

# The LOON

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**COVER:**  
*Red-shouldered  
Hawk, June 9,  
1966, Rum River,  
Isanti County.  
Photo by  
Tom Nicholls.*

## The LOON Organ of the Minnesota

**Ornithologists Union.** Published quarterly in March, June, September, and December. **The Loon** is sent to all members not in arrears for dues. Dues for members: Single, \$4.00; Family, \$5.00; Sustaining, \$25.00; Life, \$100.00. All articles and communications, for publications should be sent to the Editor. Subscriptions, memberships, and requests for back issues should be sent to the treasurer.

### 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 carryout 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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<b>Research and Records</b> .....	Janet C. Green, 9773 North Shore Drive, Duluth, Minnesota

## THE LOON CRY

*It has occurred to me that like long-married couples who are said to grow to look like one another, bird watchers grow to look, act, and sound like the birds they watch.*

*Consider the Tufted Titmouse, fairly common, but unusual enough to cause a second glance. Somehow this type is feminine, dressed in a gray flannel field jacket, black boots and stylish gray cap. She is inquisitive and eager, but not too methodical, given to purposeful yet puzzling leaps from one side of the road to the other on field trips. She plagues you with her call "Peter, Peter, Peter; what bird is that?" without trying to figure anything out for herself. Her eager black eyes snap with command or irritation, as fits her mood. Though something of a nuisance, this type is lovable as long as it is not abundant.*

*The second type is the Brown Thrasher. This piercing eyed creature demands a defense for every identification, while he carries on a repetitious but unintelligible commentary on birds he has seen which no one else has. His coat of hunter's brown is not quite handsome, and really a bit too long. He loves to skulk about in the thicket of his imagination, peering out to determine when best to pounce upon some less imaginative fellow.*

*The Great Horned Owl is the solitary ornithologist whose sight is good, but who seldom offers an opinion except to monotonously comment "Huh, huh, huh, huh, huh." He knows best how to blink his nictitating membrane and look wise without ever committing himself to an identification. Of course, he hunts alone, and has hunted long, so it is beneath his dignity to flock with more gregarious bird watchers. Consequently he is more often heard than seen.*

*The Cardinal is the enthusiastic but sensible birdwatcher, willing to check feeders at crack of dawn on a Christmas Bird Count. This type is blushing from the cold or with enthusiasm; it is hard to tell which. Though quite a common species, she is loved by all for her gentleness, quiet beauty, and dependability.*

*The Herring Gull is the high and wide flying birdwatcher attempting to add species to his life list. He may be seen nearly anywhere near water, often headed purposefully away from that body of water. If you jump in a car and follow him you will find that he visits dumps, hoping to find some choice tidbit for his "dump list." If you look carefully at the base of the outermost left or right tail feather, you may see an MOU decal. Like a good MOU member, the Herring Gull flocks together for seasonal field trips, sharing his finds with other bird watchers.*

*And what kind of bird is president of a state bird club? A Bald Eagle? Thick-billed Parrot? Yellow Wagtail? None of these. Probably most like a Whip-poor-will, regularly heard but never seen. His call asking for help is regular, repetitious, and plaintive. If you get close enough he will make your ears ring with insistence. In fact, you may even see him.*

*Fred Lester*

## Citation.

T. S. ROBERTS AWARD, 1966

I am happy to make the presentation of the fourth Roberts Award to an outstanding member of the Minnesota Ornithologists' Union. This award, given in recognition of service to the MOU, need not be given every year. It is given at the discretion of the Awards Committee. The recipient this year joins three distinguished contributors to the MOU: Mrs. Mary Lupient, Dr. Walter Breckenridge, and Mr. Ernest Swedenborg.

The recipient has contributed to the MOU in several ways, but I want to stress his contributions in two areas.

First, the recipient's contributions to the MOU and other ornithological organizations go back at least forty years. The recipient contributed to Dr. Roberts' *Birds of Minnesota*, and to *Bird Lore*, forerunner of the *Audubon Magazine*. The recipient is still active in the field, and contributes to the "Seasonal Report" in *The Loon*, and to *Audubon Field Notes*.

Second, the recipient has been leading field trips for a local Twin Cities bird club for at least twenty years and has continuously contributed time, energy, and valuable knowledge to students of bird life. In the 1920's the recipient conducted Christmas counts by himself, something not many of us do today, and now in 1966 helps maintain a feeding station in the Twin Cities area.

This gentleman is dearly esteemed by all who know him as both a humble teacher and truly kind friend. I am pleased to present the 1966 Thomas Sadler Roberts award to:

MR. A. C. ROSENWINKEL

*Fred Leshner*

*Janet C. Green*

Although there is considerable controversy over the status of Harlan's Hawk (*Buteo harlani*) as a separate species, most bird-watchers who are "listers" and those compiling regional avifaunal data are almost forced into treating it as a separate species, rather than as a variety of the Red-tailed Hawk (*Buteo jamaicensis*), because the A. O. U. *Check-list of North American Birds* (1957) considers it a separate species. In compiling records of Harlan's Hawk for Minnesota I have found that there is much confusion among birders as to what the distinguishing marks of this species are, and also that all the published records of observations for Minnesota are inadequate. Because of this difficulty the real abundance of Harlan's Hawk in Minnesota is not known. From specimens collected in the state (9 in the Minnesota Museum of Natural History plus 3 either in private collections or else described but not preserved) it is known that Harlan's Hawks occur as migrants in the spring (from late March through late April) and in the fall (from late September through late October). There are no acceptable records for the winter season and no mention of it at all in the summer.

As all birders know, the hawks are one of the most difficult groups to master. This is particularly true on the plains where the buteos occur in melanistic (black) as well as "regular" phases with some intergrading between them. Unfortunately the field guides only have room to figure prominently the "typical" and usually adult plumages. The fact that the immatures have a different plumage adds to the confusion.

The most common mistake in identification is to assume that a black buteo that seems to be the shape of a Red-tail and does not show a red tail is a Harlan's Hawk. Assuming that the diagnosis of the shape is correct (and this is quite an assumption, since size and shape are the most unreliable field marks to use), the bird could easily be, and probably is, an

# THE IDENTIFICATION OF HARLAN'S HAWK

immature melanistic Red-tail of the western race (*B. j. calurus*). In Plate I, specimen No. 7822 is an example of the immature plumage of the black Red-tailed Hawk; the tail is banded in dark colors and would look dark from a distance. This is a commonly seen melanistic plumage in Minnesota and probably the most mi- or (by cautious observers) non-identified buteo in the state.

The Harlan's Hawk specimens Nos. 6434 and 7906 in Plate I are very similar to the Red-tailed Hawk specimen No. 7822. The only distinguishing mark is the amount of white on the Harlan's back and breast which gives it a spotted appearance. This is obviously a very difficult mark to use in the field, and one would be safest to follow Peterson's advice that "young birds are probably not separable from young Red-tails (*A Field Guide to Western Birds*, 1961, p. 65). Also there is some doubt whether birds that show this character are always assignable to *Buteo harlani*.

The other bird is Plate I (No. 9367) is an immature Red-tailed Hawk in the typical light plumage of the eastern race (*B. j. borealis*). The dorsal view shows the banded dark greyish-brown tail and the large amount of white on the upper tail coverts and scattered elsewhere on the back. The white patch at the base of the tail frequently confuses beginners.

Another mistake that is made is to assume that melanistic buteos that are just seen ventrally, either perched or flying, in poor light and show a tail lighter than the dark body must be Harlan's Hawk because the tail seems light. As can be seen from the ventral views in Plates I and II, the tail seen in situations where the dark brown or rufous (of the adult) does not show through appears light.

Since it is not possible to identify immature Harlan's Hawks in the field, everyone would wish that the identification of the adults would be relatively easy. Unfortunately, this is not the case. The field guides emphasize the whitish tail

of the adult Harlan's Hawks which leads observers to expect the tail to be quite white and to assume (erroneously) that dark buteos with white tails (with or without a sub-terminal band) are this species. I suspect that some observations so described are of melanistic Rough-leg-

## PLATE I

FIGURE 1. Immature Red-tailed and Harlan's Hawks, dorsal view. Left to right: MMNH 9367 (*B. j. borealis*); MMNH 7822 (*B. j. calurus*); MMNH 6434 (*B. harlani*); MMNH 7906 (*B. harlani*).

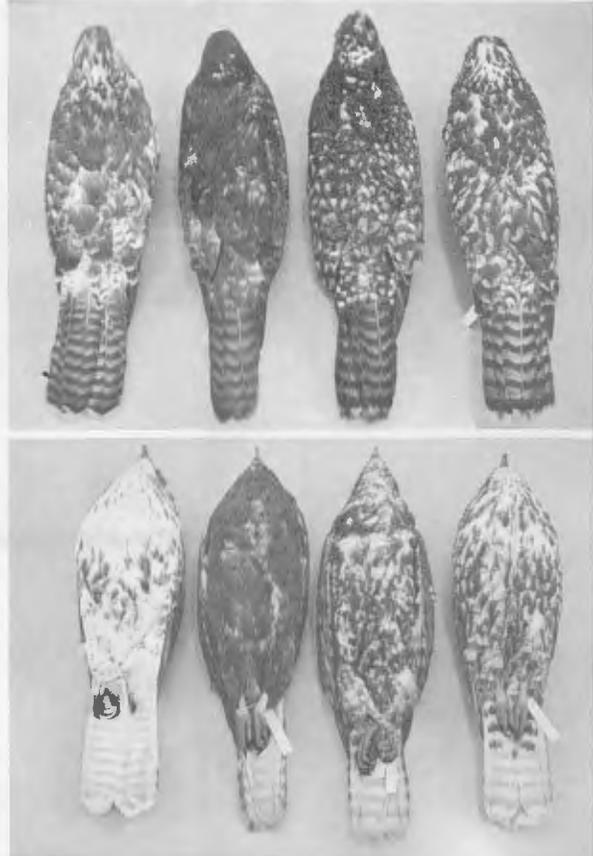


FIGURE 2. Immature Red-tailed and Harlan's Hawks, ventral view. Same specimens in same order as above.

ged or Ferruginous Hawks. Although the adult Harlan's Hawk can have an almost completely white tail (with a few longitudinal streakings and/or a faint sub-terminal band) it is not found on the very dark (melanistic) birds but on the light phase birds.

The adult Harlan's Hawk occurs in a light, intermediate, and melanistic phase. The latter is the one most often pictured in books but the tail in this phase actually may be quite dark overall, being a mixture of grey, brown, tan and/or rufous. The distinctive and supposedly diagnostic character of the longitudinal markings of varying amounts of brownish black on this variable background, giving a mottled or freckled appearance. In Plate II, specimen No. 7821 is a typical example. Even though the colors don't show in this black and white picture, it is obvious that the tail is not white or even "whitish". It is also obvious that the diagnostic mottling on a dark black background would be very difficult to

use as a field mark unless the bird were quite close. Some individual Harlan's Hawks do have lighter tails, especially those in the light or intermediate plumage, but there were not any in the Minnesota Museum of Natural History collection to photograph. There is an illustration of the light phase bird in *Birds of North America* by Robbins, Bruun and Zim. According to some authors the sub-terminal band may be absent or less distinct than is shown in this illustration.

Many observers do not realize that the adult Red-tailed Hawk with the clear rufous tail with a sub-terminal band so often pictured in books is the eastern race, *B. j. borealis* and that in Minnesota we also have many birds of the western race *B. J. calurus*. The tails of the adults of the western race are also rufous but are crossed in varying degrees with transverse bars above the sub-terminal band. In Plate II, specimen No. 8881 illustrates the eastern race and No. 7911 the western race. The latter is a melanistic



## PLATE II

FIGURE 1. Adult Red-tailed and Harlan's Hawks, dorsal view. Left to right: MMNH 8881 (*B. j. borealis*); MMNH 7911 (*B. j. calurus*); MMNH 7821 (*B. harlani*); MMNH 7939 (*B. harlani*).

FIGURE 2. Adult Red-tailed and Harlan's Hawks, ventral view. Same specimens in same order as above.



bird but this race can also be light breast-  
ed. In both phases there can be varying  
amounts of rufous on the body, occur-  
ring as a "wash" over the "normal" plum-  
age. Also in the west is a very light race  
of the Red-tailed Hawk called Kreider's  
Red-tail (*B. j. kriderii*). Its tail, although  
generally white, may have black bars and  
there is much white in the body plumage.

The last bird pictured in Plate II, spec-  
imen No. 7939 shows that there is also  
a gradation between the characteristic  
tail markings of the western Red-tailed  
Hawk and Harlan's Hawk. This specimen  
is identified on the label as Harlan's  
Hawk.

I trust all of this is sufficiently confus-  
ing to convince everyone that Harlan's  
Hawks are exceedingly difficult to iden-  
tify. This is not the same as saying it is  
impossible to identify them — only that  
one should be very cautious. I also hope  
it is obvious why all such identifications  
must be accompanied by a complete de-  
scription before the observation can be  
accepted. If a *buteo* is seen that one sus-  
pects might be this species, I suggest  
that notes be taken in the field during or  
immediately after the observation and  
*before* any field guides are consulted.  
These notes should include a complete de-  
scription of the plumage, both ventral and  
dorsal; sketches of the tail pattern can  
be very helpful. Field guides should not  
be consulted first because it is very easy  
to confuse what was actually seen in the  
field with what was seen in the picture.

I hope these strictures do not discour-  
age the reporting of observations of this  
species. Carefully documented records  
are badly needed before the abundance  
of this hawk in Minnesota can be deter-  
mined. It should pass through the western  
part of the state during migration but  
Minnesota is not included in the de-  
scribed wintering or breeding ranges.

JANET C. GREEN,  
9773 North Shore Drive,  
Duluth, Minnesota

## SELECTED REFERENCES

- American Ornithologists' Union, 1957. Check-  
list of North American Birds. Fifth Edition.  
Baltimore, Amer. Ornithologists' Union. 691  
pp.
- Friedmann, H. 1950. The Birds of North and  
Middle America, Part XI. U.S. Nat. Mus.  
Bull. 50, p. 237-272.
- Peterson, R. T. 1961. A Field Guide to the  
Western Birds. Boston. 366 pp.
- Robbins, C. S., Bruun, B., and Zim, H. S.  
1966. Birds of North America. New York.  
340 pp.
- Taverner, P. A. 1927. A Study of *Buteo bor-*  
*ealis* (Gmelin), The Red-tailed Hawk, and its  
varieties in Canada. Victoria Mem. Mus.  
Bull. No. 48, p. 1-20.
- Taverner, P. A. 1936. Taxonomic Comments on  
Red-tailed Hawks. Condor, 37:66-71.
- Wood, N. A. 1932. Harlan's Hawk. Wilson  
Bull., 44:78-87.

## DATA FOR SPECIMENS PICTURED

### PLATE I — IMMATURES

- MMNH 9367: Freeborn Co., Minn., Oct. 15, 1949.  
MMNH 7822: Verdi, Lincoln Co., Minn., Oct. 25, 1931.  
MMNH 6434: Mound, Henn. Co., Minn., Oct. 16, 1922.  
MMNH 7906: Verdi, Lincoln Co., Minn., Oct. 14, 1932.

### PLATE II — ADULTS

- MMNH 8881: Duluth, St. Louis Co., Minn., Oct. 21, 1946.  
MMNH 7911: Moody Co., S.D., Nov. 3, 1932.  
MMNH 7821: Pipestone Co., Minn., Oct. 20, 1931.  
MMNH 7939: Pipestone Co., Minn., April 8, 1933.

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## SPRING FIELD TRIP

The spring field trip of the M.O.U. will be  
held at Duluth the weekend of May 26-  
28th. Registration will be Friday after-  
noon through Saturday morning at the  
University of Minnesota, Duluth (UMD).  
There will be an informal program Friday  
evening and also a program Saturday eve-  
ning, following a baked bean dinner at the  
picnic shelter at Jay Cooke State Park.  
There will be more information and a  
form for advance registration in the April  
newsletter. Watch for it and plan to be in  
Duluth the last weekend in May for war-  
blers, shorebirds and good birding com-  
pany.

Janet C. Green, Chairman, Arrange-  
ments Committee, Duluth Bird Club.

## LOON PRODUCTIVITY STUDY

Observations from the last several years in northern Minnesota indicate that the Common Loon may be becoming an endangered species. In addition to the Loon losses reported on Lake Michigan, there is evidence of greatly reduced reproductive success of Loons in at least some areas of northern Minnesota.

A study will be initiated this spring in the Boundary Waters Canoe Area of Minnesota to document actual productivity and begin an investigation of the causes of the present reduction in productivity. Nothing is known about where birds from this area overwinter, but this may be related to the decline in productivity.

Pertinent information from observers in northern Minnesota and Wisconsin would be appreciated. The following two types of information would be most useful:

1. Productivity
  - a. Number of birds in area of observation.
  - b. Are birds paired off or showing territoriality? How many?
  - c. Nesting success — young observed in each territory.
2. Area of overwintering - winter observations of birds, as in Great Lakes.

Other observations and banding records should also be sent to:

CATHERINE H. REAM  
Kawishiwi Field Laboratory  
Box 150  
Ely, Minnesota 55731

## The New Look of the 'Loon'

With this issue of *The Loon* your editorial staff is initiating many new features in the magazine. We are especially grateful to Dr. Breckenridge for the new artwork and design for the M.O.U. seal which now appears on the inside of the front cover. With "Breck's" fine drawing of the Common Loon we hope to repro-

duce window decals and cloth patches for use by our members. You will also note that the cover of *The Loon* has been redesigned. This type of cover requires excellent photos for printing reproduction. The "camera bugs" in our organization should accept the challenge of having *The Loon* cover the best possible. With the death of Dr. Allin the Canadian Lakehead article was discontinued, but Mr. Keith Denis has very ably filled in and his first article appears in this issue. His style is most refreshing, we welcome him to *The Loon*. Our special thanks go to Craftsman Press of Minneapolis, our new printer, for the fine job of new layout, type style and fine printing. We would appreciate any comments (favorable or unfavorable) from our readers concerning the new look of *The Loon*.

## M.O.U. Treasurer's Report

Cash on hand Jan. 1, 1966 . . . \$ 549.50

### Receipts:

M.O.U. Dues . . . . .	\$2,607.00
Affiliate Club Dues . . . . .	95.00
Life Member . . . . .	100.00
Mr. Earl D. Kopischke	
Donations . . . . .	50.00
Albert Lea Club	
Mr. F. P. Heffelfinger	
Check-lists . . . . .	9.35
Advertisement . . . . .	5.00
Back Loons . . . . .	8.00
Decals . . . . .	2.00
M.O.U. Dinner ('65) . . . . .	10.00

Total Receipts . . . . . \$3,435.85

### Disbursements:

Curle Printing (4 LOONS) . . .	\$2,022.50
Newsletter Expenses . . . . .	132.83
Postage and Postal Permits . . .	151.35
Research and Records	
Postage . . . . .	25.70
Check-lists . . . . .	120.00
Bank Charges . . . . .	13.20
Miscellaneous Expenses . . . . .	29.66

Total Disbursements . . \$2,495.24

Cash on hand Jan. 1, 1967 . . . \$ 940.61

It is difficult to evaluate the effects that weather had on what has certainly been one of the most unusual fall migrations we've had. Some of the earliest and latest fall dates on record turned up, apparently without any ready explanation. November was not as mild this past fall as it has been for the past three years, but otherwise the weather seemed to be just about normal. Some of the outstandingly unusual dates have been omitted here, pending answers to our requests for further details.

**Common Loon:** Many Nov. dates: latest 11-12 Orr, St. Louis Co., NJH; 11-26 Virginia, St. Louis Co., VFB and 11-29 Ramsey Co., VL.

**Red-throated Loon:** One bird seen at Two Harbors, Lake Co., on 10-20 (JCG, ELC) and again on 11-5 (DB, EHH).

**Red-necked Grebe:** Latest 10-14 Stearns Co., RPR; 10-20 Two Harbors, JCG and 10-29 Grand Marais, BL, HFH, EMB, RG.

**Horned Grebe:** Latest 11-16 Hennepin Co., FN/MAS; 11-16 Ramsey Co., BL; 11-26 Hennepin Co., VL.

**Eared Grebe:** 9-10 Brown Co., 1, RBJ.

**Western Grebe:** 9-13 Lake Co., 5, JGH; 9-14 Lake Co., 8, JGH; 9-15 Lake Co., 3, JGH; very unusual in the northeastern portion of our state; 9-24 Lake Traverse, 3, JAH.

