fearing that too much attention would cause them to leave, we left them strictly alone for several days. The nest held four eggs when first examined on June 9th. The Mockingbirds were positively identified, and the nesting area, nest and eggs photographed on June 13th by Nestor Hiemenz of St. Cloud who is Royalton High School's ornithologist. Dr. Grewe of the St. Cloud State College faculty confirmed Mr. Hiemenz's identification. He photographed the young in the nest, in my hand, and also got pictures of the adults. On Saturday, June 29th, Dr. Grewe, with my help, banded the four young birds. On July 4th the weaker two of the young birds were victims of our old spaniel's hunting instincts. However, he did deposit them carefully on the back doorstep. We froze the corpses and presented them to Dr. Grewe who preserved them. The parent birds moved the remaining two young out of the house yard. The adults visited the bird bath daily and the male did some daytime mocking. Two weeks later they brought the young back for a two day stay. We noticed then that one of the young appeared to have a leg or joint injury. It could fly expertly but had difficulty in landing and keeping its balance. Since that visit, we have not seen the young.

In the first part of August, the parents again started carrying sticks and twigs. Although the general area of this apparent nesting was known, the nest was not located. The adults no longer returned to the house as a pair. What appeared to be the male visited the bird bath, honeysuckle bushes and cedars daily, but no longer sang for us. The last time that one of the Mockingbirds was seen in the yard this year (1968) was on September 9th. We recorded the night songs of the Mockingbird in June and could entice the male (?) close to the house by playing the recording out-of-doors. Our human visitors this summer enjoyed both seeing and hearing our feathered friends from the deep south. **Mrs. Leo Nagle, Royalton, Minn.**

CATTLE EGRET IN LAC QUI PARLE COUNTY—On Saturday morning, May 17, 1969 my husband and I were on our way to Salt Lake, Lac Qui Parle County. We were traveling on Highway 212 when we saw a white bird wading in a small pond in a barn yard near a farm house. It was about 75 feet from the north side of the road. It was a Cattle Egret in spring plumage. It was a short-necked white heron with yellow legs and bill, and pinkish-orange crest, breast and shoulders. We watched the bird for about ten minutes and took several feet of movie film of it. The heron was unconcerned and continued to wade about the pond looking for food. There were several Blue-winged Teal resting in the pond, with a pair of Shovelers. The pond was three miles east of the South Dakota state line. **Elizabeth Campbell, 5267 West Bald Eagle Blvd., St. Paul, Minnesota.**

WHITE-WINGED CROSSBILLS IN WATONWAN COUNTY—On November

9, 1969, Al and Mary Berner observed what they thought were White-winged Crossbills on the Game Research Center located 5 miles southwest of Madelia. On the following afternoon, Al and I observed 12 reddish-colored birds in the trees about 200 feet from the office. Using 8 x 30 binoculars, we observed the birds for several minutes. We then walked directly below the birds and again with binoculars looked at the birds. We checked the identification using Peterson's "Field Guide." There was no doubt that we were looking at White-winged Crossbills. On November 20, I counted 20 White-winged Crossbills feeding on spruce cones which are abundant this year at the Game Research Center. I also checked past issues of THE LOON and found no previous record of White-winged Crossbills for this area of the state.—**Earl D. Kopischke, Game Research Center, Madelia, Minnesota.**

CINNAMON TEAL IN STEVENS COUNTY—On June 8, 1969, Dick Oehlen-schlager and I were returning from a long Sunday jaunt through north-western Minnesota and southeastern North Dakota. Our homeward itinerary took us through Morris, Minnesota at about 6:00 p.m. (daylight saving time). We turned east on Minnesota Highway 28 at the north end of town. We slowed down to cross a railroad spur track, and as we were accelerating again, we noticed two teal dropping down into a small marsh on our right. The marsh was much lower than the highway and we were looking right down at the ducks at close range (not much more than 25 yards) as they were alighting. The bright chestnut color of the two teal bodies, contrasting with the lighter underwing linings, immediately caught our eye as the birds "drop-hovered" in true dabbling fashion. Dick and I yelled "Cinnamon Teal" simultaneously and I put on the brakes to stop for a better look. As we were decelerating, I glanced quickly out the rear window of the car to note the exact spot where the teal had landed. To my complete surprise, the two ducks had apparently "bounced" back up from the marsh and were flying directly toward the back of the car. I alerted Dick and then we turned to watch the ducks fly up alongside and then past us, at eye-level on the opposite shoulder of the highway. The two then turned, ahead and slightly to the left of us, and disappeared over a nearby rise. Thus, in a matter of moments, although our period of observation was brief, we noted the two birds from virtually every angle as they flew by us: same size as the Blue-winged Teal and with identical wings, but head and body entirely a vivid chestnut or cinnamon color, with no facial crescent or flank markings. Neither of had any doubt whatever about the identity of the two adult male Cinnamon Teal we had just seen. **Ronald L. Huber, 2204 N. Lexington, St. Paul, Minn. 55113.**