**Pied-billed Grebe:** Latest 11-6 St. Louis Co., JGH; 11-12 Stearns Co., RPR; 11-16 Ramsey Co., BL; 11-26 Hennepin Co., HFH; VL.

**White Pelican:** Reported from Carver Co. on 9-10 (50, BL) through 10-8 (500+, RBJ); Jackson Co. on 9-14 (HSH) thru 10-10 (250, RBJ); Watonwan Co. on 10-7 (300, EDK) thru 10-12 (3, EDK); Lyon Co. on 9-22 (15, PE); Lac Qui Parle Co. on 9-30, JAH; Nobles Co., 10-7, about 25, HSH.

**Double-crested Cormorant:** Latest 9-22 Lyon Co., PE; 9-30 Lac Qui Parle Co., JAH; 10-8 Duluth (HFH) and Ramsey Co. (ACR); 10-15 Ramsey Co., ACR.

**Great Blue Heron:** Latest 11-6 Houston Co., FL; 11-8 Blue Earth Co. (EDK) and Hennepin Co. (FN/MAS); 11-23 Washington Co., WWL.

**Green Heron:** Latest 9-14 Wabasha Co., DGM; 9-18 and 9-26 Washington Co. DS; 10-10 Martin Co., RBJ.

**Common Egret:** Latest 9-27 Pope Co., WH; 10-1 Nicollet Co., RBJ; 10-2 Hennepin Co., VL; 10-22 Lyon Co., PE.

**Black-crowned Night Heron:** Latest 9-26 and 10-1 Washington Co., DS; 10-8 Carver Co., RBJ; one exceptional record, good details, 11-26 Stevens Co., JAH.

**Least Bittern:** 8-7 (FN/MAS) and 8-9 (VL) Hennepin Co.; 8-13 Nicollet Co., EHH; 8-24 Crow Wing Co., JAH.

**American Bittern:** Latest 9-23 Washington Co. (DS) and Carver Co. (FN/MAS); 9-26 Roseau Co., PEB; 11-5 Duluth, photographed by H. Gilbert, *vide* JCG.

**Whistling Swan:** Earliest 10-8 Ramsey Co., MIG; 10-12 Roseau Co., PEB; 11-3 Crow Wing Co., MSB; latest 11-18 Weaver, 200+, FL; 11-20 Wabasha, 500, DGM; 11-27 Wabasha Co., 700, FN/MAS; 11-29 Wacouta, MHL.

**Canada Goose:** Latest 11-20 Murray Co., HSH and Wabasha Co., DGM; 11-27 into December, Encampment Forest, Lake Co., JCG.

**Snow-Blue Goose:** Earliest 9-8 Hennepin Co., RDT; 9-17 Stearns Co., RPR; 9-26 Cook Co., JCG; 9-28 Washington Co., WHL; latest 10-24 Anoka Co., TNL; 10-26 Blue Earth Co., EDK; 11-2 Wright Co., EC; 11-5 Sherburne Co., EAH.

**Black Duck:** Latest 11-26 Ramsey Co., ACR; 11-27 (VL) and 11-30 (FN/MAS) Hennepin Co.

**Gadwall:** Latest 10-20 Grant Co., JAH and Stearns Co., RPR; 10-23 Minneiska, MIG; 11-1 Hennepin Co., EWJ.

**Pintail:** Latest 10-31 Hennepin Co., VL; 11-8 Hennepin Co., FN/MAS; 11-10 Hennepin Co., VL.

**Green-winged Teal:** Latest 10-25 Cottonwood Co., LAF; 11-2 Ramsey Co., BL; 11-5 Ramsey Co., ACR.

**Blue-winged Teal:** Latest 11-12 Roseau Co., PEB; 11-26 Ramsey Co., ACR; 11-27 Virginia, game warden Ray Sanbeck, *vide* VFB.

**American Widgeon:** Latest 11-16 Hennepin Co., FN/MAS; 11-24 Cook Co., BL; 11-26 Hennepin Co., HFH; VL.

**Shoveler:** Latest 11-20 Hennepin Co., DB, RBJ; 11-22 Hennepin Co., VL; 11-26 Hennepin Co., HFH.

**Wood Duck:** Latest 11-20 Hennepin Co., DB; 11-26 Ramsey Co., ACR; 11-28 Stearns Co., RPR.

**Redhead:** Latest 11-20 Hennepin Co., RBJ; 11-24 Cook Co., BL; 11-26 Hennepin Co., HFH; VL.

**Ring-necked Duck:** Latest 11-20 Federal Dam, Cass Co., EAH; 11-26 Hennepin Co., HFH; 11-27 Virginia, Game Warden Ray Sanbeck, *vide* VFB.

**Canvasback:** Latest 11-12 Stearns Co., RPR; 11-20 Wabasha (DGM), Hennepin (RBJ), and Mille Lacs (MSB) Counties; 11-26 Hennepin Co., VL; HFH.

**Greater Scaup:** Only records: 10-9, 10-23, 11-8 Washington Co., DS; 11-20 Hennepin Co., RBJ.

**Lesser Scaup:** Latest 11-25 Washington Co., WHL; 11-26 Ramsey Co., ACR and Wabasha Co., DGM; 11-30 Hennepin Co. FN/MAS.

**Bufflehead:** Earliest 10-17 Ramsey Co., BL; 10-21 Washington Co., DS; 10-27 Hennepin Co., RBJ; latest 11-26 Ramsey Co., ACR; 11-27 Hennepin Co., VL and Lake Co., JCG; 11-29 Lake Co., EHH.

**Oldsquaw:** 10-18 Lake Co., RK; 10-29 Cook Co., HFH, RG, EMB, BL; 11-5 Lake Co., DB; only report away from Lake Superior was 11-5 Valley City, North Dakota, not far from Fargo, *vide* MGA.

**Harlequin Duck:** 11-27 Virginia, St. Louis Co., game warden Ray Sanbeck, *vide* VFB; reported initially as a female, but later observations indicate first year male.

**White-winged Scoter:** 10-28 Lake Co., JCG; 10-29 Lake Co., 1, HFH, BL, EMB, RG and Cook Co., 2, HFH, *et al*; 11-5 Lake and Cook Counties, 1 each, DB, EHH.

**Surf Scoter:** 10-21 Duluth, 1, JGH; 10-29 Two Harbors, Lake Co., 1, BL, HFH, EMB, RG.

**Common Scoter:** 10-29 Grand Marais, Cook Co., 1, BL, HFH, EMB, RG.

**Ruddy Duck:** Latest 11-9 Wright Co., EC; 11-12 Stearns Co., RPR; 11-20 Crow Wing Co., MSB.

**Hooded Merganser:** Latest 11-18 Wabasha Co., FL; 11-20 Hennepin Co., DB and Crow Wing Co., MSB; 11-27 Hennepin Co., VL.

**Common Merganser:** Latest 11-20 Crow Wing Co., MSB and Wabasha Co., DGM; 11-25 Washington Co., WHL; 11-30 Hennepin Co., FN/MAS.

**Red-breasted Merganser:** Latest 11-12 Stearns Co., RPR; 11-29 Lake Co., EHH.

**Turkey Vulture:** Latest 10-4 Stearns Co., RPR; 10-9 Winona Co., MIG; 10-28 Kanabec Co., RHJ.

**Goshawk:** 9-5 Cook Co., AEA; 11-2 Washington Co., WHL; 11-8 Stearns Co., RPR; 11-20 Ramsey Co., ACR.

**Sharp-shinned Hawk:** Latest in north 10-11 Cook Co., MOP, Lake Co., RK and St. Louis Co., AKA.

**Cooper's Hawk:** Latest 10-7 Duluth, JCG; 10-16 Stearns Co., RPR; 10-27 Wabasha Co., DGM.

**Red-tailed Hawk:** One unusual record, 9-24 subspecies *krideri* (pure white tail, good details) seen by PE, presumably in Cottonwood Co.

**Red-shouldered Hawk:** 10-25 Ramsey Co., VL, EWJ; 10-27 Hennepin Co., MHM.

**Broad-winged Hawk:** Latest 9-25 Duluth, JCG; 10-1 Stearns Co., RPR; 10-3 and 10-27 Fargo-Moorhead, MGA.

**Swainson's Hawk:** 9-13 Lac Qui Parle Co., 1, PE.

**FERRUGINOUS HAWK:** 10-31 Roseville, Ramsey Co., first year bird shot while eating Golden Pheasant; specimen now in University collection; first actual specimen for state in many years.

**Rough-legged Hawk:** Earliest 9-5 Cook Co., AEA and Lake Co., DB; 9-17 Stevens Co., one unidentified buteo seen by JAH may have been this species; 9-20 Nobles Co., HSH.

**Golden Eagle:** 10-2 Hennepin Co., 1, EWJ; 11-5 Houston Co., 2 imm., FL; 11-12 Anoka Co., 1, *fide* TKS; 11-19 Goodhue Co., MHL.

**Bald Eagle:** From 9-29 to 11-29 some 14 observers reported 4 adults, 13 immatures and 24 age undetermined, from Cook, Lake, St. Louis, Cass, Anoka, Hennepin, Ramsey, Washington, Wabasha, Winona and Houston Counties.

**Marsh Hawk:** Latest 11-1 Roseau Co., PEB and Traverse Co., JAH; 11-28 Wabasha Co., DGM.

**Osprey:** Latest 10-8 Duluth, HFH and Clearwater Co., MSB; 10-9 Lake Pepin, MIG.

**Peregrine Falcon:** 9-4 Stevens Co., 1, JAH; 9-4 Washington Co., 1, RBJ; 9-5 Cook Co., AEA.

**GYRFALCON:** 11-5 Tofte dump, Cook Co., 1, DB, RG, EHH; good details, description; photographed by DB.

**Pigeon Hawk:** Latest 10-6 Duluth, JCG, 10-10 Stearns Co., RPR.

**Sparrow Hawk:** Latest 11-26 Lac Qui Parle Co., PE; 11-28 Wabasha Co., DGM.

**Spruce Grouse:** 8-20 Lake Co., 2, DB.

**Ruffed Grouse:** All reports north and east of Duluth except the following: 9-3 Anoka Co., ACR; 10-2 Crow Wing Co., 2, MIG; 10-8 Ogilvie, 18, DB.

**Sharp-tailed Grouse:** 10-8 Mille Lacs Co., 1, RHJ.

**Bobwhite:** 8-14 Forest Lake, 1, VL; 10-25 Wabasha Co., 12, DGM; 11-29 Wabasha Co., 9, DGM.

**Gray Partridge:** "Several seen in Lincoln Co.," PE.

**Sandhill Crane:** 9-21 Roseau Co., 60, PEB; 10-8 Thief Lake Refuge, 25, MSB; 10-12 Wilkin Co., 300, EWJ; 10-20 Stearns Co., 2, RPR.

**Yellow Rail:** 10-26 Grass Lake, Minneapolis, 1, VL, good description but exceptionally late date.

**Virginia Rail:** Latest 9-13 Lac Qui Parle Co., JAH; 9-22 Redwood Co., PE.

**Sora:** Latest 9-23 Lyon Co., PE; 10-10 Duluth, JGH *fide* JCG; 10-11 and 10-25 Sherburne Co., EAH.

**Common Gallinule:** Latest 8-16 Hennepin Co., 2 ad., 5 imm., VL; 9-18 Stearns Co., 3, RPR.

**Semipalmated Plover:** Latest 9-15 Lyon Co., PE; 9-17 Lac Qui Parle Co., JAH; 10-8 Lyon Co., PE.

**American Golden Plover:** Earliest 9-15 Lyon Co., PE; 9-20 Cook Co., JCG; latest 10-20 Two Harbors, JCG and Grant Co., JAH; 10-22 Traverse Co., JAH; 10-31 Virginia, St. Louis Co., feeding on angleworms on lawn, Mrs. Tom Carey *fide* VFB.

**Black-bellied Plover:** Earliest 8-20 Duluth, BL, DB; 9-5 Hennepin Co., RDT; 9-24 Traverse Co., JAH; latest 10-8 Lyon Co., PE; 10-16 Lac Qui Parle Co., JAH; 11-5 Duluth, JCG.

**Ruddy Turnstone:** 8-23 Jackson Co., PE; 8-28 Duluth, JCG.

**American Woodcock:** 10-1 Washington Co., DS; 10-6 Anoka Co., WHL; 10-9 Ogilvie, DB.

**Spotted Sandpiper:** Latest 9-23 Lyon Co., PE; 9-26 Cook Co., JCG; 10-8 Anoka Co., WHL.

**Solitary Sandpiper:** Earliest (see also Summer Season, previous issue) 8-4 Detroit Lakes, PE; 8-16 Hennepin Co., VL; 8-23 Lake Co., JCG; latest 9-18 Hennepin Co., RBJ; 9-25 Anoka Co., WHL; 9-27 Washington Co., ACR.

**Greater Yellowlegs:** Earliest (see also Summer Season, previous issue) 9-6 Hennepin Co., MHM, VL; 9-10 Traverse

Co., DB; latest 10-23 Lyon Co., PE and Saginaw, JCG; 10-24 Wabasha Co., DGM; 11-8 Dakota Co., FN/MAS and Pope Co., RPR.

**Lesser Yellowlegs:** Earliest (see also Summer Season, previous issue) 9-10 Traverse Co., DB; 9-11 Blue Earth Co., EDK; latest 10-22 Traverse Co., JAH; 10-23 Lyon Co., PE; 10-26 Pope Co., WH.

**Knot:** 8-28 Duluth, 3, JCG; 9-18 Duluth, 2, EHH.

**Pectoral Sandpiper:** Earliest (see previous Summer Season also) 8-7 Hennepin Co., FN/MAS, Carver Co., MHM and Nicollet Co., DB; latest 10-22 Traverse Co., JAH; 10-23 Lyon Co., PE; 11-1 Washington Co., BL.

**Baird's Sandpiper:** Earliest 8-28, 9-8 Duluth, JCG; 9-10 Lac Qui Parle Co., DB, BL, RLH; latest 10-1 Lyon Co., RBJ; 10-23 Lac Qui Parle Co., PE.

**Least Sandpiper:** 8-7 Nicollet Co., DB; 8-28 Duluth, JCG; 9-3 Morrison Co., LSR; 9-21 Lyon Co., PE; 10-1 Brown Co., RBJ.

**Dunlin:** 10-8 Lyon Co., PE, only report.

**Long-billed Dowitcher:** 10-1 Brown, Nicollet and Lac Qui Parle Counties, RBJ; 10-23 Lac Qui Parle Co., 4, PE; all records based on call-notes.

**Short-billed Dowitcher:** 8-23 Jackson Co., 259, PE; 9-2 Lyon Co., 2, PE; call-note information given.

**Dowitcher, species ?:** 8-2 to 8-25 Moorhead, LWJ; 9-4 McLeod Co., 3, FN/MAS; 9-17 Artichoke Lake, 1, JAH.

**Stilt Sandpiper:** 9-4 Lyon Co., PE; 9-10 Lac Qui Parle Co., BL, DB, RLH; 10-1 Brown Co., RBJ.

**Semipalmated Sandpiper:** 8-9 Carver Co., VL; 8-28 Duluth, JCG and Morrison Co., LSR; 9-3 Morrison Co., LSR; 9-10 Lac Qui Parle Co., DB, BL, RLH; 9-13 Lac Qui Parle Co., JAH; 10-8 Lyon Co., PE; 10-22 Lake Traverse, JAH.

**WESTERN SANDPIPER:** 9-10 Salt Lake, Lac Qui Parle Co., 1 seen with Least and Semipalmated for comparison; noted dark legs, rusty back, very long bill, small size; DB, BL, RLH.

**Buff-breasted Sandpiper:** 8-20 St. Louis Co. (Duluth ?), 1, DB, BL; 8-28 Duluth, 2, JCG; 9-7 Duluth, JCG; 9-10 Salt Lake, Lac Qui Parle Co., DB, BL, RLH; 9-15 Lyon Co., 1, PE; 9-18 Duluth, 4, EHH.

**Marbled Godwit:** Latest 7-26 Stevens Co., JAH; 7-30 Lac Qui Parle Co., PE; 8-2 Moorhead, Clay Co., LWJ.

**Sanderling:** Earliest 8-7 Nicollet Co., DB; 8-28 Duluth, JCG; latest 9-24 Clay Co., LWJ; 9-26 Cook Co., JCG; 10-8 Lyon Co., PE.

**Wilson's Phalarope:** Latest 8-19 Stevens Co., JAH; 8-25 Moorhead, LWJ; 9-2 Lyon Co., PE.

**Northern Phalarope:** Earliest 8-25 Washington Co., BL; 9-5 Hennepin Co., RDT; latest 9-24 Lac Qui Parle Co., PE; 10-1 Brown Co., RBJ and Lac Qui Parle Co., HFH.

**Jaeger, Species ?:** 9-7 Duluth, St. Louis Co., RN.

**Glaucous Gull:** 11-29 Grand Marais, Cook Co., 1, EHH; earlier than usual.

**Ring-billed Gull:** Latest in north 11-5 Duluth, JCG; 11-11 Mille Lacs Lake, MSB; 11-12 Stearns Co., RPR; latest in south 11-28 Wabasha Co., DGM; 11-30 Hennepin Co., FN/MAS.

**Franklin's Gull:** A spectacular movement through the greater Minneapolis-St. Paul area was witnessed by a dozen or more observers who saw many flocks passing by October 8; some of the flocks numbered into the hundreds and the total movement must have totaled thousands of birds; perhaps this movement is unprecedented in the Twin Cities? latest 10-22 Traverse Co., JAH; 10-23 Lyon Co., PE; 10-26 Wright Co., EC; 11-14 Nobles Co., HSH.

**Bonaparte's Gull:** Earliest (see previous Summer Season also) 8-28 Duluth, JCG; 9-5 Hennepin Co., RDT; latest 10-23 Cass Co., JCG; 11-5 and 11-11 Crow Wing Co., MSB.

**Forster's Tern:** Latest 9-18 Stearns Co., RPR; 9-21 Lyon Co., PE; 9-25 Becker Co., RPR.

**Common Tern:** Latest 9-25 Becker Co., RPR; 10-17 (JAM) and 10-23 (JCG)

Cass Co.; two October dates undoubtedly latest dates on record here.

**Caspian Tern:** 9-4 Hennepin Co., VL, MHM; 9-18 Stearns Co., RPR; 9-21 Wabasha Co., DGM; 9-25 Becker Co., RPR; 9-26 Hennepin Co., EHH.

**Black Tern:** Latest 9-17 Ramsey Co., BL and Lac Qui Parle Co., JAH; 9-25 (PE) and 10-1 (RBJ) Lyon Co.

**Mourning Dove:** Latest in north 11-17 Cook Co., 2, RLG; latest in south 11-28 Hennepin Co., VL.

**Yellow-billed Cuckoo:** Latest 8-23 Jackson Co., PE; 9-12 Rochester, JPF.

**Black-billed Cuckoo:** Latest 9-1 Ramsey Co., ACR; 9-4 Stevens Co., JAH; 9-6 Hennepin Co., MHM.

**Snowy Owl:** 10-29 Silver Bay, 1 photographed by HFH; 10-29 Grand Marais, HFH, BL, EMB, RG; 11-1 Adolf, RN; 11-4 Becker Co., GA; 11-5 Lakeside, LTM; 11-5 Gary, MJB; 11-6 Chippewa Co., 10 mi W Willmar, 1 shot, *vide* RPR; 11-6 Duluth, 4 separate reports *vide* RN; 11-7 Duluth, JKB; 11-8 Roseau Co., Warroad, 1, PEB; 11-12 Clifton, DW; 11-13 Duluth, 4, JGT; 11-15 Ottertail Co., GHG; 11-14 Minneapolis, 1, RLH; 11-26 Duluth, 3, AR; 11-26 Traverse Co., 2, TW; 11-30 Ottertail Co., 1, GHG; 11-20 Beltrami Co., near Agassiz Refuge, AWR. Much of this information was supplied by Mr. Tom Nicholls at the Museum of Natural History; Mr. Nicholls is engaged in a survey of this species this winter.

**Great Gray Owl:** 11-24 Wawina River, Itasca Co., photo by Dale Olsen, *vide* JCG.

**Long-eared Owl:** 9-9 Stearns Co., 1, RPR; 11-8 Houston Co., 1, FL; 11-15 Sherburne Co., EAH.

**Short-eared Owl:** 9-18 Cottonwood Co., LAF; 10-1 Lyon Co., PE; 10-29 Hennepin Co., PE; 11-4 Roseau Co., PEB; 11-7 Anoka Co., WHL.

**Saw-whet Owl:** 10-9, 10-10 Duluth, 2 banded, DTL.

**Common Nighthawk:** Latest 10-6 Stevens Co., JAH; 10-7 Fargo, MGA; Hennepin Co., PE, JAJ; Washington Co., WWL

and Ramsey Co., BL, RBJ; 10-8 St. Paul, TKS and Hennepin Co., VL; we seldom have so many reports into October.

**Chimney Swift:** Latest 9-15 Ramsey Co., ACR; 9-16 Stearns Co., RPR; 9-20 Washington Co., WWL.

**Ruby-throated Hummingbird:** Latest 9-27 Cook Co., MOP; 9-29 Ramsey Co., MIG; 10-3 Washington Co., WWL.

**Belted Kingfisher:** Latest 10-22 Traverse Co., JAH; 10-23 Duluth, JCG; 10-29 Wabasha Co., DGM.

**Yellow-shafted Flicker:** Latest 11-24 Pope Co., WH; 11-26 Lyon Co., PE; 11-28 Nobles Co., HSH.

**Red-bellied Woodpecker:** One northerly report 11-27 Mille Lacs Co., WJH.

**Red-headed Woodpecker:** Latest 10-9 Weaver, MIG; 10-12 Washington Co., WWL.

**Yellow-bellied Sapsucker:** Latest 10-9 Cook Co., MAF; 10-12 Cook Co., MOP; 10-13 Lake Co., RK; interesting that all 3 were along the north shore of Lake Superior.

**Black-backed Three-toed Woodpecker:** Numerous reports in Cook Co., from 9-18 to 11-19; also reported 10-13, 10-15 Vermillion, DGM; 11-13, 11-19 Leech River, Cass Co., EAH; 11-13 Chisago Co., WHL; 11-14 Roseau Co., PEB.

**Eastern Kingbird:** Latest 9-10 Brown Co., RBJ; 9-15 Lyon Co., PE; 9-17 Pine Co., MIG.

**Western Kingbird:** Latest 9-10 Lincoln Co., BL, DB, RLH; 9-17 Lac Qui Parle Co., JAH; 9-28 Cook Co., good details, MOP; all three are among the latest dates we've had.

**Great Crested Flycatcher:** Latest 9-8 Hennepin Co., MHM; 9-10 St. Louis Co., AKA; 9-30 Cook Co., MOP; last date could be latest for NE Minn.?

**Eastern Phoebe:** Latest 10-9 Washington Co., DS; 10-10 Hennepin Co., VL; 10-11 Hennepin Co., MHM.

**Yellow-bellied Flycatcher:** Latest 9-4 Duluth, JCG; 9-14 Hennepin Co., RBJ and Stevens Co., JAH.

**Trail's Flycatcher:** Latest 9-5 Duluth JCG; 9-13 Morrison Co., LSR; 9-15 Anoka Co., WHL.

**Least Flycatcher:** Latest 9-17 Duluth, AKA; 9-22 Morrison Co., LSR; 9-25 Cook Co., JCG.

**Eastern Wood Pewee:** Latest 9-20 Wabasha Co., DGM; 9-23 Lyon Co., PE; 9-27 Hennepin Co., MHM.

**Olive-sided Flycatcher:** Latest 9-2 Hennepin Co., VL; 9-3 Anoka Co., BL, Morrison Co., LSR and Hinckley, MIG; 9-20 Hennepin Co., MHM.

**Tree Swallow:** Latest 10-1 Brown Co., RBJ and Stearns Co., RPR; 10-2 Lyon Co., PE; 10-15 Washington Co., DS.

**Bank Swallow:** Latest 9-10 Martin Co., RBJ; 9-11 Artichoke Lake, JAH.

**Rough-winged Swallow:** 10-1 Yellow Medicine Co., RBJ.

**Barn Swallow:** Latest 10-1 Brown Co., RBJ; 10-9 Lyon Co., PE; 10-7 Cottonwood Co., LAF.

**Cliff Swallow:** 8-21 Hastings, VL; 9-10 Jackson Co., RBJ; only two reports.

**Purple Martin:** Latest 9-29 Cottonwood Co., LAF; 10-1 Stearns Co., RPR; 10-6 Washington Co., WWL.

**Gray Jay:** Other than the usual reports from NE Minn. were these: 10-23 Itasca, Cass and Beltrami Co's, RBJ, JCG; 11-13 Cass Co., EAH.

**Black-billed Magpie:** 10-6 Roseau Co., PEB; 10-8 Marshall Co., MSB; 10-9 Borup, MGA; 10-10 Marshall Co., EHH; 10-13 Borup, MGA; 11-10 Fargo-Moorhead, MGA.

**Common Raven:** Other than the usual records from extreme NE are these: Oct.-Nov., Pine Co., WHL; 11-12 Itasca Co., DB.

**Boreal Chickadee:** Southwestward movement onto our "prairies" may be without precedent; 10-24 Morrison Co., 1, LSR; 10-30 (7), 11-13 (5) and 11-28 (2) Morris, Stevens Co., JAH, RAG; 11-1 Donnelly, Stevens Co., DHR; 11-23 to 11-27 Benson, Swift Co., 2 at feeders on opposite sides of town, HSH; 11-26 to 11-28 Birchwood (St. Paul), at feeder, *vide*

WWL; moved even further south later in winter.

**Tufted Titmouse:** After sudden disappearance several years ago, this species may now be starting its "comeback;" six observers reported them from Houston, Hennepin and Washington Co's. during Oct. and Nov.

**Red-breasted Nuthatch:** Earliest movements 8-6, 8-23 Hennepin Co., RDT; in Sept. reported from Cook, Rice, Crow Wing, Stearns, St. Louis, Chisago, Ramsey Co's. and Fargo-Moorhead area; only 2 reports in Oct.; then in Nov. reported from Stevens, Cook, Crow Wing, St. Louis, Ramsey and Hennepin Co's.

**Brown Creeper:** Latest in north 11-14 Roseau Co., PEB; 11-19 Cass Co., EAH; 11-28 Stearns Co., RPR.

**House Wren:** Latest 10-4 Hennepin Co., FN/MAS, MHM; 10-11 Hennepin Co., VL; 10-21 Wright Co., EC.

**Winter Wren:** Latest 10-8, Duluth, HFH and Ogilvie, DB; 10-12 Washington Co., WWL; 10-13 Wright Co., EC; 11-11 Nobles Co., HSH.

**Long-billed Marsh Wren:** Latest 9-28 Hennepin Co., VL; 10-1 Lac Qui Parle Co., RBJ; 10-9 Lyon Co., PE.

**Short-billed Marsh Wren:** Latest 9-7 Anoka Co., WHL; 9-10 Lincoln Co., BL, DB, RLH; 9-21 Hennepin Co., EWJ.

**ROCK WREN:** 10-29 Grand Marais, Cook Co., RG, EMB, BL and photographed in color by HFH. A remarkable record; probably fourth state record.

**Mockingbird:** 11-11 Cook Co., MAF (good details).

**Catbird:** Latest 9-27 Lake Co., RK; 10-1 Stearns Co., RPR; 10-8 Duluth, HFH.

**Brown Thrasher:** Latest 10-11 Duluth, JHM; 10-31 Duluth, JGH; 11-23 Cook Co. RGA (good details).

**Hermit Thrush:** Latest 10-24 Cook Co., MAF; 11-7 Nobles Co., HSH.

**VARIED THRUSH:** 11-13 Chisago Co., imm. male, WHL.

**Swainson's Thrush:** Latest 10-16 Lake Co., RK; 10-18 Duluth, AKA; 10-29

**Cook Co.** HFH, EMB, RG, BL; one exceptional record **11-10** Fargo, MGA, good details.

**Gray-cheeked Thrush:** Earliest 9-4 Lake Co., RK; 9-6 Duluth, JCG; 9-7 Duluth, AKA; latest 10-28 Duluth, AKA; **10-29** Cook Co., HFH, BL, EMB, RG; same bird, identified by one-inch twig sticking out of throat, seen **11-5** by RG, DB; injury did not seem to bother bird or hamper its ground-search for food.

**Veery:** Latest 9-13 Duluth, JCG; 9-19 Lake Co., RK; **9-27** Cook Co., MAF.

**Eastern Bluebird:** Latest 11-7 Nobles Co., HSH; **11-23** Roseau Co., PEB; **11-24** Benson, Swift Co., 1 male, HSH.

**TOWNSEND'S SOLITAIRE:** 10-11 Duluth, Ruth Lender; see Note of Interest in previous issue.

**Ruby-crowned Kinglet:** Latest 10-21 Fargo, MGA; 10-26 Wright Co., EC; 11-8 Hennepin Co., VL.

**Water Pipit:** Earliest 9-7 Duluth, AEA; 10-1 Brown Co., RBJ; latest 10-29 Grand Marais, HFH, EMB, RG, BL; 11-5 Gooseberry Park, DB, RG; note that both latest dates were along north shore of Lake Superior.

**Sprague's Pipit:** 8-13 Clay Co., usual spot, DB.

**Bohemian Waxwing:** 10-29 Split Rock Lighthouse, 1, HFH, RG, EMB, BL; 11-9 Duluth, 10, JCG; several reports in Nov. from Cook Co.; also 11-23 Mora, Kanabec Co., 25, RHJ; farther south later in winter.

**Northern Shrike:** 10-21 Cook Co., MOP; 10-22 St. Louis Co., Lake Vermilion, RBJ; then increase in reports for Nov., south to Fargo, St. Cloud, Pope Co., Goodhue Co. and Wabasha Co.

**Yellow-throated Vireo:** Latest 9-13 Morrison Co., LSR; 9-18 Hennepin Co., JAJ; 9-30 Wabasha Co., DGM.

**Solitary Vireo:** Latest 10-5 Fargo, MGA; 10-11 Hennepin Co., MHM; 10-17 Morrison Co., LSR and Hennepin Co., EHH.

**Red-eyed Vireo:** Latest 9-25 Hennepin Co., FN/MAS; 10-2 Duluth, AKA; 10-13 Cook Co., MAF.

**Philadelphia Vireo:** earliest in south 8-24 Hennepin Co., DB; latest 9-28 Hennepin Co., JAJ; **10-11** Lake Co., RK; **10-12** Duluth, AKA.

**Warbling Vireo:** Latest 9-16 Hennepin Co., MHM; 9-27 Duluth, AKA; **10-18** Cook Co., MAF.

**Black-and-white Warbler:** Latest 9-28 Hennepin Co., JAJ and Morris, JAH; 9-30 Lake Co., RK and Cook Co., MOP.

**Golden-winged Warbler:** 9-3 Anoka Co., BL; 9-11 Crow Wing Co., MSB; 9-16 Anoka Co., WHL.

**Tennessee Warbler:** Latest 10-7 Cook Co., MAF; 10-8 Duluth, JCG, HFH; and Hennepin Co., VL; 10-11 Ramsey Co., MIG.

**Orange-crowned Warbler:** Earliest 8-27 Hennepin Co., MHM; 9-1 Fargo, MGA; 9-7 Hennepin Co., VL; latest 10-18 Fargo, MGA and Ramsey Co., MIG; 10-20 Stearns Co., RPR; 10-21 Hennepin Co., MHM.

**Nashville Warbler:** Latest 10-12 Lake Co., RK; 10-16 Fargo, MGA; 10-19 Hennepin Co., MHM.

**Parula Warbler:** Latest 9-3 Anoka Co., BL; 9-18 Hennepin Co., DB; 9-24 Duluth, AKA; one exceptional record **10-25** Cook Co., MAF, good details.

**Yellow Warbler:** Latest 9-16 Duluth, AKA; 9-21 Hennepin Co., VL; 9-25 Cottonwood Co., LAF; two exceptional records **10-13** Duluth, 1 banded, DTL and **10-16** Fargo, MGA.

**Magnolia Warbler:** Latest 9-18 Duluth, AKA, Washington Co., WHL, Hennepin Co., JAJ and Olmsted Co., JPF; 9-23 Washington Co., WWL; 9-27 Duluth, JCG and Lake Co., RK; one exceptional record 10-16 Fargo, MGA.

**Cape May Warbler:** Latest 9-20 Washington Co., WWL; **10-4** Duluth, JCG.

**Black-throated Blue Warbler:** 9-9 Lake Co., WJB and Cook Co., ad male, Mrs. Margaret Brooke *vide* JCG (good description, etc.); 9-12 Anoka Co., WHL; 9-17 Duluth, ad female, FN/MAS; 9-21 Hennepin Co., MHM.

**Myrtle Warbler:** Latest 10-20 Stearns Co., RPR; 10-27 Fargo, MGA; 10-28

Cook Co., MOP; exceptional records 11-1 Duluth, JGH; early Nov., Lake Jane, Washington Co., JO; **11-25 Cook Co., MOP.**

**Black-throated Green Warbler:** Latest 9-26 Hennepin Co., VL; 9-29 Ramsey Co., MIG; 10-1 Hennepin Co., MHM.

**Blackburnian Warbler:** Latest 9-10 Duluth, AKA; 9-14 Olmsted Co., JPF and Ramsey Co., BL; 9-20 Washington Co., WHL.

**Chestnut-sided Warbler:** Latest 9-25 Duluth, AKA; **10-1 Anoka Co., WHL.**

**Bay-breasted Warbler:** Latest 9-21 Duluth, JCG; 9-25 Olmsted Co., JPF; **10-7 Washington Co., WHL.**

**Blackpoll Warbler:** Earliest 8-26 Duluth, JCG; 9-5 Hennepin Co., DB; latest 9-22 (MAF) and 9-26 (JCG) Cook Co., 9-27 Lake Co., RK; one exceptional record **10-10 Fargo, MGA.**

**Pine Warbler:** Latest 9-24 Lyon Co., PE; 9-28 Bemidji, JAM; **10-8 Duluth, HFH;** one exceptional record **10-20 Fargo, MGA.**

**Palm Warbler:** Latest 10-18 Cook Co., MOP; 10-20 Fargo, MGA and Lake Co., JCG; 10-22 St. Croix State Park, DB.

**Ovenbird:** Latest 9-24 Hennepin Co., JAJ; 9-28 Lake Co., RK; 10-4 Hennepin Co., FN/MAS.

**Northern Waterthrush:** Latest 9-25 Cook Co., JCG; 10-1 Fargo, MGA and Olmsted Co., JPF.

**Connecticut Warbler:** 8-26 to 9-2 Fargo, 4 reports, *fide* MGA; 9-2 Morrison Co., LSR; 9-13 Lake Co., RK and Duluth, JCG; 9-20 Hennepin Co., FN/MAS.

**Mourning Warbler:** Latest 10-1 Stearns Co., RPR and Anoka Co., WHL; 10-2 Fargo, MGA; **10-18 Hennepin Co., FN/MAS.**

**Yellowthroat:** Latest 10-2 Hennepin Co., MHM; 10-8 Anoka Co., WHL; 10-20 Fargo, MGA.

**Wilson's Warbler:** Latest 9-21 Hennepin Co., JAJ; 9-23 Fargo, MGA; 9-25 Cottonwood Co., LAF.

**Canada Warbler:** Latest 9-13 Duluth, JCG; 9-14 Lake Co., RK; 9-15 Morrison Co., LSR.

**American Redstart:** Latest 9-30 Lake

Co., RK; 10-13 Washington Co., WWL; **10-22 Hennepin Co., MHM.**

**Bobolink:** Latest 9-3 Anoka Co., BL; 9-10 Martin Co., RBJ; 9-12 Sauk Centre, RPR.

**Eastern Meadowlark:** Latest 10-31 Wabasha Co., DGM; 11-11 Cook Co., MOP.

**Western Meadowlark:** Latest 10-20 Traverse Co., JAH; 10-27 Wright Co., EC; **11-29 Pope Co., WH.**

**Yellow-headed Blackbird:** Latest 10-1 Lac Qui Parle Co., RBJ; 10-9 Washington Co., DS; 10-11 Grant Co., JAH.

**Baltimore Oriole:** Latest 9-13 Washington Co., WWL; 9-15 Ramsey Co., ACR; exceptional records **11-3 to 11-13 Minneapolis, JIM; 11-5 to Dec., Duluth, MJB** *fide* JCG; **11-29 Northfield, at feeder, GNR;** these late records are undoubtedly without precedent.

**Rusty Blackbird:** Latest in north 10-4 Cook Co., MOP; 10-10 Lake Co., RK.

**Brewer's Blackbird:** Latest 10-23 Cook Co., MOP; 10-27 Hennepin Co., VL; **11-14 to 11-24 Cook Co., female at feeder, DRG; 11-17 Parkville, at feeder, SNE.**

**Brown-headed Cowbird:** Latest 11-7 Wabasha Co., DGM; 11-17 Wright Co., EC; 11-25 Pope Co., JAH.

**Scarlet Tanager:** Latest 9-23 Ramsey Co., ACR; 9-25 Hennepin Co., JAJ; 10-6 Hennepin Co., MHM.

**Cardinal:** Interesting northerly records: 10-26 to 11-13 Duluth, 4 different reports *fide* JCG, RN; 10-17 Lutsen, Cook Co., 4 pair, DRG; 10-27 Hibbing, *fide* SM; 10-31 Tofte, 1 female *fide* MOP; 11-16 Lutsen, 6, DRG.

**Rose-breasted Grosbeak:** Latest 9-20 Washington Co., WWL; 9-26 Hennepin Co., VL; exceptional records: **10-17 Fargo, MGA; 10-23, 10-26, 11-8 French River, St. Louis Co., imm male, B. Borgeson and JCG; 10-29 Cook Co., HFH, BL, EMB, RG.**

**Indigo Bunting:** Latest 9-18 Fargo, MGA; 9-25 Olmsted Co., JPF; 10-5 Hennepin Co., VL.

**Dickcissel:** Latest 9-10 Lincoln Co., 50-60, DB, BL, RLH; 9-21 Lyon Co., PE.

**Evening Grosbeak:** Usual northerly records with limited southward movement;

10-8 Fargo, MGA; 10-15 Washington Co., WHL; 11-10 Ramsey Co., WWL.

**Pine Grosbeak:** Earliest 10-25 Cook Co., MAF; 10-29 Cook Co., BL, RG, EMB, HFH; 11-5 Ely, JCG and Lake Co., EHH; no records from southern part of state.

**Common Redpoll:** Earliest 10-12 Duluth, JCG; 10-16 Fargo, MGA; 11-2 Pope Co., WH.

**Pine Siskin:** Scattered movements across northern half of state plus Twin Cities during Sept. and Oct.; by Nov. all reports confined to extreme NE part of state—apparently species withdrew from western part of Minnesota?

**Red Crossbill:** In direct contrast with the scattered summer records which extended down into Winona during Aug., the species seemed to withdraw into the more northern portions of the state this fall; by Oct. had retreated to NE part of state extending southwestward only to Crow Wing (MSB) and Stearns (RPR) Co.'s; by Nov. it was reported only from Cook, Lake and St. Louis Co.'s.

**White-winged Crossbill:** 11-5 Lake Co., DB; 11-15 Stearns Co., 6, RPR.

**Rufous-sided Towhee:** Latest 9-22 Morrison Co., LSR; 9-27 Fargo, MGA; one exceptional record, 11-15 Duluth, Mrs. T. Pappas fide JCG.

**Lark Bunting:** 10-29 Cook Co., 3 mi S of Split Rock, EMB, BL, RG, photographed in color by HFH.

**Savannah Sparrow:** Latest 10-8 Lyon Co., PE; 10-18 Fargo, MGA; 10-29 Lake Co., HFH, BL, EMB, RG.

**Grasshopper Sparrow:** Latest 10-1 Lac Qui Parle Co., HFH, RBJ; 10-1 Pope Co., WH.

**LeConte's Sparrow:** Latest 10-1 Lac Qui Parle Co., RBJ; 10-11 Traverse Co., JAH.

**Sharp-tailed Sparrow:** 8-13 Mahnomen Co., EHH.

**Vesper Sparrow:** Latest 10-15 Wright Co., EC; 10-20 Traverse Co., JAH; 10-26 Wabasha Co., DGM.

**Slate-colored Junco:** Earliest south 8-25 Hennepin Co., RDT (exceptional); 9-15 Hennepin Co., RBJ; 9-18 Washington Co., ACR; one late record for the north: 11-11 Lutsen, Cook Co., DRG.