EDITORS NOTE: See page 90 of September issue of "The Loon" for a record of what is probably one of the above birds seen three weeks before!

ODDLY-COLORED SONG SPARROW—On August 2, 1969, I observed a light colored Song Sparrow at Father Hennepin State Park, Mille Lacs County. The bird was a very light, creamy-tan color throughout with pinkish-yellow bill and legs. It had a faint dark breast spot and breast streaks. There were also faint markings on each side of the head and streaks on the back. Other normally colored Song Sparrows were seen in the same locality. The bird was observed at about 20 feet for fifteen minutes with a 7x15x35 binoculars. The weather was clear and sunny.—**Bruce A. Hitman, 1260 N. E. Highway 100, Minneapolis, Minnesota.**

AMERICAN WOODCOCK NEAR ITASCA STATE PARK—On June 15, 1969, Dr. Millicent Ficken reported observing closely an American Woodcock with brood near the east entrance of Itasca State Park. Later, on

July 18, Dr. Vincent Heig and Dr. Dwain Warner flushed six birds in the Alice Lake Bog about 3 miles northeast of this locality. One bird was captured in a mist net set up in the recently cut-over bog forest and is now in the collection of the James Ford Bell Natural History Museum. Just at dusk on October 4, 1969, while it was raining heavily, I flushed three woodcock from the north park boundary road near its intersection with State Highway 31. Woodcock had been reported along the Mississippi River about 5 miles north of the Park and I sighted one there at dusk on June 16, 1969. These reports represent new sightings of the American Woodcock in the area which is close to the northwestern boundary of the breeding range for this species.—**William H. Marshall, University of Minnesota, St. Paul, Minnesota.**

COMMON EGRETS IN ITASCA STATE PARK—On the afternoon of May 19, 1968, while driving north on the Lakes Drive where it passes between Twin Lakes, a large white heron with black legs and feet flushed from the channel along side the road. It showed typical heron flight and was judged to be the size of a Great Blue Heron. Although sharp watch was kept for it at the Heron Rookery and on lakes and bogs in the Park during the Biology Sessions, it was not seen again that season. However, Park Naturalist, Ben Thoma, reports seeing three Common Egrets on the west shore of the north arm of Itasca Lake on July 24, 1969. Two days later, I saw one bird on the edge of French Creek Bog about one mile south of this site. Either two or three birds were sighted at various times here and on Schoolcraft Island for several subsequent days. On August 7, three were reported at the sewage lagoon about 2 miles east of this area. Finally on August 13, one bird was seen on the west arm of Lake Itasca. Thus for a period of about three weeks, one to three birds, all undoubtedly Common Egrets, were seen in the Park. These probably were wandering birds from a rookery to the south.—**William H. Marshall, University of Minnesota, St. Paul, Minnesota.**

COMMON GRACKLES "ANTING" WITH ORANGES—Effie Hogenson of 1512 N. Pascal Ave., St. Paul is one of the few people who enjoy having Grackles in her yard, and for a good reason. She places orange halves around for the Baltimore Orioles, as do many other people who feed birds. The Common Grackles have taken to the fruit for a very different reason, however, and they wait their turn to go through this unusual anting procedure or performance. They don't eat the fruit, though, but bite off bits of the peeling or rind, crush it in their beak, discard the white part, and using only the oily, orange portion, go over each feather, one at a time, rubbing the feathers with the orange rind bits.—**Isabel Goldberg, 1915 Palace Avenue, St. Paul, Minnesota.**

LEAST BITTERN CAUGHT IN CROW WING COUNTY—On August 25, 1969, a Least Bittern was observed walking on a sandy open beach on Serpent Lake. When it was being approached it gave no signs of flying away and was thus caught by throwing a minnow net over it. The back of the bittern's head was without feathers, but there were a few pieces of down on top of its head. The bird was put in a cage but would not eat. Soon it became too weak to eat and had to be force-fed. (It ate only minnows which had to be alive.) By morning, it had recovered nicely. That night the bittern was observed squeezing out of its cage through the wire that surrounded it. (This wire had a diameter of an inch.) The bird soon became tame enough to be picked up and petted but you had to watch your

face when you got close because it would peck at you. On September 7, 1969, the bittern was set free in a nearby swamp which has cattails and wild rice growing in it. It would not fly out of the box so the bird had to be lifted from the box. At first it surveyed the terrain with its neck outstretched and then flew down to the water's edge. Then it took off and flew down the shore for about forty feet where it landed in a small bush. We retrieved it and helped it get another start. This time it flew about forty feet and dropped down into the wild rice, out of view.—**Terry Savolaja and Mark Carlson, Deerwood, Minnesota.**

SAVANNAH SPARROWS AT FEEDING STATION—On November 16, 1969, my neighbor (Ida Hollingsworth) observed a sparrow beneath her feeder that appeared to be a Song Sparrow because of its central breast spot. However, it remained about 10 feet from her window and with binoculars at that range she noted the buffy head stripe of the Savannah Sparrow. I first saw it November 17 in late afternoon light and could be sure only of two things: it's tail was markedly notched and its white crown stripe looked exactly like carefully center-parted hair. The next morning it appeared outside my window where it sat on a fence in good light and I was easily able to see its yellowish head markings. It flew briefly to my feeder where another Savannah Sparrow joined it and they dropped to the ground. The second Savannah Sparrow lacked the converging spots on the breast but its yellow head stripe was brighter. The two birds flew together in a twisty low and fluttery manner. The bird first observed remained in the area through November 22 but was not seen again in company with another.—**Mrs. E. D. Maurer, 310 4th Street, White Bear Lake, Minnesota.**

BLACK-CAPPED CHICKADEE TAKES OVER BLUEBIRD NEST—At Northwoods Audubon Center on Grindstone Lake, Pine County, I had placed over 30 Eastern Bluebird and Tree Swallow houses around the property. A bluebird nested in one at the edge of a woods and laid 4 eggs on which she was setting the last time I had checked the box. The following week, on another check, I opened the side door and a female Black-capped Chickadee flew out. There was no sign of a bluebird in the area. The chickadee had built her own nest of lichen and moss right over the bluebird nest and eggs and had laid two eggs of her own. The following week when I checked the box again there were six chickadee eggs in the nest. It is difficult to imagine a bird as small as the chickadee driving off a bluebird, twice her size. It is possible, of course, that something had happened to the latter and so the box had been unattended when the chickadee arrived to look things over.—**Maury Goldberg, 1915 Palace Avenue, St. Paul, Minn.**

PROTHONOTARY WARBLER IN ST. PAUL—Looking out of the window onto our yard at 1915 Palace Ave., St. Paul last summer (1969) in an attempt to locate where an unusual bird call was coming from, I noticed a male Prothonotary Warbler trying to get into a wren house which was mounted on top of a 6½ foot tree stump. This stump was purposely placed next to the fence to act as a perching pole and we fill some of the holes in it with suet during the winter. The hole in the wren house was just large enough for the warbler's head, but no more. When the bird left for a moment I rushed out and enlarged the hole somewhat but had to stop work on it when the bird was seen returning to the yard. This time the bird could get its head and part of its body inside but it was still too small an opening. The bird sat on top for awhile and continued with its calling, then left. I rushed out once more and made the hole just large

enough for its entry in case it returned once more. Five minutes or so later it returned and went inside for awhile. When it came out it had a royal battle with two wrens who just then decided to take over. After some aerial gymnastics the wrens left and the Prothonotary took possession of the box. It stayed around for two days, calling periodically and making short flights around the neighborhood. After two days no mate showed up and the bird left. Had a mate showed up I am fairly certain they would have nested in our yard which is in a thoroughly builtup section of the city. Last year (1968) two of these birds arrived at the same time, but after looking the place over, left the yard. At that time the wren house was not in place. We have a miniature "river" in our yard and it is possible this might have had something to do with its attraction for this species which normally nests in a stump near or over water.—**Maury Goldberg, 1915 Place Ave., St. Paul, Minnesota.**