**Oregon Junco:** R. Oehlenschläger informs

me that after examining many specimens of this and the preceding species (and their hybrids) that even the fully adult male (black hood, pink sides, brown back) is virtually inseparable in the field from the dark-hooded *cismontanus* "sub-species" of the Slate-colored Junco. Therefore I submit the following for what they are worth: 10-10 Hennepin Co., MHM; 10-15 Lake Co., RK and Duluth, AKA; 10-16 Duluth, JCG; 10-17 Washington Co., DS; 10-19 Lake Co., RK; 11-8 Dakota Co., FN/MAS; 11-10 Fargo, MGA and Morris, JAH; 11-11 Cook Co., MAF; 11-13 Morris, JAH; 11-27 Fargo, MGA; 11-28 Washington Co., WWL; 11-29 Stearns Co., RPR.

**Tree Sparrow:** Earliest 9-10 Beltrami Co., MK; 9-20 Cook Co., JCG; 9-26 Lake Co., RK; latest in north 11-8 Cook Co., MAF; 11-10 Lake Co., RK; 11-24 Roseau Co., PEB.

**Chipping Sparrow:** Latest 10-10 Hennepin Co., MHM; 10-11 Cottonwood Co., LAF; 10-15 Anoka and Stearns Co.'s, RPR; 10-18 Fargo, MGA.

**Clay-colored Sparrow:** Latest 9-21 Mt. Iron, RLH; 9-26 Cook Co., JCG; 10-20 Fargo, MGA.

**Field Sparrow:** Latest 9-20 Anoka Co., EWJ; 9-27 Hennepin Co., MHM; 9-28 Stevens Co., JAH (northerly record).

**Harris' Sparrow:** Earliest 9-13 Cook Co., MAF; 9-24 Duluth, DB and Olmsted Co., JPF; latest 11-7 Nobles Co., HSH and Wacouta, MHL; 11-8 Cottonwood Co., LAF; 11-30 Fargo, MGA.

**White-crowned Sparrow:** Earliest 9-14 Duluth, AKA; 9-17 Lake Co., RK and Ramsey Co., ACR; latest 10-19 Hennepin Co., MHM; 10-20 Traverse Co., JAH; 11-13 Cook Co., MAF.

**White-throated Sparrow:** Latest 10-31 Duluth, JCG; 11-17 Hennepin Co., MHM, VL; 11-27 Fargo, MGA.

**Fox Sparrow:** Earliest 9-4 Hennepin Co., RDT; 9-14 Fargo, MGA; 9-15 Anoka Co., WHL; latest 11-8 Duluth, AKA, JCG; 11-12 Morris, JAH and Olmsted Co., JPF; 11-20 Cook Co., MAF.

**Lincoln's Sparrow:** Latest 10-20 Lake Co., RK; 10-21 Fargo, MGA and Hennepin Co., VL.

**Swamp Sparrow:** Latest 10-23 Washington Co., DS; 10-25 Ramsey Co., VL; 10-27 Fargo, MGA.

**Song Sparrow:** Latest 10-27 Morrison Co., LSR; 10-31 Hennepin Co., VL; 11-7 Jackson Co., HSH; 11-28 Fargo, at feeder, MGA.

**Lapland Longspur:** Earliest 9-9 Duluth, RPR; 9-13 Carver Co., RDT; 9-23 Cook Co., MAF and Lake Co., RK; latest 11-5 Cook Co., DB, EHH; 11-14 Nobles Co., HSH; 11-26 Fargo, MGA.

**SMITH'S LONGSPUR:** 10-20 Traverse Co., 10 mi E of Wheaton, 2 seen with mixed flock of Lapland Longspurs and Horned Larks, good details, JAH.

**Snow Bunting:** Earliest 10-15 Fargo, MGA, Lake Co., JCG and Duluth, VL; 10-16 Cook Co., MAF; 10-17 Cook Co., MOP and Beltrami Co., JAM.

**SUMMARY:** What can be said about such an autumn? So many late dates, some of them record-breakers, are hard to explain. The thrushes took it upon themselves to break most of their late dates and the vireos and warblers proved that my own personal October list is very deficient in their species numbers. Moreover, some of the outstandingly early and late records which were omitted for lack of details may shed further light on the fall migration when our Request-for-details sheets are returned (we had to send out about 25 of them!). A look at the strange early and late dates along the north shore of Lake Superior, plus the occurrence of such species as the Lark Bunting, Western Kingbird, Rock Wren, Mockingbird and Townsend's Solitaire up there indicates that some western influence must have taken place. This flair in our Arrowhead Country continued on into the winter when two new species were added to the state list (to be covered in the next issue). The south and west movements of the Boreal Chickadee were very notable, as were the very late records for the Baltimore Oriole, Eastern Bluebird, Common Tern, Rose-breasted Grosbeak and Black-crowned Night Heron. A rash of Snowy Owl reports may foretell an invasion this winter.

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A warm, dry and sunny September was followed by dull, cooler than average weather. The first killing frost occurred October 12. The earliest heavy snowfall since 1943, 4.1 inches, fell October 15. November was the coldest since 1959 but winds averaged only 7.5 mph even when the 51 mph gusts of November 30 were included. December 6 the temperature reached 41 degrees but the 15th was the only other day above freezing. Only one day in January had a maximum temperature below zero ( $-7^{\circ}\text{F}$ ). No heavy snowfalls hit the Lakehead, the heaviest one-day fall of 3.6 inches occurring on January 11. Total winter snowfall to the end of January was 52.8 inches, an inch above average. February began with a cold spell and on the 13th the temperature was 39 degrees below zero.

The Hartleys reported a Canada Violet in bloom October 1 and dahlias flowered until the first severe frost October 12. Black ash leaves fell on the 10th. The odd poplar still flaunted golden leaves between Port Arthur and Nipigon October 20 but driving north to Geraldton the only yellow leaves were on larch. Leaves remained on many willows until Nov. 1, the day the Neebing River froze.

The fall migration was disappointing. The general comment was that birds were scarce and moved south without staying the usual length of time. The flocks of finches common in autumn were missed. Records of individual birds suggested the movement was spread out over a considerable period.

One addition to the list of breeding birds of Thunder Bay District was obtained in 1966. Baltimore Orioles were observed in Paipoonge township during the summer and E. Beebe watched the adults and young. The nest was found when the leaves fell from an aspen, and the nest is now in the Lakehead University collection. An unusual feature of the nest was the use of a considerable amount of nylon fishing line.

The second Lark Sparrow to be seen locally came to the feeder of Mrs. M. Vibert November 11 and stayed a week, eating grain on the ground. Several club

members observed it closely. One white tail feather stuck out at a sharp angle and others appeared missing. Rosslyn village cats were suspects.

Red Crossbills have provided the winter thrill. A mid-summer report, July 17, by D. H. Elder at Geraldton raised futile hopes of a breeding record. The snow storm of October 15 brought two males to D. Smith's feeder on Rosslyn road. M. Kyle saw several near Grand Marais Nov. 14 and at Nipigon December 20. The Muries noted 16 in Fort William December 16. I. Sherlock found a male apparently frozen sitting in a shrub in Port Arthur December 21. They became very common throughout the Yuletide season. The last large flock of about 50 was seen by Mrs. A. E. Allin January 1. Numerous reports have been received since that time from persons with feed trays near conifers having seven or eight Red Crossbills as steady boarders.

The Thunder Bay Field Naturalists' Club held the Christmas Bird Census Day, which dawned clear and cold. The winds increased from 6 mph to gusting at 24 mph which made birding difficult. Twenty of the 24 enumerators made up 12 parties that travelled 208 party-miles. The total of 4,909 individual birds of 28 species broke no records.

The following birds were noted: House Sparrow, 1,793; Rock Dove, 929; Starling, 822; Common Raven, 479; Evening Grosbeak, 198; Black-capped Chickadee, 161 Common Redpoll, 118; Pine Grosbeak, 79; Herring Gull, 76; Red Crossbill, 53; Blue Jay, 52; Pine Siskin, 41; Ring-billed Gull, 18; Common Crow, 16; White-winged Crossbill, 15 Hairy Woodpecker, 10; Gray Jay, 8; Glaucous Gull, 8; Gray Partridge, 7; Downy Woodpecker, 7; Boreal Chickadee, 5; Ruffed Grouse, Red-breasted Nuthatch, Slate-colored Junco, 3 each; Snow Bunting, 2; Northern Shrike, Purple Finch, Rusty Blackbird, 1 each.

The 479 Common Ravens counted are a record. This species has increased steadily since 1962 when 72 were seen. The totals for the next three years were 113, 283, 349. Another highlight was

the presence of eight Glaucous Gulls, the most seen here at one time. Ring-billed Gulls and Red Crossbills established new highs for a census. Feeders and garbage dumps provided the best birding as high winds kept many birds in sheltered places.

**LOONS TO SWANS:** A Common Loon was seen on Lake Superior November 14, and another was on half-frozen Lake Windigoostigan November 23. Dr. Allin saw six Pied-billed Grebes at the Keefer Seaway Terminal October 1. Great Blue Herons left about this date.

**GEESE TO MERGANSERS:** September 17 a field trip party saw 16 Canada Geese at Little Pigeon Bay. Large flocks of Canada Geese passed over and Snow and Blue Geese fed in fields in Paipoonge township the last two weeks of October. Black Ducks were scarce this fall but large flocks of Mallards were reported west of Port Arthur. Dr. Allin noted 150 American Widgeons at the Seaway terminal the evening of October 1 and small groups kept arriving until dark. Some males were in almost full plumage. On October 30 he saw 40 Mallards, 4 Blacks, and 2 Common Goldeneyes at Grand Marais; and a White-winged Scoter and 2 Red-breasted Mergansers at Grand Portage Bay. Mallards, Blacks and Common Goldeneyes have been wintering on the few open stretches of water on the Nipigon and Kaministikwia rivers and at the Dorion Fish Hatchery.

The fall banding program of the Department of Lands and Forests of Ontario at the Port Arthur harbor was conducted August 19 to September 26.: 417 Blue-winged Teal, 234 Black, 99 Mallards, 32 Green-winged Teal, 4 Pintails, and 3 Redheads were banded. The two lily-pad, multi entrance traps caught a total of 1,878 ducks, including 8 originally banded here in 1964 and 25 in 1965, plus 10 foreign retraps, and many local repeats. At Woodyatt township, near Fort Frances, conservation officers banded 201 Mallards, 58 Wood Ducks, 10 Blue-winged Teal, 8 Blacks, 3 Green-winged Teal, and one each, American Widgeon and Ring-necked Duck.

**VULTURES TO PARTRIDGE:** No evidence of a hawk flight occurred at the Lakehead. Twenty Sparrow Hawks on wires along Highway 61 seen by M. Smith September 11 may have been mov-

ing southwards. A few Red-tailed and Rough-legged hawks were seen in October. Bald Eagles were reported at hunter kills and Mrs. M. Vibert saw one at Arrow Lake September 11. At least four pairs nested on the shores of Lake Nipigon in 1966. Pigeon Hawks have been seen occasionally throughout the winter.

Ruffed Grouse were scarce in the fall after what appeared a good breeding season. The usual number of Spruce Grouse were brought in for identification by hunters who did not know the species. M. Kyle saw Sharp-tailed Grouse in the Black Sturgeon area.

**CRANES TO TERNS:** Six flocks of Sandhill Cranes were reported over Ignace this fall; 3 to 10 birds in a flock and 51 in all. One was shot September 26. J. Flatt saw five among a flock of Canada Geese at Hurkett September 24. Another flock was reported over Raleigh Lake and another at White Otter Lake.

No large flocks of shorebirds were seen in the fall. Dr. Allin saw several Pectoral Sandpipers and a Stilt Sandpiper August 27 in a Neebing township slough. Within the week these were joined by Solitary Sandpipers, Greater Yellowlegs, three Baird's Sandpipers, and a Dowitcher. American Golden Plovers arrived October 2. D. H. Elder saw two Sanderlings at Neys Provincial Park September 22. Black-bellied Plover were present October 20. Both Yellowlegs and Solitary Sandpipers were seen at the north end of Dog Lake October 21 by C. E. Garton. November 1 was a late record for American Woodcock at Polly Lake, near Nipigon. Dr. Allin saw 10 American Coots at the Lakehead Terminal October 16.

Glaucous Gulls, irregular winter visitors, came just before Christmas; eight were seen on the census, and N. Denis reported two on January 14. The Ring-billed Gulls were not present after mid-January and Herring Gulls were scarce after February 1. Common Terns were reported at Geraldton in the summer of 1966 but few terns were seen locally.

**DOVES TO KINGFISHERS:** No winter records of Mourning Doves this year to date. Snowy Owl observations are frequent but many doubt if over half a dozen owls have visited the Lakehead. Only once have three been reported in

a day. A Short-eared Owl was seen Oct. 29. D. Allin saw a Hawk-Owl in Fort William December 23. Boreal Owls, like Flying Squirrels, are often caught in traps set for fur bearers. In the Black Sturgeon area on January 3 a trapper found a Boreal Owl which was caught when it struck, with enough force to trigger the trap, a Red-backed Vole that was feeding on the bait. The owl was caught high on both legs and still had the vole in one talon.

Common Nighthawks were migrating August 26. One was found on Allins porch September 10, a late date for this species. A Belted Kingfisher is wintering at the Dorion Fish Hatchery pond; the water of the spring-fed pond never freezes and the creek below the hatchery remains open for a short distance.

**FLICKERS TO SWALLOWS:** Pileated Woodpeckers visit country suet logs at times. Hairy and Downy Woodpeckers are more frequent visitors. September 18 the Denis estimated 300 Horned Larks (Hoyt's) fed in a Paipoonge township field and 32 were seen at Long Lac October 26. The Allins saw an Eastern Kingbird September 11 — a late record.

**JAYS TO STARLINGS:** Driving along northwestern Ontario roads Common Ravens are noticeable birds. Seldom does one drive ten miles without seeing a Common Raven. Small communities support 40 or more, depending on their garbage disposal methods. February 22 many acrobatic pairs soared, banked and rolled. One, perched on a false front to a store in Red Lake, vocalized in a deep 'gong' note, unlike the bell-like note heard as spring approaches.

Great flocks of Common Crows gathered October 10. Some have remained to date. Black-billed Magpies may be coming more common. One was killed at Raith August 27, and two were at a moose kill near Port Arthur in November. Only one Robin is known to be wintering and a flock of Bohemian Waxwings appears about once a month. A Hairy Woodpecker chased a Northern Shrike from a feeder near Port Arthur's Centennial Park. Starlings apparently migrate but some remain all winter.

**VIREOS AND WARBLERS:** Warbler movements were observed September 1 in Rainy River District, September 15 at Ear Falls, Kenora District, and on

September 11 and 22 at the Lakehead. Tennessee Warblers were unusually numerous. At Nolalu on October 8, while on a field trip to view a 2.5 billion year old algal reef with Walter Tovell of the Royal Ontario Museum we watched a Palm Warbler chasing an Eastern Bluebird. Flocks of Myrtle Warblers moved through the Lakehead area October 18.

**BOBOLINKS TO BUNTINGS:** Red-winged Blackbirds (2) are wintering at Caramat and a Rusty Blackbird at the Lakehead. This is the second winter record of Rusty Blackbird. Blackbirds were in large flocks from August 25 to the October frosts. Wintering populations of both Evening and Pine Grosbeaks have decreased. Common Redpolls and Pine Siskins have been seen in small numbers throughout the winter. Slate-colored Juncos were abundant in Rainy River District October 13 to 20 and an Oregon Junco was spotted by Dr. Allin October 20 at Fort William. N. Denis found Tree Sparrows plentiful October 11 to 23. No records of Clay-colored Sparrows were obtained in 1966. The first Harris' Sparrow came September 25. The last White-crowned Sparrow left October 21. Fox Sparrows were present from October 5 to 28. Lapland Longspurs arrived September 17 and were still about October 13. Snow Buntings were along Highway 61 in Cook County and near the Canadian Lakehead October 10. Some stayed into January.

During the first cold months the odd bird of a migratory species is often seen. A Hermit Thrush, slow in movements, picked half-heartedly at berries on honeysuckle and bittersweet on November 18 in the yard of Mrs. W. P. Hogarth, Fort William. No interest was shown in the grain eagerly being eaten by House Sparrows. It did not appear after the cold night. A Song Sparrow joined other birds at the Neebing Township feeders of Shan Walsh until November 12. M. Kyle saw a Fox Sparrow at Tofte November 14. During mid-November a Rufous-sided Towhee, the fifth ever seen in this area, came to the feeder of Sheila Burnford at Loon Lake, and was still present January 2nd. Some day the authoress of "The Incredible Journey" may give us a story of the wintering birds of the boreal forest. *Keith Denis, 317 Morse Street, Port Arthur, Ontario.*

In the fall of 1965 in northeastern Minnesota the number of Grays Jays seen was large enough to be called an invasion. Although they nest locally in the coniferous bogs in this area, they are not usually seen very far from their breeding habitat. Usually every fall one or two are spotted by the observers counting hawks at the "Hawk Lookout" in Duluth, but 1965 was the first year since I began keeping records in 1960 that they have occurred in numbers. However, such invasions are not unprecedented. P. B. Hofslund's notes reveal that there was an invasion in the fall of 1955. He saw the first jay in Duluth that year on September 18th. That fall Robert R. Cohen counted 35 Gray Jays within a month in Duluth. In *The Birds of Minnesota* T. S. Roberts mentions influxes in the fall of 1915 and 1919 in the northern part of the state and a big invasion in the fall of 1929 that extended south to the Twin Cities area and lasted all winter. This latter invasion evidently was continent-wide across the northern states.

Because there are now more people who report their observations regularly, the invasion of 1965 can be charted with some accuracy. It began in Cook and northeastern Lake Counties in mid-September and the first birds reached Duluth and Two Harbors about a week later. My husband and I had been staying on the North Shore at Little Marais since the middle of August and we saw the first Gray Jay along the shore of Lake Superior by our cabin on September 17th. On September 22nd I saw a group of 7 Gray Jays migrating with some Blue Jays along the ridges that are a couple of miles inland in that part of Lake County. About twenty miles to the northeast at Tofte, Cook County, Jean Peterson counted 22 migrating along the shore on September 25th; this was her biggest daily count for the fall. The first ones were seen in Duluth on September 25th by P. B. Hofslund (two seen) and in

Two Harbors on September 26th by Ruth Kuchta (one seen). By September 28th at least one had reached Rice Lake National Wildlife Refuge in Aitkin County where it was reported by Carl E. Pospichal.

The peak of the actual migration seemed to be in early October and they were present in numbers during the rest of the month. From October 1st through 10th I counted 25 moving through our yard on the shore of Lake Superior just northeast of Duluth at Clifton. I assumed that they were all different birds since the direction of movement was always to the southwest, parallel to the lake shore, just like all the other diurnal, fall migrants. My peak count was 8 on October 4th which was also the day of Jean Peterson's peak October count at Tofte where she counted 14. P. B. Hofslund's peak count while watching for hawks at Duluth was four on October 2nd. After the 11th of October the jays were not seen in actual migration along the shore of Lake Superior, but they were still present in the Duluth area in numbers. At the Duluth Bird Club meeting on October 14th, 10 out of the 50 people present reported that they had them at their feeders; in a normal year perhaps only one or two would be reported in the city for the whole fall and winter. The influx was not confined to the shore of Lake Superior since D. G. Mahle reported many around Lake Vermilion, St. Louis County on October 15th. During the latter part of October the numbers seemed to slacken off in the Duluth area. However, the peak further south was the second half of October. The greatest number seen at Rice Lake National Wildlife Refuge was 30 on October 21st by Carl E. Pospichal. On October 27th Robert B. Janssen saw several along Highways 23 and 61 from Duluth as far south as southern Pine County. This seems to be about the southern limit of the invasion although a few stragglers went further. One was present

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at Stillwater, Washington County on November 11th when it was seen by C. L. Ammerman. There was also a report of one in St. Paul on January 19, 1966 (*The Loon*, v. 38, p. 62).

During November the birds seemed to evaporate from Duluth and from the Rice Lake Refuge. Carl E. Pospichal reported only about 5 present at Rice Lake at the end of November and only an occasional jay was seen in Duluth during that month, but there were still more than in a normal year. By the time the winter came they were difficult to find in Duluth. Only one person at the Duluth Bird Club reported a single bird at his feeder very occasionally during the winter and only one was seen on the Duluth Christmas Count which is the average situation. Whether the birds present in the fall died or retreated back into the heavy coniferous forests is not known. The invasion seemed to be confined to the eastern edge of the state since observers in St. Cloud, Bemidji or Warroad reported nothing unusual for their areas.

There is some indication that this Gray Jay invasion existed along the northern border of the United States to the east coast. In the *Audubon Field Notes* for the Fall Migration, 1965 (v. 20, no. 1), two regional editors east of the Rocky Mountains singled out the Gray Jay for comment. Richard F. Bernard for the Western Great Lakes Region stated, "Gray Jays moved into northern Wisconsin in unprecedented numbers this year. Birds of this species were not only found in greater numbers than usual but were also seen in several counties where they had not been known to occur" (p. 51). He also briefly mentioned the Minnesota data cited above. The Wisconsin situation was elaborated in *The Passenger Pigeon* (v. 28, no. 3) where the seasonal editor wrote, "A real influx this fall as witnessed by the following reports: August 12 in Sawyer and August 23 in Price counties (Robbins). Two September rec-

ords: September 11, eight in Langlade county (Soulen) and September 27 in Ashland county (Dryer). October records are from Florence, Forest, Oneida, Vilas, Price and Douglas counties. November records include Price, Douglas and Burnett counties" (p. 120).

The other *Audubon Field Notes* report was from the Northeastern Maritime Region where "The first suggestion of a modest flight of Gray Jays may have been provided by an individual at Old Town, Me., Sept. 26 (*Naturalist*). The species seemed more common this fall in the New Brunswick-Nova Scotia border area (AJE). On Oct. 10, in Yarmouth County, N.S., 5 Gray Jays were on Bunker Island, and 7 were at Chebogue Point; 6 of these jays were on Cape Sable, N.S., Oct. 13 (*Newsletter*); these occurrences 'in such habitat (treeless coastal pasture) . . . suggest a migratory movement' (PD). In Maine, meanwhile, 'a flight' of Gray Jays was being detected in October (CMP in *Naturalist*). Interestingly, the first reports (2 at Lubec, 1 at Brooklin) were also for Oct. 10 and were coastal. . . . In November, these jays pushed southward in Maine . . . Gray Jays also reached Massachusetts in November" (p. 15-16).

The fall, 1965, seasonal reports from *The Jack-Pine Warbler* (Michigan) and *The Ontario Naturalist* list observations for the Gray Jay but don't mention that anything unusual had occurred. However, the statement in *The Jack-Pine Warbler* that this species was "Reported as numerous on Drummond Island; also reported from five stations in the UP, in numbers from one to five" (v. 44, p. 33) would suggest that they were unusually abundant in the Upper Peninsula.

It is interesting to correlate our observations in Minnesota with those in other parts of the country, especially in the timing and extent of the erratic irruptions of birds from the northern boreal forests. Unfortunately, many areas north of the Great Lakes that could provide meaningful details to sharpen the picture of these irruptions are uninhabited or very sparsely inhabited by bird-watchers.

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## Notes of Interest

**Dickcissel Flock:** Although some of the popular literature makes reference to the flocking behavior of the Dickcissel during autumn migration, I don't believe this tendency has been previously documented for Minnesota. It is therefore of some interest that on September 10, 1966, Don Bolduc, Bill Litkey, Gary Korsmo and I observed this behavior in a Lincoln County cornfield. Just south of Hendricks in Drammen Township on a county road running parallel to, and one mile east of, the South Dakota border, we stopped to observe some unusual-looking sparrows. Those that first caught our attention (and brought us to a sudden halt) resembled female House Sparrows with a touch of yellow on the breast. We soon noted some fully adult male Dickcissels among them plus some first-fall (?) males with only a trace of black at the throat. It was soon apparent that we were looking at a large flock of Dickcissels (both sexes ?) ranging from first-fall to fully adult plumage. In that part of the cornfield immediately adjacent to us, we estimated that there were some 50-60 individuals in an area slightly less than one acre. The density may have been even higher because not all were up near the tops of the cornstalks. An occasional glimpse of one skulking through the lower part of the stalks supported this conclusion.

Perhaps a moment of speculation is in order. The Dickcissel is a bird of strongly fluctuating summer populations in Minnesota. Although sometimes scarce, they may occasionally be one of our most abundant roadside birds. This year was such a year. From our observations in southwestern Minnesota this summer, a one-mile roadside walk may have yielded, at maximum density, a count of 30 to 40 wire-perched singing males. It would be interesting to look for some correlation between summer population peaks and flocking tendencies that autumn. Resident observers in southwestern Minnesota are in a good position, hopefully, to conduct such a study. *Ronald L. Huber, 480 State Office Bldg., St. Paul, Minnesota 55101.*

### Cowbird Parasitizes Baltimore Oriole —

The nest was located on the afternoon of June 19th, 1965, 63 feet up in the top branches of a soft maple tree in our windbreak grove near Clements in Redwood County. On climbing to the nest I was surprised and delighted to find it to contain 5 eggs of the Baltimore Orioles, and 1 of a Brown-headed Cowbird. Unfortunately, I destroyed the cowbird egg which I found to be on the verge of hatching. The embryo was slightly feathered, very large, and moved about quite actively. It no doubt would have hatched within a day or two. The oriole eggs were also very near to hatching, for within 3 or 4 days ( I know not the exact time), all but one of the 5 eggs, which I supposed to be addled, had hatched and the young were dry and fluffy on being discovered.

I am sure that the oriole parents would have hatched the cowbird egg out, but it is unfortunate that it will never be known whether or not the orioles would have continued to rear the young bird or if they would have pushed it from the nest. *James Sogaard, Clements, Minnesota.*

## A Spectacle of WHITE PELICANS

I first saw them about 7:30 in the morning on October 4, 1966 and, as I slowed down the car, I was wishing I had along my old 12 gauge double instead of the 20. I put the binoculars on a small flock still in the sky and I should have immediately realized that the birds were White Pelicans by their distinctive sailing flight pattern. But the goose season had just opened and my mind was geared to Snow Geese. My thrill increased as I glassed the water, for here was the largest flock of White Pelicans I had observed. Smaller flocks were still arriving from the southwest.

The scene was on the Lewisville Wetland Unit, about 3 miles northwest of Lewisville in Watonwan County. I observed for over an hour and when the last birds alighted, I estimated that there were between 3,500 and 4,000 White Pelicans crowded on this 30 - acre open water

### **Townsend's Solitaire in Minneapolis —**

On December 24, 1966 a Townsend's Solitaire was reported in Glenwood Park in west Minneapolis by Mr. Charles L. Horn, Jr. and several other observers. The bird was subsequently seen on Christmas Day and several days thereafter by other observers. When seen the bird was found in a group of Cedar trees near the parking lot and also along a small open stream near the spring. I observed the bird at 8:00 A.M. on January 6, 1967 in the group of Cedar trees mentioned above. At the time of observation a snow storm with strong east winds was in progress. The bird was flushed and the white outer tail feathers were seen. The bird perched a short distance away and the general grayish coloration, eye ring (broken slightly in the rear) and buffy wing patches were noted. The bird was quite tame and allowed close approach and I had an excellent view with 9x35 binoculars despite the weather conditions. The bird was reported again by other observers for the next two to three weeks but was not found in the area on January 28. *Robert B. Janssen, 1817 West 59th Street, Minneapolis, Minnesota.*

### **Townsend's Solitaire in Anoka County —**

On December 31, 1966, while making the Christmas census with the Anoka Bird Club, we saw a strange looking bird flying through a grove of oak trees. The instant it flew out in the open, I recognized it as a Townsend's Solitaire. With its long tail and gangly, half bluebird-half flycatcher flight pattern, and the flash of the broad, buffy wing bars when the sun hit at the right angle, there could be little other possibility as to its identification. It flew to the top of a tall oak tree and sat there for about five minutes while eight of us studied it through our binoculars. The light was not so good as it had been when it was flying, but its distinctive silhouette, which I had seen almost 50 times before in various western states, and the occasional glimpses of the buffy patches on the wings only served to make the identity of this bird more positive. It then flew across a field to the top of another high oak tree and sat there for about two minutes. When we approached too closely with the car, the bird flew down toward the Rum River and out of sight.

The presence of an eyering could not

marsh. As a game biologist, I was especially delighted to watch these birds ridding the slough of carp. The pelicans worked in formation and actually herded the carp to the shallow water where they could easily pick them up. Later, I found two 10-inch carp laying on the adjacent road. The carp apparently were dropped by the pelicans as they flew from the marsh. I photographed the pelicans and then telephoned my wife; she and several

friends came over to enjoy the sight with me. The main flock stayed in the vicinity for several days and a few lingered until October 11. I learned that what appeared to be the same flock was observed at Perch Lake, a shallow carp lake about 10 miles south of Lewisville. Also, smaller flocks were seen on several other local water areas during this same period. *Robert A. Chesness, Game Research Center, Madelia, Minnesota.*



## **Townsend's Solitaire**

*(Continued from Page 25)*

be determined because of distance (never approached closer than 100 feet) and light conditions. This field mark is generally a poor one, unless conditions are excellent. The white appeared to be much reduced in the outer tail feathers and visible only in flight. Most unusual was the extreme darkness of the general plumage. Instead of a pearly gray color, this individual's plumage color approached that of a Catbird's, perhaps indicating an immature or sub-adult plumage.

The location, 10 miles north of Anoka on Anoka Co. Road No. 7, was only 5 miles from where several of us from the Anoka area had seen another individual of this species on January 5, 1959. *David L. Pearson, Pacific Lutheran University, Tacoma, Washington.*

## **Common Eiders shot in Pope County —**

On November 5, 1966 two male Common Eiders were shot from a flock of four birds that were flying low over the water of Lake Reno, Pope County. The other two birds in the flock appeared to be the same size and shape and have the same coloration as the two that were shot. It is assumed that they were also Common Eiders. The two birds were turned over to the Museum of Natural History, University of Minnesota and are now part of the specimen collection. *Roy A. Bertleson, 1745 W. Shryer, St. Paul, Minnesota.*

## **Cardinal seen in Beltrami County —**

On October 26, 1966, my wife and I were driving to the Twin Cities and observed what I am reasonably sure was a male Cardinal one mile south of Red Lake River on Highway 89, Beltrami County. It was sitting in heavy brush along the highway when we first drove by, but by the time we had turned around to go back and verify it, it was further back in the brush feeding on the ground. I got several good looks at the body and tail through my binoculars, but never was able to get a good look at the head for the crest and black on the face. It was too large for a Purple Finch and too solidly scarlet to be a Pine Grosbeak. The tail and body conformation were quite definitely Cardinal. *Paul E. Bremer, Warroad, Minnesota.*

**Turkey Vultures seen in December —** We saw them in the Whitewater Refuge, Winona County near the Appleby Springs on the afternoon of December 21, 1966 when we took our Christmas Bird Count. These two birds sailed with the upturned wings of the vulture, had a very small head in contrast to that of the eagle which we see here quite often. They were black with an underneath wing pattern showing a little darker on the leading edge of the wings and the flight feathers lighter. We saw what we thought was another Turkey Vulture in this exact same area during our census of 1959. The only other thing it could possibly be would be a Golden Eagle and I doubt that. This at any other time of the year would be a vulture to me. These birds sailed right over us coming off a bluff of a height of about 400 feet. We saw them for a half minute or so. *Dr. and Mrs. D. C. Mahle, Wabasha, Minnesota.*

## **Late Fall Rose-Breasted Grosbeak at Duluth —**

From October 23 through November 8, 1966 an immature male Rose-breasted Grosbeak lingered at the feeding station of B. Borgesen at French River, Duluth Township, St. Louis County. I was notified on October 26th that the bird was there and went up to identify it. It was feeding on the ground under the feeder when I drove in the driveway and I had an excellent view of it from the car window. It was about 40 feet away and the sun was at my back. I watched it for about five minutes before it flew and noted the following characteristics: 1) an obvious grosbeak of the Rose-breasted/Black-headed variety with strong head stripes in dark brown and buffy white, and dark brown cheek patch bordered with buffy white, 2) the breast was a yellowish buff with a few indistinct darker markings, 3) the sides, flanks and belly were white with a few blurry markings on the sides, 4) the wings were dark brown with a few (I could see four) buffy-white spots, two on the coverts and two on the primaries. When the bird flew it went right in front of the car and I could easily see the pink wing lining.

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## BOOK REVIEW

*BIRDS IN OUR LIVES*, Superintendent of Documents, Government Printing Office,, Washington, D.C. 20402. 1966, \$9.00.

*BIRDS IN OUR LIVES* is a factual story about birds and people. It tells of the positive values of birds — of the enjoyment and inspiration that birds give to millions of people. It tells also of problems, warnings, and hopes, too.

The authors — 61 in all — have a wide range of backgrounds. Many are internationally known. All write with authority, clarity, and simplicity.

A frontispiece — in color — features the Bald Eagle, symbol of our Nation. The book has 576 pages and is attractively illustrated — there are 80 wash drawings and 372 story-telling photographs.

*BIRDS IN OUR LIVES* was written to give readers, in all walks of life, an opportunity to achieve a greater appreciation and a deeper insight into the impact of birds on our civilization. It brings into focus the economic, esthetic, scientific, and recreational values of the 850-odd species that comprise the bird resources of North America and Hawaii.

All whose lives have been touched by birds will find interest and value in this book. Birdwatchers, artists, photographers, poets, naturalists, sportsmen, falconry enthusiasts, farmers, gardeners, aviculturists, scientists, students, teachers, stamp and coin collectors, and many others will want to read it and to keep it as a reference.

### ORGANIZATION AND CONTENT

*The book's 54 chapters are in 9 sections:*

*In Perspective* (3 chapters) gives a panoramic view of birds, how people use them, the dimensions of the world of birds, and the value of birds in biological research.

*Literature and Arts* (10 chapters) reviews the influence of birds on literature, painting, commercial arts, music, folklore, our language, geographic names, and design. There is a chapter on birds and stamps and one on birds and coins. There is also a chapter on our national symbol, the Bald Eagle, and one on our State birds.

*In Nature's Scheme* (4 chapters) reviews the often misunderstood place in

Nature of hawks and owls, fish-eating birds, carrion feeders, and insect eaters.

*Science and Husbandry* (6 chapters) has stories of: The centuries-old quest of man to "fly like a bird"; the intensive search of scientists for answers as to how birds migrate with great precision over long distances; the significance of birds to earlier cultures; birds and our health.

*The Hand of Man* (6 chapters) surveys the critical and controversial problem of birds and pesticides; analyzes hunting as a factor in bird management and conservation; details the story of bird introductions into the United States and discusses the harm and good that have come to us from them; gives information on the impact of water pollution on birds and the prospects for corrective action; considers problems caused by intrusion of TV towers into the ancestral flyways of birds; and reviews the effect on birds of man's use of land and water resources.

*For Better or Worse* (5 chapters) considers bird problems at airports the damage birds cause to power and communication systems; the favorable and unfavorable effects of birds on farming and forestry; and the pleasures and problems that birds bring to our cities and suburbs.

*Answers to Conflicts* (6 chapters) brings into focus the nature of the damage and the scope of the problems that a few species of overabundant birds cause. Some hopeful solutions to conflicts between birds and people are explored.

*For Their Survival* (6 chapters) tells of: Laws and treaties now in force to protect birdlife in North America; organizations that are working to assure the preservation of birdlife; birds that are now on the brink of extinction and what is being done for them; the reservation of lands for bird refuges and sanctuaries; and the prospects for birds to the turn of the century.

*Sports and Recreation* (8 chapters) surveys the ways in which birds provide healthful outdoor recreation to millions of people: Game bird hunting, birdwatching, bird photography, attracting birds, the annual, nationwide Christmas bird count, zoo aviaries, the sport of falconry, the raising of game and ornamental fowl for recreation and profit, and the cage-bird industry are all covered in detail.

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\*Indicates Life Membership

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## SUGGESTIONS TO AUTHORS

As you all know the editor's job is a voluntary one and to make this job a little easier and less time-consuming I would like to make a few suggestions to authors when they submit articles and notes for publication in *The Loon*.

As editor I would like to encourage people to send articles, notes and observations to me. If possible all articles and notes should be typewritten and double spaced on one side of the paper. This is the only way they can be submitted to the printer. The more material received the better the magazine will be. When submitting observations of birds, either rare, accidental, or difficult to identify please try and follow the suggestions made by Janet C. Green in her article "What Constitutes an Acceptable Bird Record," (*The Loon*. Vol. 36, No. 1, pages 4-6). If photos are submitted with articles they should be clear, *black* and *white prints*. If the author of an article would like reprints please let me know when the article is submitted. Reprints will be furnished at the author's expense. Cost of reprints depends on length of article and number wanted.

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The  
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## THE LOON CRY

December 2, 1967, the tentative date for the important Winter Meeting of the MOU, may seem long from now, but it is not too soon to make plans to attend or give a paper.

There have been several important developments recently which affect the Winter Meeting. First, Boyd Lien will not be able to organize the meeting. This is regrettable, but understandable personal reasons will prevent him from carrying out this responsibility.

The second development follows the first. At the spring meeting of the MOU Board of Directors, held at Duluth during the annual spring field trip, Bob Turner of Shafer was appointed to replace Mr. Lien. The board has this power under Article IV, Section 2 of the MOU by-laws. Mr. Turner was active in the MOU years ago, and we are grateful for his continued and current interest. His job is one of the important ones in the club, and he will need the cooperation of everyone, especially of those in the Twin Cities who can help with banquet arrangements.

The MOU offers the Winter Meeting every year, but it can succeed only if YOU attend. Thirty years ago there were few bird clubs in existence. Now there are literally dozens in the Upper Midwest with which YOUR organization must compete. Support it!

The board also strongly recommends that the Field Trip chairman organize a camp-out bird trip during the months of June or July, 1968. This will be an informal weekend gathering of those who like to camp, possibly families with children, and look for birds during the breeding season. Hopefully, this activity will pump new members into the club and create interest for present members.

The president announced to the board the appointment of Jo Blanich, Crosby, as new Membership Chairman. She will be asking some members to help brainstorm for ideas to contact new members, and may come out with a membership card to be given to dues paying members of the MOU.

Also announced was the appointment of L. S. (Pete) Ryan, Little Falls, as new Finance and Endowment Chairman. Mr. Ryan is experienced at this job, and will seek to add to the recently established endowment fund.

The fact that we have an endowment fund, plus a very favorable financial report given at the May meeting of the board, indicates that we are growing in stability of membership and finances. This gives the lie to a tendency on the part of some members to denigrate their organization. You may be proud to belong to an organization whose official headquarters is the new James Ford Bell Museum of Natural History, an organization which publishes one of the better quarterlies among state bird magazines in the Upper Midwest, and an organization which sponsors four meetings each year.

It is a legitimate question to ask what all this means to you or to me. If you attend the various meetings it means new friends and new birds to one's life list. If you read THE LOON, it means new awareness of birds that might turn up in your back yard or favorite swamp. This list is not long, but it is deep. Also, each benefit is preceded by that conjunction "if," which conceals those conditions which only you can determine. Why not plan now to add new birds and new friends to your life list by attending the fall meeting hawk count September 23 and 24, at Duluth? See you there.

Fred Lester

The first specimen of the Iceland Gull (*Larus glaucescens*) taken in Minnesota was collected on August 10, 1931, near Grand Marais, Cook County; it was an immature bird in all-white plumage (i.e. no buffy or grey markings). The only other specimen is an immature bird in buffy-white plumage collected on February 25, 1951, near French River, St. Louis County. Both these specimens are in the Minnesota Museum of Natural History. In 1954 they were sent to the Smithsonian Institution and identified as *L. g. glaucescens* by A. Wetmore and H. Freidmann.

Up until the 1960's these two specimens, both taken along the shore of Lake Superior, were the only concrete evidence that this species occurred in Minnesota. There were quite a few sight observations mentioned in *The Flicker* (former name of *The Loon*) or in the *Audubon Field Notes* (or its predecessors), but none of these was accompanied by a detailed description. When any description was given it was only "smaller than Glaucous Gull" or "same size as Herring Gull." Because of the variations in the size of Glaucous Gulls that are present on Lake Superior in the winter, these designations are not adequate and the records must be considered unacceptable. However, even if the identifications were all accurate (and some of them probably were), this species was still of casual occurrence, being reported only at infrequent intervals.

Since the winter of 1960-61 I have been observing the gulls that spend the winter in the Knife River-Two Harbors area of Lake County. Concentrations of gulls, almost all of them Herring Gulls (*Larus argentatus*), occur there because of the commercial fishing activity at Knife River and the large town dump at Two Harbors. The gulls usually remain throughout the winter but in February if Lake Superior freezes up and the fishing ceases, most and sometimes all of them

leave the area. The winter population of Herring Gulls in that area is on the order of 500-1,000 birds. Every winter a few Glaucous Gulls (*Larus hyperboreus*) are found in the Herring Gull flock. The total wintering population of this species is probably on the order of 20-30 birds. I have identified as many as 22 individuals in a single winter (1966-67) by using plumage and size variations, and each year a maximum of 10-15 birds are seen together on one day, usually in January. The first birds arrive in November and December (earliest arrival for an immature was November 1, 1964, and for an adult November 23, 1964), the peak numbers are reached in January, and the adults depart by March or April (latest date, April 8, 1962) although some immatures may linger through May in the Duluth harbor area (latest date, June 3, 1951, seen by P. B. Hofslund). The immature Glaucous Gulls usually outnumber the adults by three or four to one.