MOURNING DOVE BANDING—The Minnesota Division of Game and Fish wishes to band at least 3,500 Mourning Doves during June, July, and August in 1970. Among the reasons for banding doves in Minnesota are 1) location of wintering areas and 2) delineation of migration routes. Any one interested in banding Mourning Doves should contact me as soon as possible at the address below so that arrangements can be made for trapping and banding. Only free-flying doves will be banded, not nestlings. Detailed instructions and other necessary information will be mailed to those responding.—**Earl D. Kopischke, Game Research Center, Madelia, Minn. 56062.**



UNUSUAL MALLARD NESTING SITE—A Mallard that nests in a tree! My friends look at me disdainfully and tell me I don't know the difference between a Mallard and a Wood Duck. Frankly, I am not an ornithologist or even much of a bird-watcher. I do enjoy seeing the birds and feeding them, but as far as devoting a good deal of time and attention to them, I just don't. We first noticed a Mallard feeding in front of our house about

six years ago and by putting out corn and watching her carefully saw that she was nesting on the lake shore right near our dock where there was a great deal of traffic—that is children swimming and boats coming close to where her nest was. However we let the weeds grow up around the nest and when the eggs hatched and she left the nest there was one egg left. My next door neighbor had an incubator so she helped the duck out of the shell and raised the baby Mallard. The next year the mother returned and once again nested near the shore. The following spring there was a good deal of rain and no available shoreline. But the Mallard was around and coming right up into the yards to be fed. We noticed that she—and her drake—were in a large willow tree, approximately 25 to 30 feet above the ground. They would sort of totter back and forth on the limbs. Before long she had found an abandoned squirrels nest and acquired it. It was in the fork of the tree, and when the leaves came out it made the approach, landing and getting into the nest difficult and rather hilarious. She made it however, and one of the biggest thrills of my life was happening to see twelve small baby Mallards come tumbling out of this huge tree early one Sunday morning. When all were out the mother hen flew down gave a couple of quacks and they all formed a line and swam off across the lake. In 1967 she returned to the same old nest; however, a bad storm, in early July, blew the nest apart. The poor bird tried again, using a box that some of the men in the neighborhood put up for her benefit, but cold weather ruined the eggs and last year there were no offspring. This spring, the day after the ice went off the lake—our duck, Henrietta—was back, and you guessed it, once more up a tree! She successfully hatched eleven ducklings and as far as we have been able to observe, has had no casualties. We have watched them grow, learn to fly and before long they will be joining others on their flights south.—**Edith A. Snell, 2695 S. Shore Blvd., White Bear Lake, Minnesota.**

BOOK REVIEW

WILDLIFE IN DANGER, by James Fisher, Noel Simon, Jack Vincent. 368 pages, 32 color plates, numerous half-tone drawings. Viking Press, New York. 1969. \$12.95.

The urgent and immediate need for this fine book has been met by a sextet of outstanding conservationists. An erudite preface by my favorite naturalist-philosopher-conservationist, the inimitable Joseph Wood Krutch, gives the book a perfect start. About 200 mammals and birds, 24 reptiles, 8 amphibians, 30 fishes (plus a special section on many endangered endemic African forms) and numerous species of plants are treated, in reverse phylogenetic order. This systematic treatment was the only organizational disagreement I had with an otherwise

fine book. My criticism is quite minute but somehow I feel that readers would better relate to the plight of **familiar** animals and plants, hence a geographic presentation by continent or faunal realm might have been slightly more meaningful. Perhaps those readers who are widely-traveled will find the present systematic arrangement perfectly acceptable. I was also surprised that insects were ignored (as an insect collector I am perhaps overly sensitive to such an omission?), since certain orders, notably the butterflies, moths, and beetles, are so well-studied—at least in this country and in Europe. Indeed, members of the Lepidopterists' Society in this country are now working with the Nature Conservancy to set aside certain

well-known bogs as "preserves" for butterflies which are known to be endangered.