As I gained experience in identifying the different gull species and plumages, the number of field trips that I made to the Knife River-Two Harbors area increased. A schedule of these trips by month and year follows:

	Nov.	Dec.	Jan.	Feb.	Mar.	Total
1966-67	0	4	7	7	4	22
1965-66	4	2	6	6	5	23
1964-65	4	5	3	2	1	15
1963-64	0	3	5	3	3	14
1962-63	2	1	4	5	5	17
1961-62	0	1	4	3	2	10
1960-61	1	0	1	1	1	4

As my field experience and my reading in the ornithological literature increased, I began to recognize the problems involved in separating the Glaucous Gull from the Iceland Gull. Although the field guides are helpful they overemphasize certain features, particularly the large size of the Glaucous Gull, and make the identification seem simpler than it is. On the western end of Lake Superior many of the

Glaucous Gulls are quite small, approaching or equalling the Herring Gull in overall length. This may be because they are the small Alaskan race of the Glaucous Gull — the Point Barrow Gull (*L. h. barrovianus*) — but there are not enough specimens to confirm this. Whatever their racial origin there are definite size differences in the Glaucous Gulls that winter here. Some are very large and stand out as much bigger than the Herring Gulls even at a great distance. These obviously offer no problem in identification. But the ones that approach or equal the Herring Gulls in size require more knowledge to identify them correctly. With practice most of the smaller Glaucous Gulls can be identified when they are resting by the larger bulk of the head and chest and by the bigger bill, and when they are in the air, by the heavier flight (all comparisons are made with the ubiquitous Herring Gull). However, there are some individual Glaucous Gulls that do not differ perceptibly in length or in bulk from the Herring Gulls — or at least from the bigger male Herring Gulls since there is a sexual size difference in all these species. These individuals offer the greatest problem in identification since the Iceland Gull is commonly considered to be the same size as the Herring Gull. Actually, most Iceland Gulls are slightly smaller and daintier in build than the Herring Gull. The most obvious size difference between a very small Glaucous Gull and a Herring Gull is in the *width* (not the length) of the bill, but one needs a close study to be sure of it. The bill of an Iceland Gull is proportionately smaller than that of a Herring Gull.

The field guides mention the overlap of the folded wings over the tail as a distinguishing mark for separating Glaucous and Iceland Gulls. However, I have found that most, if not all, the Glaucous Gulls in our area have the wings protruding over the tail a little bit and sometimes quite a bit, enough to be almost comparable to the Herring Gull. Although the Iceland Gull's wings protrude more, I would not recommend this field mark unless one is very familiar with both Glaucous and Iceland Gulls.

The most satisfactory difference between the two is the amount of black on the bill. To use this one must be cognizant

of the different stages in plumage of the Glaucous Gull. The Iceland Gull plumages are very similar except for the amount of black in the bill which is greater in an Iceland Gull than in a Glaucous Gull in comparable plumage. The youngest plumage seen in our area is an overall buffy white resulting from a dirty white background overlain by much buffy barring and mottling. These birds sometimes look pinkish at a distance in strong light. The bill of the Iceland Gull in this plumage is all black (possibly with a bit of pink at the base of the bill) whereas the bill of the Glaucous Gull is bright pink for about two-thirds of the length and black on the outer one-third. The next generalized plumage stage is pure white all over (I have not called these stages by age names like first winter or second winter because there is no exact information on how long the plumages are worn and there is probably much individual variation; the general tendency is for the bird to become whiter with age and for the mantle to go from buffy white to pure white to greyish white to grey). The bill in this all-white stage in the Iceland Gull has more pink than in younger birds, usually about one-half pink and one-half black, but not as much pink as a Glaucous Gull in the same plumage. There are probably individual variations here as well and caution should be used.

The only plumage difference between the fully adult Iceland Gull and Glaucous Gull is the color of the orbital ring. In the Iceland Gull the skin around the eye is red (brownish-red, brick-red, violet-red) and in the Glaucous Gull it is yellow (lemon-yellow). However, I do not recommend this as a field mark. The colors are probably less pronounced in winter when these birds are seen on the Great Lakes. Also I have noticed that in strong sun the orbital ring of the Glaucous Gull (and also of the Herring Gull which has a yellow orbital ring) looks bright orangish-yellow or even reddish-orange. (Incidentally, the color of the orbital ring of the Glaucous Gull given in T. S. Roberts' *A Manual for the Identification of the Birds of Minnesota and Neighboring States* is wrong.)

Since the Iceland Gull is much rarer than the Glaucous Gull in Lake Superior, it is safe to assume that all white-winged

gulls are the latter species unless one can prove otherwise. And the proof should be study and comparisons with other gulls present at the same time and detailed notes taken in the field while looking at the bird in question (and not at the bird books — it is easy to confuse what one sees with what is stated in the field guides). When the identification seems doubtful, it is probably a small Glaucous Gull. An Iceland Gull well seen by an observer familiar with the Glaucous Gull does not produce the same element of doubt because it is a smaller, daintier bird.

However, the Iceland Gull does occur in Minnesota and is more regular than was once supposed. In the winter of 1962-63, one was identified; in 1963-64, one; in 1964-65, one; in 1965-66, none; and in 1966-67, six. The large number seen this last winter may be the result of more time spent watching the gulls at Knife River and my greater experience; or it may be that this winter was an unusual one in the number of Iceland Gulls present. No Iceland Gulls were identified in the winter of 1960-61 and 1961-62 but this is probably the result of fewer field trips combined with inexperience. It would seem that the Iceland Gull is a regular but very rare winter visitant in Minnesota, occurring only on Lake Superior. Its status probably has always been the same. The increase in the number of observations in the 1960's is only the result of more constant and accurate observing of the gull concentrations.

Since none of the recent Iceland Gull observations have been published in detail before I will list them below. All observations are my own unless otherwise stated and the quotations are from my field notes. Some other identifications of Iceland Gulls were made during this period by other observers as well as by me but the descriptive material was inadequate to make the observations acceptable.

March 2, 1963 — "My husband, John C. Green, and I observed an all-white bird with some grey mixed with the white of the mantle standing on the ice with a large group of Herring Gulls about 100 yards off shore at Knife River. Wings extended over the tail quite far; wings crossed when standing. Bill with black tip

on upper and lower mandibles. We observed it through a spotting scope (15 to 30 power) as it stood and then walked around among the Herring Gulls and near the one Glaucous Gull present. This allowed us much opportunity for size comparison and we could see that it was smaller in size and build than the largest Herring Gulls and was quite dainty in comparison to the Glaucous Gull. The light was excellent during the 10 minutes we observed the gull."

December 15, 1963 through March 3, 1964 — "Dirty white with much buffy barring on tail and spots on wing; seems to have a bit of grey in mantle mixed with the buff. Size equals that of smaller Herring Gulls and bill quite definitely smaller than average Herring Gull. Bill all black; eye all dark. Wings overlap the tail at rest but does not seem to be as much as in Herring Gull. Very tame. I got out of the car once and all other gulls except the Iceland Gull flew. This bird was seen many times during the winter in the Two Harbors, Knife River and French River area by me and by many other observers. I saw it on December 15th (Two Harbors), January 1st (French River), January 14, 18, 19 (French River), January 29th (French River and about 2 hours later at Knife River), February 3, 15 (Knife River), March 3 (French River). The bill remained all black throughout the winter. On March 29, 1964, I saw an identically plumaged bird at Duluth (25 miles away) which was probably this same individual. On December 28, 1963, it was seen by Ronald L. Huber and Donald A. Bolduc at French River; the latter photographed it in color at distance of 20 feet. This photograph is on file in the M. M. N. H. On January 12, 1964, P. B. Hofslund saw it at French River. Among the other observers who saw it was Robert B. Janssen.

November 14, 1964 — "One first year bird with Herring Gulls at Knife River; observed with R. L. Huber and R. Glasel. Size — smaller than most (but not all) Herring Gulls. Build — slim and light-bodied on the wing. Bill — fairly small, about the size of Herring Gull; all dark. Plumage — buffy spotted bird almost as dark as first year Herring Gull (did not stand out at a distance as lighter as first year Glaucous Gull seen on

November 7th did) but with primary tips same color as rest of wing; difference from dark primary tips of first year Herring Gull noted on wing and while resting on beach; nape lightest part of bird. Saw it first while bathing with Herring Gulls; later it flew to beach and perched with Herring Gulls. Spotting scope and binoculars used at distance of 100 to 150 feet. Watched about 10 minutes. Very windy and cloudy."

January 15, 1967 — "Immature at Knife River. Watched in air for about 5 minutes constantly as it circled in front of car with some Herring Gulls attracted by bread I had thrown into the lake — distances 150-200 feet down to 40-50 feet, average about 100 feet. Binoculars used; sun out and to the rear. Also watched it in scope off and on as it sat in water on outskirts of large group of Herring Gulls about 200-400 yards away. It did not stay settled in one spot in the water for any length of time and seemed more flighty than Herring or Glaucous Gulls in group. Plumage — all white at distance; closer it appeared to be mottled somewhat with pearly grey. Bill pink with black tip. Eye seemed dark. On the wing gull appeared daintier than Herring Gull — head, bulk and bill. Also wing beat seemed more rapid. At one time for a few seconds had a Glaucous Gull in same field and could compare bulk and speed of wing beat with Glaucous Gull which was slower and heavier. In water it also appeared daintier in build (head, bill) than Herring Gull although in size it was about average Herring Gull size (*i.e.* length) — long and slim."

January 22, 1967 (also seen on January 23) — "Immature at Knife River. On foggy, warm (36°) day with east wind producing moderate waves. Visibility: Knife Island could be seen but not clearly through fog. Watched gull through scope for 3-4 minutes at distance of about 200 feet as it sat and bathed in water. Buffy all over, seemed slightly darker than first year Glaucous Gull that was in the area but never had them in same field to compare directly. However, Glaucous Gull was more readily spotted with naked eye which might also have been function of size or fact that the Glaucous Gull was on the beach and not in the choppy water. Noted light wing tips when Iceland Gull

raised wing. It was definitely lighter than first year Herring Gull. Head and bill were slightly smaller than Herring Gull's but length seemed comparable. Bill and eye all dark (no basal pink seen on bill). On January 23rd watched it at distances of 50-100 feet with binoculars and scope. Size equalled that of smaller Herring Gulls and bill was even smaller. Bill and eye seemed all dark. Had in some view with first year Glaucous Gull and seemed slightly darker."

January 28, 1967 (notes by Robert P. Russell, Collegeville, Minn.) — "While on a birding trip on the North Shore, Kim Eckert and I observed a bird we felt was an Iceland Gull. Among the several hundred gulls that frequent the fishing docks at Knife River was a white-winged gull, the size of a Herring Gull, that appeared much smaller and much lighter of wing and bill than the several Glaucous Gulls that were present at the time. The quickness of its wing beats and its superior maneuverability over the Glaucous were readily noticed. The bird's color was all white, not buffy; the bill color was black. On February 12 Charles Easterberg, an experienced birder from Illinois, reported that he flushed a similar bird from the Knife River flock that he also felt was an Iceland Gull. He did not get a chance to study its plumage but called it on its very small size and different actions in flight. We have seen a couple of Iceland Gulls on Lake Michigan in the winter and felt that they were even smaller than the Herring Gull, more akin to the size of a Ring-billed Gull. Great care must be taken to distinguish the occasionally small Glaucous from the large Iceland Gulls, however."

February 2, 1967 — "In late p.m. (about 4:00) saw an Iceland Gull on snow on opposite side of slip at Knife River. Buffy white, but lighter than first year Glaucous Gulls that were in area. Small with dainty head and bill. Did not see it fly but saw it perched on snow with Herring Gulls. Eye dark and bill all dark."

February 2, 1967 — "Saw an Iceland Gull perched on ice about one-half way to the ledge at Knife River. Watched it in good light through spotting scope. Size equalled larger Herring Gulls but head and bill decidedly daintier. Eye dark. Bill pink with black on distal one-third (I noticed that the bill had more black than

one would expect in Glaucous Gull in this plumage). Head and breast white; could not be sure if tail was all white or not. Mantle slightly darker white than head from a mixture of grey and/or buff — couldn't be sure at that distance."

February 28, 1967 — "Saw an Iceland Gull at Flood Bay and again at Two Harbors dump (saw it fly from the bay toward the dump). Took pictures in color (prints are now on file in M. M. N. H.). While feeding at dump it was 50-150 feet away. Ruth Kuchta was present and concurred in identification. Bird was same length as Herring Gull and was dainty and slim. Head and chest definitely slight of build (not like Glaucous Gull) and bill dainty. Plumage: all white except mantle which was a mixture of white and buff: looked all white at a distance; eye, light; bill, black the distal  $\frac{1}{3}$  to  $\frac{1}{2}$ , the rest a bone color with a pinkish cast (not the bright pink of a Glaucous Gull's bill); the light part of the bill was not as bright a pink as its legs; in some lights on the wing the bill looked all dark. On the wing its flight pattern was rapid and light."

#### SELECTED REFERENCES

- Bailey, A. M. 1948. Birds of Arctic Alaska. Colo. Mus. Nat. Hist. Pop. Ser. 8. 317 pp.
- Dwight, J. 1925. The gulls (Laridae) of the world; their plumages, moults, variations, relationships and distribution. Amer. Mus. Nat. Hist. Bull., 52:63-402.
- Kay, G. T. 1947. The Glaucous Gull in winter. British Birds 40:369-373.
- Macpherson, A. H. 1961. Observations on Canadian Arctic Larus gulls; and on the taxonomy of *L. thayeri* Brooks. Arctic. Inst. North Amer., Tech. Paper No. 7. 40 pp.
- Poor, H. H. 1946. Plumages and soft-part variations in the Herring Gull. Auk 63:135-151.
- Smith, N. G. 1966. Evolution of some Arctic gulls (Larus): an experimental study of isolating mechanisms. Amer. Ornithologists' Union, Monog. No. 4. 99 pp.
- Janet C. Green, 9773 North Shore Drive, Duluth, Minnesota 55804.

Ronald L. Huber

#### December 1, 1966 to February 28, 1967

— Early December was colder than normal over much of the state but this seemed more pronounced to many of us because of the milder Decembers we've had over the past three years. January and February seemed to be about normal in temperatures but set some snowfall records. In spite of this, the total winter accumulation still fell short of the all-time snowfall record. Many of the open-country species seemed scarce, perhaps because of the heavy snow cover on the ground? Several species, by contrast, seemed more abundant than usual but, perhaps this again was a function of the heavy snow cover — driving these species to feeders where they would certainly be more noticeable. Variables such as this make it difficult to evaluate population fluctuation for any given species. Two new state records were realized, and a number of unusual species were well-documented.

**Red-necked Grebe:** 12-20 Knife River, Lake Co., DP.

**Pied-billed Grebe:** 1-3 (BL), 1-20 (DB), 2-25 (RBJ), 2-28 (VL) Dakota Co.

**Great Blue Heron:** 1-2 Winona, Winona Co., *vide* GD; 1-2 Blackdog, Dakota Co., RBJ; **2-13 Cotton, St. Louis Co.,** Mrs. R. S. Nethercott *vide* VFB, second February record for the state and perhaps the only winter record north of the Twin Cities area?

**WHISTLING SWAN:** 12-21 Wabasha Co., 1, DGM; 12-8 Sartell, Stearns Co., 1, RPR; same bird still there on **2-26, DB;** probably first state record for an overwintering bird that made it into February.

**Canada Goose:** aside from the usual wintering flock at Rochester, this species was reported from Jackson, Wright, Winona,

# THE WINTER SEASON

66-67

Dakota, Hennepin, Ramsey, Stearns, Lake and St. Louis Co's.

**Snow-Blue Goose:** 12-3 Olmsted Co., 1 ad, 2 imm, BL.

**Mallard:** reported from Houston, Winona, Olmsted, Goodhue, Dakota, Hennepin, Ramsey, Yellow Medicine, Stearns, St. Louis, Lake and Cook Co's.

**Black Duck:** reported from Lake, Cook, St. Louis, Ramsey, Wright, Goodhue, Wabasha and Winona Co's.

**Gadwall:** 1-1 (RBJ), 1-5 (FV) Winona, Winona Co.

**Pintail:** 12-11, 1-2 Winona, Winona Co., FV; 1-1 (RBJ), 1-21 (DB) Goodhue Co.

**American Widgeon:** 12-3 Dakota Co., ACR; 12-6 Hennepin Co., VL; 12-7, 12-17 Cook Co., JCG.

**Shoveler:** 12-3 Minneapolis, Hennepin Co., CLH.

**Wood Duck:** reported from St. Louis, Stearns, Wright, Hennepin and Dakota Co's; none reported in February.

**Redhead:** 12-3 Goodhue Co., ad male, BL.

**Ring-necked Duck:** 12-6 to 1-24 Virginia, St. Louis Co., VFB, DP, EHH.

**Canvasback:** 12-3 Goodhue Co., BL; 12-11 Dakota Co., DB; 12-11 Winona Co., FV; 1-2 Winona Co., *fide* GD.

**Lesser Scaup:** reported from Ramsey, Wabasha, Olmsted, Dakota and St. Louis Co's.

**Common Goldeneye:** reported from Cook, St. Louis, Beltrami, Stearns, Morrison, Benton, Washington, Ramsey, Hennepin and Wabasha Co's.

**BARROW'S GOLDENEYE:** 12-31 to

about 3-15, St. Paul, Ramsey Co., 1 ad male seen by many observers, except on 1-31 when RAK and FN observed 2 ad males and what appeared to be a female because of the close association with the two males; this compares very nicely with a report on 2-11 at Blackdog, Dakota Co. (only a few miles from the St. Paul site) when EMB and his brother observed 2 ad males and a closely associated female.

**Bufflehead:** reported in Dec. from Hennepin, Cook, Lake and St. Louis Co's.; in Jan. and Feb. reported only from Dakota Co.

**Oldsquaw:** usual reports from Cook, Lake, and St. Louis Co's.; one record away from Lake Superior 12-3 Wabasha Co., BL.

**Harlequin Duck:** 12-7 thru Feb., Virginia, St. Louis Co., 1 sub-adult male, seen by many observers and photographed in color by HFH and GNR.

**White-winged Scoter:** 2-18 Grand Marais, Cook Co., 1, GNR.

**Ruddy Duck:** 2-26 Goodhue Co., FN/MAS.

**Common Merganser:** reported from Cook, Lake, St. Louis, Wabasha and Goodhue Co's.

**Red-breasted Merganser:** 12-17 St. Louis Co., JCG; 1-15 Lake Superior, DB.

**TURKEY VULTURE:** 12-21 Whitewater State Park, Winona Co., 1 or 2 on Xmas Count, DGM; very few winter records for state.

**Goshawk:** 12-1 Hennepin Co., MEH; 12-26 St. Louis Co., OAF; 1-1 Goodhue Co., RBJ; 1-5 St. Louis Co., LTM; 1-26 Morrison Co., LSR; 1-27 Washington Co., DS; 1-31 Ramsey Co., JO; 2-18

Cook Co., AR; 2-26 Roseau Co., PEB; 2-27 Goodhue Co., EMB.

**Sharp-shinned Hawk:** 12-19 Wabasha Co., DGM; 1-5, 2-3 Hennepin Co., MEH; 2-5 Washington Co., DH; 2-7 Isanti Co., GNR.

**Cooper's Hawk:** 2-1 Princeton, Mille Lacs Co., WJH.

**Red-tailed Hawk:** reported from Dakota, Olmsted, Rice, Goodhue, Wabasha, Winona, Nobles, Hennepin, Washington, Stevens and Ramsey Co's.

**Red-shouldered Hawk:** 1-1 Winona Co., RBJ.

**Rough-legged Hawk:** very few records this winter; reported from Dakota, Wabasha, Nobles, Beltrami and St. Louis Co's.

**Golden Eagle:** 12-1 Cook Co., LS; 12-2, 1-12 Marshall Co., AWR; 1-13 Stearns Co., RPR.

**Bald Eagle:** usual wintering group at Read's Landing, Wabasha Co., with interesting build-up and decline of numbers, thusly: 12-12 (12), 12-23 (34), 1-1 (48), 1-28 (21), 2-11 (20), 2-13 (12), 2-26 (6); also reported from St. Louis, Dakota, Washington Co's.

**Marsh Hawk:** 1-2 Steele Co., OAR; one all winter, Olmsted Co., JPF, CMJ.

**GYRFALCON:** 12-7 Warroad, Roseau Co., gray phase female caught in grouse trap, PEB.

**Sparrow Hawk:** reported from Kanabec, Hennepin, Ramsey, Cottonwood, Lyon, Wright, Wabasha, Dakota, Olmsted, Carver, Steele and Goodhue Co's.

**Spruce Grouse:** sometime between 11-25 and 12-1, Everett Clem took a survey in the Beltrami Island State Forest and in a single day counted 118 along roads near Norris Camp; undoubtedly highest single count for the state; usual other reports from northeastern part of state throughout the winter.

**Ruffed Grouse:** picking up again after decline in recent years; reported by 19 of our observers from Cook, Lake, St.

Louis, Beltrami, Aitkin, Clearwater, Morrison, Stearns, Anoka and Winona Co's.

**Sharp-tailed Grouse:** 12-21 Fargo area, *fide* EGA; 12-26 Aitkin Co., DP; 1-2 St. Louis Co., SM; 1-14 Beltrami Co., DB; all winter, Roseau Co., over 200 trapped and banded, PEB.

**Bobwhite:** 12-9, 12-15, 1-8 Wabasha Co., DGM; 12-21 Rice Co., OAR, GNR.

**Ring-necked Pheasant:** reported from Rice, Wabasha, Washington, Pope, Stearns, Wright, Meeker, Ramsey, Kanabec, Hennepin, Dakota, St. Louis, Anoka, Blue Earth, Nobles, Cottonwood, Wright and Roseau Co's.

**Chukar:** 2-18 Ely, St. Louis Co., 9, RBJ.

**Gray Partridge:** reported from Olmsted (20 in one flock, CMJ, JPF), Dakota, Rice, Blue Earth and Roseau Co's.; also from Fargo.

**American Coot:** reported from Cook (first in 25 years, MAF). St. Louis, Wright, Dakota and Wabasha Co's.

**Killdeer:** 12-2 Dakota Co., ACR; 12-26 Wabasha Co., FV; 1-2 Winona Co., *fide* GD; 2-18 (DB) and 2-26 (RBJ) Scott Co.

**Common Snipe:** reported from Washington, Anoka, Ramsey, Dakota, Hennepin, Winona Co's.

**PURPLE SANDPIPER:** 12-17 (JCG), 12-19 (DP) Grand Marais, Cook Co.; first state record, specimen collected for Museum of Natural History.

**Glaucous Gull:** 12-11 (DB) and 12-24 (BL) Dakota Co.; usual reports from north shore of Lake Superior; greatest number reported was 10 at Knife River, Lake Co. on 1-14, by JCG; she estimates a minimum count of 25 different individuals throughout winter, from 12-7 to 2-19.

**ICELAND GULL:** 1-15 to 2-2 Knife River, Lake Co., and 2-28 Two Harbors, JCG; she estimates five different individuals based on plumage differences.

**Herring Gull:** reported from Lake, Cook, St. Louis, Hennepin, Dakota, Wabasha and Winona Co's; largest number reported was 800+ at Knife River on 1-28 by RPR.

**Ring-billed Gull:** 12-4 Hennepin Co., JAH.

**IVORY GULL:** one bird at Grand Portage, Cook Co., from about Christmas until third week of January, photographed by Mr. Hendricks, good details given to JCG; less than five records for our state.

**Mourning Dove:** reported from Ramsey, Chippewa, Stearns, Wabasha, Faribault, Pope, Hennepin, Winona, Wright, Olmsted Co's.; also Fargo.

**Screech Owl:** 12-4, 1-1 and 2-26 Knife River Lake Co., RK; also reported from Winona, Wright, Rice and Hennepin Co's.

**Great Horned Owl:** reported from Rice, Wabasha, Hennepin, Ramsey, Yellow Medicine, Stearns, Dakota, Washington, Nobles, Beltrami, Lake, Cook, St. Louis and Lac Qui Parle Co's.

**Snowy Owl:** the invasion continued with 25 reports from 12 counties in December, 16 reports from 8 counties in January and 15 reports from 10 counties in February; there is undoubtedly some duplication in counting the owls, but Mr. Tom Nicholls will, in the near future, present an analysis of the invasion, with special emphasis on the upper midwest.

**Hawk-Owl:** 1-15 near Meadowlands, St. Louis Co., DB.

**Barred Owl:** scattered reports from Blue Earth, Washington, Ramsey, Dakota, Hennepin, Stevens, Morrison, Cook, Goodhue, Stearns, Olmsted, Winona and Wabasha Co's.

**Great Gray Owl:** 2-21 Itasca Co., 2 miles N. of Ball Club Lake, J. J. Janecek.

**Boreal Owl:** 2-12 Hubbard Co., 6 miles SE of Park Rapids, 1 photographed, JAH; 2-18 Ramsey Co., Langford Park, 1 found dead, specimen in University of Minnesota collection.

**Saw-whet Owl:** 12-7 Marshall Co., AWR; all winter, Lamoille, Winona Co., FV.

**Belted Kingfisher:** twelve reports from Ramsey, Hennepin, Dakota, Winona and Rice Co's.

**Yellow-shafted Flicker:** fourteen reports in December, four in January and one in February, from Rice, Lyon, Murray,

Ramsey, Nobles, Big Stone, Lac Qui Parle, Traverse, Cook, St. Louis, Pope, Wabasha, Hennepin and Winona Co's.; also Fargo; note preponderance of western records.

**Yellow-shafted x Red-shafted Flicker:** 1-2 Duluth, St. Louis Co., two independent observations by AKA and Mrs. H. Gibson *vide* JCG.

**Pileated Woodpecker:** quite a few reports for this handsome recluse; listed from Cook, Stearns, Olmsted, St. Louis, Blue Earth, Roseau, Washington, Goodhue, Dakota, Hennepin, Wright, Rice, Ramsey, Wabasha, Winona and Anoka Co's.

**Red-bellied Woodpecker:** reported from Yellow Medicine, Murray, Hennepin, Washington, Olmsted, Ramsey, Goodhue, Rice, Wabasha and Winona Co's.

**Red-headed Woodpecker:** 12-21 Rice Co., OAR, GNR; 1-4 Stearns Co., RPR; fewer reports than usual.

**Hairy Woodpecker:** reported from Washington, Cook, Roseau, Blue Earth, Morrison, Ramsey, Hennepin, Wabasha, Winona, St. Louis, Lake, Pope, Olmsted, Lyon, Crow Wing, Mille Lacs, Cottonwood, Rice, Stearns, Wright, Stevens, Nobles, Lake, Kanabec and Marshall Co's.

**Downy Woodpecker:** reported from St. Louis, Marshall, Kanabec, Lake, Cook, Stevens, Wright, Washington, Hennepin, Stearns, Olmsted, Rice, Cottonwood, Mille Lacs, Crow Wing, Lyon, Roseau, Blue Earth, Morrison, Wabasha, Pope and Ramsey Co's.

**Black-backed Three-toed Woodpecker:** one December record, one January record and four February records, all from Cook County.

**Horned Lark:** reported from Pope, Hennepin, Wabasha, Winona, Roseau, Morrison, Dakota, Sherburne, Crow Wing, Lyon, Rice, Goodhue, Washington, Wright, Anoka, Stearns, Olmsted, Cottonwood, Nobles, Grant, Lac Qui Parle, Ottertail, Douglas, Marshall and Ramsey Co's.; more reports than usual, but it is difficult to separate migrants from wintering birds.

**Gray Jay:** usual reports from Cook, Lake and St. Louis Co.'s. plus expected reports from Roseau, Beltrami, Lake-of-the-Woods, Marshall and Clearwater Co.'s; one southerly record, Stearns Co., throughout winter, RPR.

**Blue Jay:** reported from Cook, St. Louis, Lake, Hennepin, Roseau, Stearns, Ramsey, Stevens, Nobles, Cottonwood, Rice, Olmsted, Washington, Wright, Crow Wing, Sherburne, Morrison, Wabasha, Pope, Blue Earth, Beltrami, Kanabec and Mille Lacs Co.'s.

**Black-billed Magpie:** 12-22 Bemidji, Beltrami Co., 1, DP; 12-22 Warroad, Roseau Co., 3, DP; 1-14 Baudette, Lake-of-the-Woods Co., 2, DB.

**Common Raven:** usual reports from Cook, Lake and St. Louis Co.'s; several westerly records, 12-23 and 2-25 Beltrami Co., EBH; 2-3 Marshall Co., AWR.

**Boreal Chickadee:** invasion continues; 12-5 to 12-27 Brooklyn Center, Hennepin Co., *fide* DW; all winter at feeder, Granite Falls, Yellow Medicine Co., Mrs. Paul Schmidt, *fide* PE; all winter, Little Falls, Morrison Co., 2, LSR; 12-25 Benson, Swift Co., 2 at feeders, HSH; all winter, Morris, Stevens Co., Mrs. T. S. Long *fide* JAH; 1-6 to 2-20, Excelsior, Hennepin Co., 1 at feeder, *fide* RDT; 2-26 Waite Park, Stearns Co., DB; this unprecedented movement southward and westward resulted, almost in predictable fashion, in the first Iowa record for this species; it would be interesting to note if a parallel situation existed in Wisconsin or Michigan this winter.

**Tufted Titmouse:** about 20 reports from Hennepin, Olmsted, Rice, Ramsey, Winona and Washington Co.'s.; perhaps numbers are building up again?

**White-breasted Nuthatch:** reported from Rice, Anoka, Hennepin, Olmsted, Washington, Winona, Wabasha, Wright, Nobles, Lyon, Stevens, Stearns, Cottonwood, Kanabec, Mille Lacs, Morrison, Pope, Crow Wing, Carlton, Lake, St. Louis, Cook, Marshall, Roseau and Beltrami Co.'s.

**Red-breasted Nuthatch:** present all winter in St. Louis, Lake and Cook Co.'s. and also interestingly enough, in Winona

and Olmsted Co.'s.; other scattered reports from Anoka, Ramsey, Hennepin, Kanabec, Stearns, Roseau, Clearwater, Lake-of-the-Woods, Wadena and Stevens Co.'s.

**Brown Creeper:** no less than 40 reports from 17 counties, segregated as follows: 16 reports from 13 counties in December; 15 reports from 10 counties in January, and only 9 reports from 7 counties in February; wintering birds difficult to separate from migrants, but a Lake County record on 2-19 by MIG could be an early migrant, as might a Crow Wing Co. record on 2-8 by MSB; all other reports were from south of a line through Duluth, Mille Lacs Co., Morrison Co. and Stevens Co.

**Winter Wren:** 12-21 Wabasha Co., 1, DGM.

**MOCKINGBIRD:** 12-11 to 1-11 Schroeder, Cook Co., MAF; 11-27 to 1-12 Randall, Morrison Co., Hildur Dalquist; good details on both records.

**Brown Thrasher:** 12-1 Minneapolis, Hennepin Co., 1 at feeder, *fide* MIG; all fall until 12-16 when it fell prey to a Northern Shrike, Lutsen, Cook Co., RLG; mid-December to mid-January, Northfield, Rice Co., 1, GNR; very few winter records.

**Robin:** scattered reports from Cook, St. Louis, Stearns, Hennepin, Winona, Rice, Washington, Stevens, Wabasha, Wright and Yellow Medicine Co.'s.

**VARIED THRUSH:** 12 - 2 to 12 - 21 Northfield, Rice Co., 1 ad male at G. Campbell's feeder, photographed by GNR; late November to 2-26, Iverson (nr Cloquet), Carlton Co., 1 ad male at feeder of Mrs. G. Carlson *fide* JCG; late November thru end of period, Little Marais, Lake Co., 1 ad male at feeder of Viola Fenstad, photographed by FL; past two winters have been rather spectacular with regard to this species and the next one.

**TOWNSEND'S SOLITAIRE:** 12 - 31 Anoka Co., about 10 miles N. of Anoka, 1 sub-adult on Christmas Count *fide* DP; 12-17 to 1-15 Theodore Wirth Park,

Minneapolis, 1 adult, perhaps 2, seen by many observers; 1-13 Fargo, 1 adult, good details, EGA.

**Golden-crowned Kinglet:** reported from Kanabec and Stevens Co's in December only; all winter in Stearns, Hennepin, Washington and Winona Co's.

**Bohemian Waxwing:** about 46 records from 17 counties; present throughout period in Kanabec, Hennepin, Ramsey, St. Louis, Cook Co's.; also Fargo; scattered records from Stearns, Stevens, Washington, Morrison, Lake, Marshall, Rice, Cook, Beltrami, Roseau, Wright, Benson and Yellow Medicine Co's.; 14 Dec. records from 11 counties, 17 Jan. records from 12 counties and 15 Feb. records from 13 counties; largest concentrations were in St. Louis Co., 1000 on 12-28 and 1300 on 2-1, K. Jaros *vide* JCG.

**Cedar Waxwing:** reported from 7 counties each for Dec. and Jan., but 15 counties during Feb., perhaps indicating migrants? present throughout period in Hennepin, Anoka, Lake and Stevens Co's.; also Fargo; scattered reports from Cook, Roseau, Stearns, Winona, Wright, Swift, Wabasha, Cottonwood, Rice, Ramsey, Dakota, Olmsted Co's.

**Northern Shrike:** reported from 15 counties in Dec., 9 in Jan. and 7 in Feb.; Anoka, Wadena, Clearwater, St. Louis, Aitkin, Ramsey, Murray, Cook, Lake, Crow Wing, Hennepin, Lac Qui Parle, Carlton, Wabasha, Washington, Stearns, Beltrami, Winona, Rice Co's.

**Meadowlark, sp ?:** 12-21 Fargo, *vide* EGA; 12-30 Chippewa Co., PE; 1-1 to 1-11 Stearns Co., EAH; 1-1 Winona Co., RBJ; 1-21 Rice Co., OAR; HSH reports that this is the first winter in 25 years this species was **not** seen in Nobles Co.

**Red-winged Blackbird:** usual reports from southern part of state, Lyon, Goodhue, Wabasha, Winona, Rice, Ramsey, Pope, Big Stone, Hennepin, Olmsted and Cottonwood Co's.; two northerly records, 12-7 Crow Wing Co., MSB; 12-6 to 12-13 Roseau Co., female at feeder, PEB.

**BALTIMORE ORIOLE:** 12-3 to 12-22 Gary (West Duluth), St. Louis Co., 1

sub-adult male at feeder of Mrs. Jerome Blazevic *vide* JCG; 12-7 to 12-21 Northfield, Rice Co., 1 sub-adult male at feeder of GNR, photographed; few if any previous winter records.

**Rusty Blackbird:** late northern record 12-8 to 12-15 Cook Co., LS; scattered reports throughout period from Ramsey, Big Stone, Hennepin, Blue Earth, Winona, Washington, Dakota, Scott Co's.; also Fargo.

**Brewer's Blackbird:** 11-27 and 2-4 Parkville, St. Louis Co., SNE; 12-26 to 1-15 Tofte, Cook Co., seen daily, apparently with injured wing, MOP; these very northerly records are unusual considering that this species seldom winters as far north as the Twin Cities; often difficult to separate from adult Rusty Blackbird in winter.

**Common Grackle:** reported from Hennepin, Dakota, Blue Earth, Washington, Goodhue, Stevens, Lac Qui Parle, St. Louis, Wabasha, Rice, Lyon, Olmsted and Winona Co's.; one northerly record, Norris Camp, Lake-of-the-Woods Co. until 12-22 (DP).

**Brown-headed Cowbird:** 12-18 Big Stone Co., JAH; 1-2 Winona Co., *vide* GD.

**Cardinal:** reported from Washington, Hennepin (16 at feeder daily, DWL), Rice, Cook (12-17 Lutsen, RLG, and 1 female at feeder daily from Dec. to 2-8 Tofte, MOP), Olmsted, Stearns, Wright, Cottonwood, Wabasha, Winona (194 on Christmas Count), Lyon, Kanabec, Anoka, Stevens and St. Louis (12-4 Duluth, 1 male, Milt Sundquist *vide* JCG) Counties.

**Evening Grosbeak:** reported from Roseau, Beltrami, Clearwater, Lake, St. Louis, Cook, Hubbard, Marshall, Carlton, Kanabec, Crow Wing and Morrison Co's.; only southerly records were Ramsey, Washington, Olmsted and Winona Co's.

**Purple Finch:** numbers apparently down from the past two winters; reported from Anoka, Winona, Hennepin, Ramsey, Cottonwood, Swift, Beltrami, Lyon, Yellow Medicine, Washington, Mille Lacs and Stevens Co's.

**Pine Grosbeak:** present throughout period in Cook, Lake, St. Louis and Beltrami Co.'s.; westward and southward to Marshall, Itasca and Stevens Co.'s. in Dec.; still in Stevens Co. in Jan. plus inexplicably isolated record from Rice Co. (1-17, 1-24, 1-29, GNR); withdrew into extreme northeast corner of state in Feb.

**Hoary Redpoll:** 12-22 Beltrami Co., 30 miles N. of Bemidji, 5 in flock of Common Redpolls, DP; 1-14 Beltrami Co., DB; 1-29 St. Louis Co., RBJ; 2-23 Hennepin Co., SW; 2-25 Stevens Co., JAH; 2-28 Traverse Co., JAH.

**Common Redpoll:** reported from Beltrami, Cook, Lake, St. Louis, Roseau, Lake-of-the-Woods, Pennington, Clearwater, Wadena, Aitkin, Crow Wing, Morrison, Stearns, Washington, Hennepin, Ramsey, Anoka, Wright, Chippewa and Cottonwood Co.'s.

**Pine Siskin:** reported from Beltrami, Cook, Lake, St. Louis, Crow Wing, Ramsey and Hennepin Co.'s.

**American Goldfinch:** apparently up in numbers this winter; reported by almost all observers in southern third of state (some report highest numbers ever — JO banded 150 during Jan., Feb.) and reported north to Cyrus, Bemidji, Duluth, Larsmont, Tofte, Lutsen and Schroeder; withdrew somewhat from northern areas in Jan. and Feb.

**Red Crossbill:** behaving in its usually erratic manner, reported from Cook, St. Louis, Beltrami and Hennepin (12-2, RDT) Co.'s. in Dec.; none reported anywhere in the state during Jan.; reported from Lake, Ramsey (2-7, 2-15, WWL) Co.'s. in Feb.; also at Fargo from 2-1 thru remainder of period, EGA.

**White-winged Crossbill:** 12-25 Cook Co., RLG; 12-27 St. Louis Co., MMP; 1-4, 1-15 Stearns Co., RPR.

**GREEN-TAILED TOWHEE:** 12-5 (or earlier) to at least 1-15 Duluth, St. Louis Co., 1 ad at Mrs. McKay's feeder, observed and photographed by many; first state record.

**VESPER SPARROW:** 12-5 Duluth, St. Louis Co., AKA; may be only Dec. record for state?

**Slate-colored Junco:** reported from Stearns, Olmsted, Washington, Lyon, Rice, Wabasha, Hennepin, Stevens, Big Stone, Blue Earth, Ramsey, Pope, Morrison, Cook (MOP), Mille Lacs, Cottonwood, Lake (AR), Winona, Wright, St. Louis (JCG) and Nobles Co.'s.

**Oregon Junco:** reported from Olmsted, Stearns, Lyon, Hennepin, Ramsey, Winona and Rice Co.'s; some of our banders have recently reported Oregon x Slate-colored Junco hybrids, something that even an expert taxonomist would hesitate doing; eventually the two might even be regarded as conspecific; until such time as the entire genus has been overhauled, observers should keep accurate, objective descriptions of any blackhooded individuals seen.

**Tree Sparrow:** reported from Hennepin, Lyon, Stearns, Washington, Rice, Ramsey, Anoka, Olmsted, Wright, Nobles, Stevens, Big Stone, Wabasha and Winona Co.'s.; one northerly record, 12-7 Cook Co., JCG.

**Harris' Sparrow:** all fall to 12-13 Duluth, St. Louis Co., 1 imm, Mrs. W. C. Smith *vide* JCG; all winter at feeder, Granite Falls, Yellow Medicine Co., Mrs. Paul Schmidt *vide* PE; 1-28 Worthington, Nobles Co., 1 at feeder, HSH; all winter, Cyrus, Pope Co., 2 until 2-13 then only 1, WH; thru most of December, Fargo, *vide* EGA.