The very pleasing color plates in **WILDLIFE IN DANGER** were done by an assortment of artists, and thus vary (albeit slightly) in quality, as do the innumerable halftone drawings. The latter add immeasurably to the text.

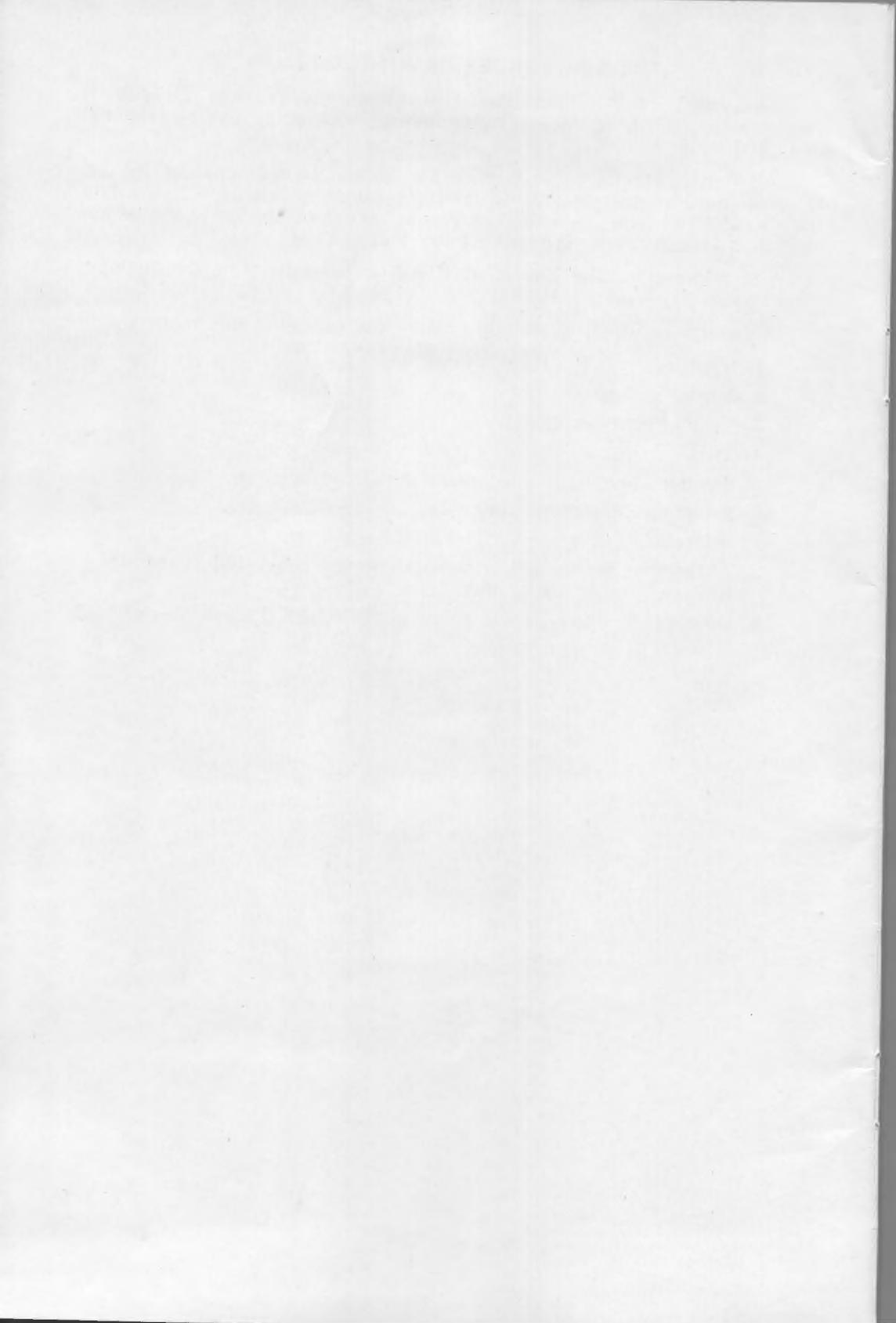
Every naturalist has his own personal set of values and intensities, but even those who are only mildly conservation-minded would enjoy this encyclopedic cross-section of world wildlife on their bookshelf. **Ronald L. Huber, 2204 N. Lexington, St. Paul, Minnesota 55113.**

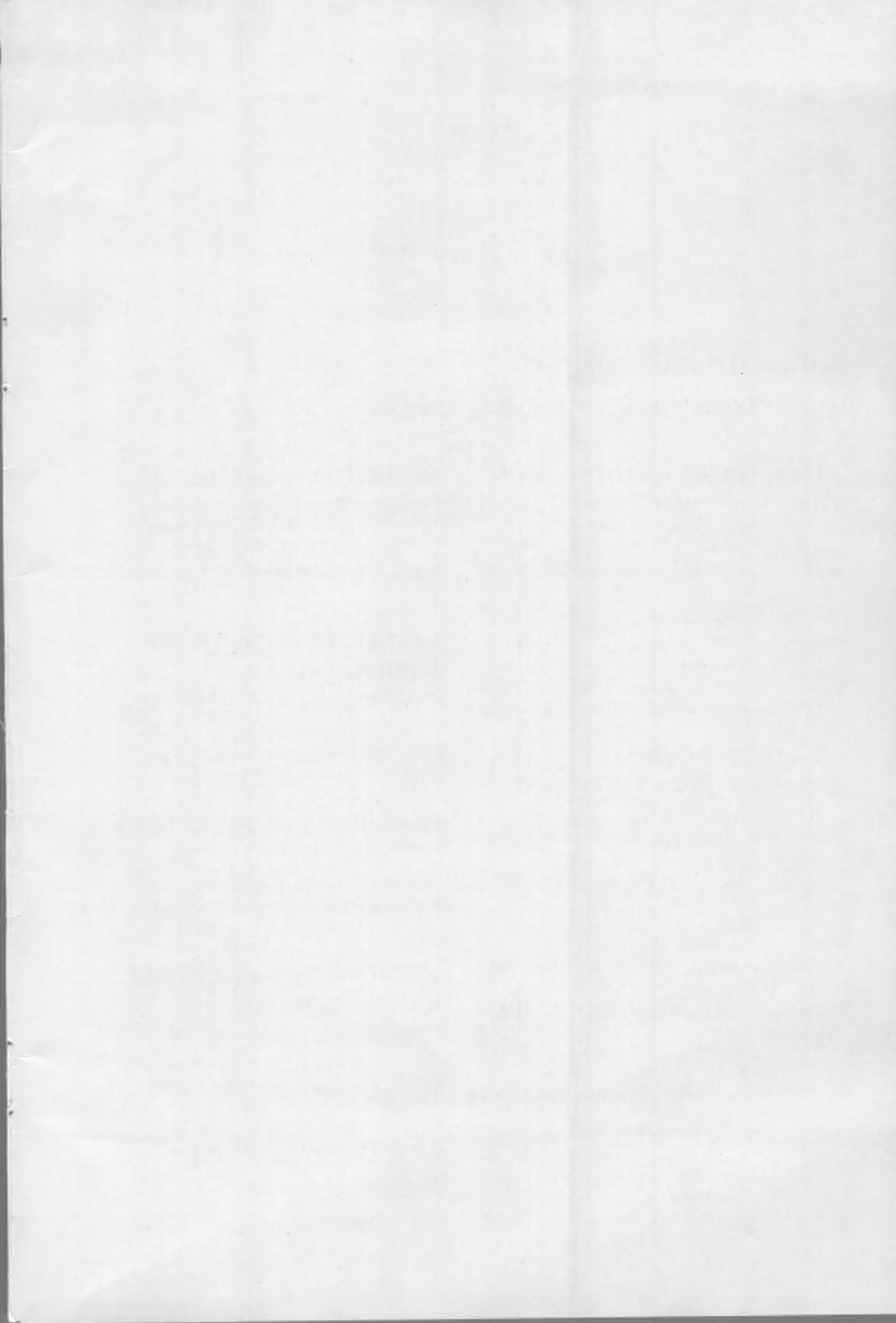
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