**White-throated Sparrow:** 1-6 Minnetonka, Hennepin Co., 1, DWL; 1-22 Minneapolis, Hennepin Co., VL; all winter, 1 or 2 at feeders, St. Paul, Ramsey Co., MIG; all winter at feeder, Central Lakes, St. Louis Co., MMP; 2-2 to 2-9 Duluth, St. Louis Co., Sister Emerline *vide* JCG.

**FOX SPARROW:** throughout period, 1 at feeder, Minneapolis, Hennepin Co., MEH.

**Swamp Sparrow:** 12-20 Lyon Co., PE.

**Song Sparrow:** throughout period, Schroeder, Cook Co., 1, MAF; all other records Dec. and Jan., Beltrami, Nobles, Ramsey, Rice, Goodhue and Lyon Co.'s.

**Lapland Longspur:** 12-11 Stevens Co., 50, JAH; 12-20 Cook Co., JCG; 12-21 Lake Co., DP; not seen again until Feb. (Lyon Co., PE and Nobles Co., HSH).

**Snow Bunting:** reported from Roseau, Lake-of-the-Woods, Beltrami, Itasca, St. Louis, Cook, Carlton, Aitkin, Crow Wing, Pope, Stevens, Kanabec, Morrison, Pine, Stearns, Sherburne, Hennepin, Ramsey, Dakota, Olmsted, Wabasha, Winona, Nobles, Lyon and Lac Qui Parle Co's.

**SUMMARY:** Approximately 90 observers garnered data on 123 species this winter. This is probably far more observers than we've ever had before in winter. Two new state records were realized, the Purple Sandpiper and the Green-tailed Towhee. Other birds considered unusual during the winter season were Whistling Swan, Great Blue Heron, Turkey Vulture, Mockingbird, Baltimore Oriole, Vesper Sparrow and Fox Sparrow. Several species were also seen that are poorly known in this state, such as the Barrow's Goldeneye, Gyrfalcon, Iceland and Ivory Gulls, Varied Thrush and Townsend's Solitaire. Two species, the Snowy Owl and the Boreal Chickadee, exhibited distribution patterns which may be construed as "invasions." The Snowy Owl is well-known for its cyclic southward penetrations but the Boreal Chickadee movement, or at least its southward extent, may be unprecedented. The Spruce Grouse showed no range extension southward but the one-day total of 118 birds near the Beltrami/Lake-of-the-Woods County line is especially noteworthy. The American Goldfinch had quite a winter here; the increase in numbers at various feeders may have been due to the very heavy snowfall covering foodplants, but certainly the northward extent of their distribution would be independent of that variable. The multitude of reports for the Yellow-shafted Flicker, Horned Lark, Red-breasted Nuthatch, Brown Creeper, both waxwings, Northern Shrike, Cardinal, Common Redpoll, Slate-colored Junco and Snow Bunting were almost certainly due to the more extensive coverage provided by the very large number of observers. All in all, it was a very exciting winter, climatic conditions notwithstanding.

**CONTRIBUTORS:** It is very encourag-

ing that many of the following observers are becoming "regular" contributors; ACR, A. C. Rosenwinkel; AJ, Alice Johnson; AKA, Anne K. Arndt; AR, Anthony Rekas; AWR, Agassiz Wildlife Refuge staff; BL, Bill Litkey; CCE, Rev. Clayton C. Engen; CKS, Charles K. Sherck; CLH, Charles L. Horn, Jr.; CMJ, Carl M. Johnson; DAS, Dana Struthers; DB, Don Bolduc; DGM, Dr. and Mrs. D. G. Mahle; DH, Dean Honetschlager; DM, Dave Medeck; DP, Dave Pearson; DS, Dave Sovereign; DWL, Donald W. Larson; EAH, Edmund A. Hibbard; EBH, Evan B. Hazard; EC, Erma Christopher; EDK, Earl D. Kopischke; EGA, Elizabeth G. Anderson; EHH, Emmett H. Hermanson; EMB, E. Manson Brackney; EWJ, Mrs. E. W. Joul; FBB, Florence B. Barker; FN/MAS, Fran Nubel, for Mpls. Aud. Soc.; FV, Francis Voelker; GNR, George N. Rysgaard; HD, Hildur Dalquist; HFH, Harding F. Huber; HH, Helen Hoover; HSH, Helen S. Hatlelid; JAH, John A. Hart; JAJ, James A. Janke; JAM, John and Ann Mathisen; JCG, Janet C. Green; JHR, Joseph H. Reisinger; JJ, Joan Johnson; JKB, J. K. Bronoel; JMS, J. Morton Smith; JO, Jane Olyphant; JPF, John P. Feehan; KS, Koni Sundquist; LAF, Mrs. Loren A. Feil; LS, Lloyd Scherer, Jr.; LSR, L. S. Ryan; LTM, Lester T. Magnus; MAF, Marie Aftreith; MEH, Mrs. Ed Harms; MEP, Myrtle E. Penner; MHM, Mary H. Muehlhausen; MIG, Maury and Isabel Goldberg; MMP, Mrs. Muriel Peterson; MOP, Mrs. Oliver Peterson; MSB, Mrs. Steve Blanich; NJH, Nels J. Hervi; OAF, O. A. Finseth; OAR, Orwin A. Rustad; PBH, P. B. Hofslund; PE, Paul Egeland; PEB, Paul E. Bremer; PL, Paul Lukens; RAK, Ruth Ackley; RBJ, Robert B. Janssen; RDT, Rachel D. Tryon; RHJ, Rev. and Mrs. R. H. Jackson; RK, Ruth Kuchta; RLG, Robert L. Gambill; RLH, Ronald L. Huber; RPR, Robert P. Russell; SM, Selena McCracken; SNE, Mrs. S. N. Erickson; SW, Sadie Whitesel; TC, Mrs. Tom Carey; TEM, Mrs. T. E. Murphy; VF, Viola Fenstad; VFB, Vera F. Barrows; VL, Violet Lender; WH, Mr. and Mrs. Wayne Hawkinson; WHL, William H. Longley; WJH, William J. Hansen; WWL, Mrs. W. W. Lundgren. *Ronald L. Huber, 480 State Office Building, St. Paul, Minnesota 55101.*

March appeared well on the way to duplicating the extremely cold temperatures of February up to the 18th. Then came 13 balmy days. As a result the monthly mean temperature of 20.9° was slightly higher than the March average. March sunshine totalled 186.3 hours, well above the 149.9 hours in 1966. The lowest temperature was 24 below on the 8th and the highest 59° on the 31st. April was cool, extra dull and rather wet. The mean temperature of 35.1 degrees was exactly the same as a year ago. The month's lowest reading of 5 degrees above on the 3rd occurred just one day earlier than the month's high of 65 degrees. There were four days with snow and 11 with rain. The total winter snowfall reached 73.4 inches; far below the average of 90.2 inches. May was cold and windy until the 25th. Then came a week of enjoyable warm sunshine. The first day the green of the opening leaves became noticeable was May 28th, almost a week later than usual.

Timber wolves were howling around Allan Oliver's home near Candy Mountain on March 9. A lone Milbert's Tortoise Shell butterfly was seen on the Mountain Road by Walter Hartley April 7. Wood Frogs and Spring Peepers began their nuptial chorus April 16 and the next day Skunk Cabbage was in bloom. The Rydholms reported Hazel pollinating on the 20th and alder by the 24th. Shepherdia bloomed on the 28th but Hepatica and Spring Beauty waited for May 6th. Elms flowered May 12; Bloodroot on the 18th and Marsh Marigolds on the 20th. A Garter Snake was seen at Dorion May 9th and a Jefferson's Salamander on the 19th. Bearberry and violets bloomed May 27.

Spring was announced by an increase in cawing Common Crows on March 15. Herring Gulls arrived the same day. The next movement occurred the last week of

March and the first few days of April. Then the northward flight slowed down until the third week of April. The next and largest wave of migrants surged into the area from May 20th to the end of the month. Individual birds of several species came early but the usual numbers were up to two weeks late. A check on the first fifty migrants revealed that 30 species were reported ahead of the average arrival date; one, the Common Snipe, came the expected day; and 19 were from 6 to 24 days behind time. More than the usual number of observers were in the field and species as large as Ring-billed Gulls, Snow Geese, Ring-necked Duck, American Widgeon, Redhead and Western Meadowlark could hardly be missed if present. The inland lakes were frozen until the middle of May but the Canadian Lakehead harbour was open by late April. LOONS TO BITTERNs: A Common Loon was seen May 3 on Rainy Lake and another at Port Arthur May 7. A Pied-billed Grebe was spotted on Arrow Lake by Mrs. Vibert on May 7. Great Blue Herons reached Dorion April 8 and Shirley Peruniak reported four at Atikokan April 12. The first report of an American Bittern was May 21. Three White Pelicans, birds seldom seen locally, spent May 18 at Hurgett under the eyes of Doug McKillop.

SWANS TO MERGANSERS: Thirty Whistling Swans, an unusually large flock for this region, were reported by Carol Saucier May 7 and many people drove to Cloud Bay and saw them during the next ten days. The same day swans were seen in Dorion. It had been believed we would miss this species as 5 had reached Atikokan April 20th. Canada Geese flew over the Lakehead April 8 and great flocks were seen on the 10th. The wavy "V" formation was a familiar sight to April 20. A flock of 95 were at Dorion

May 12. Over a dozen observers closely observed two small (Lesser?) Canada Geese at Chippewa Park May 5 to 8. They were accompanied by Canada Geese, Snow Geese, Shovelers, and Blue-winged Teal.

The wintering Common Goldeneyes appeared to increase in numbers suddenly about April 4, as did the Blacks. Lesser Scaup, and Common Mergansers came April 9th while Bufflehead, Green-winged Teal, Hooded Mergansers, Mallards and Pintails came the next week. The numbers of ducks in the harbour remained unusually low. Several Oldsquaw were seen on Black Bay May 4 and on the same day 7 Common Scoters were at Amethyst Harbour. American Widgeon, Blue-winged Teal, Redheads, Ring-necked Ducks and Greater Scaup were added to our list May 6. The numbers of Common Goldeneyes, Lesser Scaup, Pintails and Blue-winged Teal seemed drastically reduced compared with other years. The inland lakes were not clear of ice until mid-May but the customary thousands of ducks never appeared at the mouth of the Neebing River.

**VULTURES TO FALCONS:** Pigeon Hawks were seen in McIntyre Township March 31 by Walter Rosser who also saw a Sparrow Hawk the same day. These were new early records by five days. Bald Eagles were seen at Kenora April 11, at Atikokan on the 12th and at Hurkett near a nesting site on May 18. Marsh Hawks appeared in Vickers Heights April 2 and at Atikokan April 13, and were plentiful within a week. Tom Perrons saw Red-tailed Hawks at Murillo April 5. Broad-winged Hawks were reported from several places April 22. A Turkey Vulture was at Atikokan April 20. The first Osprey was reported at the Dorion Hatchery by Helen Atkinson May 4. Rough-legged Hawks were not seen until May 18th. Bill Peruniak and his son, paddling on the Atikokan River April 23 in preparation to take part in the 104 day Centennial Voyageur Canoe Pageant race from Rocky Mountain House to Montreal, saw an adult and 4 immature Bald Eagles feeding on beaver remains, along with 20 Common Crows.

**GROUSE TO PHALAROPES:** Both Spruce and Ruffed Grouse appeared to have wintered well. Numerous reports

have been received of drumming activities since mid-May. Sharp-tailed Grouse were seen at Savanne March 3. Only a few "Huns" have survived the poachers. Small shore birds have not been reported in numbers, possibly because of the destruction of one beach by reeds and other plants, and as a result of high water covering some favorite sand spits. Killdeer arrived March 26, Lesser Yellowlegs April 16, and Greater Yellowlegs were first seen by Mary Cryer April 30. Common Snipe were winnowing April 28 and were very active May 20. Upland Plover lost their favorite fields to a housing development but were seen in the Slate River valley May 14th. Evelyn Knowles saw 2 American Woodcock in the same area May 16. Whimbrels were at Dorion May 21 and the same day Spotted Sandpipers arrived in many places. Solitary Sandpipers visited Dorion Hatchery May 5. Claude Garton saw Dunlin near the mouth of Wolf River May 21. Short-billed Dowitchers were on wet meadows and sloughs May 20th.

**GULLS TO HUMMINGBIRDS:** Herring Gulls returned March 15 and great numbers came on March 27. Ring-billed Gulls were very reluctant to move north this year, the first report coming from Black Bay May 12, three weeks later than 1966. Bonaparte's Gulls were seen in unusual numbers: 24 at Hurkett May 18; approximately 200 on Black Bay May 21, and several reports from inland points up to May 28. Mourning Doves arrived April 6. A few Snowy Owls remained until March 12 and a lone one was seen May 11. A Barred Owl began hooting at Atikokan March 10 but it was May 10 before one was heard at the Dorion Hatchery. A Great Gray Owl was seen by the Freemans at Gravel river February 19 but none have been seen since. Whip-poor-wills were calling at the Dorion Hatchery May 11. A Ruby-throated Hummingbird was at Dorion May 21.

**KINGFISHERS TO FLYCATCHERS:** The first Belted Kingfisher was reported April 19. A few Yellow-shafted Flickers arrived April 2 though it was not until April 26 their calls became noticeable throughout the district. Yellow-bellied Sapsuckers were reported April 2. Eastern Kingbirds were seen May 20. Eastern

Phoebes were scarce to May 18. Horned Larks, Eastern Wood Pewees and Least Flycatchers came in the following week.

**SWALLOWS TO WRENS:** Thirty-five Tree Swallows arrived in a snow storm at Atikokan April 21. Helen Vibert saw a flock at Arrow Lake May 7 but the first to reach Port Arthur arrived on the 13th. Rough-winged Swallows, scarce locally, were seen at close range May 21 with Barn, Tree and Cliff Swallows. Barn Swallows were at Dorion the same day. Crows wintered, some cawing pairs arrived March 15, but the great influx was on March 25. Phyllis Pratt saw a Brown Creeper April 8. Winter Wrens returned to the Dorion Hatchery April 11 and a House Wren was spotted on a Thunder Bay Field Naturalists' Club field day May 6.

**CATBIRDS TO VIREOS:** Bohemian Waxwings were seen in Fort William by Tom Dyke April 3. A few Robins came on March 29 and large flocks were seen April 11. Mrs. Hogarth saw Eastern Bluebirds in Neebing April 23. Unusual numbers of Ruby-crowned Kinglets have been present this spring since April 17. Golden-crowned Kinglets, and Hermit Thrushes were seen in Vicker's Park, Fort William, by Bessie Blake on April 20. Swainson's Thrush came May 21 and a Catbird and a Veery were reported May 26. A Loggerhead Shrike was carefully identified April 20. Vireos have been scarce. Mrs. Murie reported a Philadelphia Vireo May 25 and the Solitary and Red-eyed were heard May 26.

**WARBLERS:** Myrtle Warblers arrived April 20 and were the only warbler at Red Lake, Ontario, on May 24. Palm Warblers were seen at Whitefish Lake May 7 but did not appear in Fort William before May 18. The other warblers commonly seen arrived between May 21 and 27th. Unusual numbers of Blackpoll Warblers were seen. Strangely enough, no one has seen a Tennessee Warbler to date; though the average arrival date is May 19.

**BOBOLINKS TO GROSBEEKS:** Bobolinks were singing along the Slate River May 30. Ada Bird saw the first Western Meadowlark April 17. They seem scarce this spring and no Eastern Meadowlarks have been reported. Baltimore Orioles are uncommon here; one was seen May

20 and 3 on May 30. Another uncommon species, the Yellow-headed Blackbird, has been reported three times this year and in three widely separated areas on May 20 and 21. Rusty Blackbirds arrived at the Dorion Hatchery April 4, six days earlier than usual. Marion Smith saw returning Common Grackles March 31 and Brewer's Blackbirds April 8. A flock of 200 Red-winged Blackbirds arrived April 8 accompanied by Brown-headed Cowbirds. An immature male Indigo Bunting ate grain outside Mrs. R. Walker's house May 19 and was joined by two adults on May 28. Unusual numbers of Rose-breasted Grosbeaks have been seen since May 24 and 3 have been seen eating sunflower seeds. The last Pine Grosbeak was noted on March 17.

**FRINGILLIDAE:** Common Redpolls were seen along Northwestern Ontario roads throughout the snow months. A number of Hoary Redpolls were noted, especially between March 5 to 21. Mrs. Rydholm noted the redpolls would not tolerate House Sparrows and chased them from the feeders. Red Crossbills are still coming to a feeder near Port Arthur's Centennial Park. The Tree Sparrows and Slated-colored Juncos were in great flocks along the highway to Fort Frances during a snow storm on May 3. A few had arrived at the Canadian Lakehead in April but not in the usual numbers. A Fox Sparrow on the slope of Mount McKay April 2 was unusually early. Song Sparrows came April 15 and Chipping Sparrows, White-crowned Sparrows and White-throated Sparrows were present in usual numbers from the end of April. Swamp Sparrows were not seen until May 21, unusually late and very scarce. The Lapland Longspurs arrived May 20. Two Clay-colored Sparrows, a species unreported in 1966, were seen May 27. Snow Buntings were present throughout the winter. Tom Perrons reported their numbers increased greatly between Murillo and Ignace on March 31. Males in starting white breeding plumage were seen along Highway 11 on May 3. *Keith Denis, 317 Morse Street, Port Arthur, Ontario.*

## Notes of Interest

**Blue-winged Teal X Green-winged Teal Hybrid (See front cover)** — On Sunday, April 23, 1967, Ed and Elbert Holslin and myself were looking over the bird life on Frog Lake, Stevens County when we spotted what we took to be an off-colored Green-winged Teal among a group of nine Blue-winged Teal (one female - rest all drakes). The day was dark and windy, but on April 24, conditions were perfect for observation and photography, with the result that I spent nearly all day with this group of ducks, shooting five rolls of film, mostly of this "hybrid". This duck, a drake, was very nearly the same size as the Blue-winged Teal, with which it associated. It had the green eye-patch of the Green-winged Teal, somewhat enlarged and more prominent. The top of the head was very dark, very nearly blackish, with a faint hint of purplish chestnut on the top of the head. The sides of the head and the upper neck was a very pale mixture of reddish chestnut and creamy buff, in two patches on each side, separated and edged by the creamy buff color alone. It had the green wing speculum of both parents, but the wing converts were gray instead of the blue found in the Blue-winged Teal. The sides were mostly gray, as in the Green-winged Teal, but more coarsely barred. The breast was reddish brown, spotted with the normal white breast marks of the Green-winged Teal showing up only as very light reddish brown marks, unspotted. The legs were dull yellow - quite similar to those of the female Blue-winged Teal. This hybrid duck, and the little flock he was with (ten birds in all), were still present in the area on the mornings April 25th and April 26th. During the night of April 26th there was an exodus of coots and teal from Frog Lake, and also a fresh arrival of other teal on their way northward. And although the weather has been too bad to make any accurate or complete checks, we can only assume that our "hybrid teal" pulled out with the exodus of April 26th - 27th, 1967. *Ernest T. Strubbe, Alberta, Minnesota.*

**Cinnamon Teal X Blue-winged Teal Hybrid** — The Cinnamon Teal is of infrequent occurrence in Minnesota, but a Cinnamon Teal x Blue-winged Teal hybrid is of even a greater rarity, if not unique in this state.

On the morning of April 9, 1967, my brother, Roger Brackney, and I were bird-watching in the area adjacent to the Vermillion river between Eggleston and Etter in Goodhue county when, at the edge of an inundated cornfield among a large number of Blue-winged Teal and Shovelers, we saw an unusual duck that we both immediately assumed was a Cinnamon Teal. The breast and flanks were of a deep rufous or cinnamon color with large light blue wing patches. The only discrepancy in the identification was a dark head and cheek patches as those of a Blue-winged Teal, with the cheek patches a deep cinnamon rather than white as in the Blue-winged Teal. It was decided that this particular bird was a hybrid of the two species.

We observed the bird closely for about twenty minutes with 7x35 binoculars and a 20-40X Bushnell scope at a distance varying from twenty to sixty yards before we intentionally flushed it to check the wing pattern in flight. We than informed as many members of the Avifaunal Club as possible of the discovery, all of whom were able to to sight the bird the same day or the next and verify our original conclusions. Photographs were taken. The bird was still present in the same area on April 15.

A check of the literature available to me reveals several other occurrences of hybridization. Bent reported a hybrid collected in Colorado in 1887 by a William G. Smith with "the whole body color of the Cinnamon Teal, with the head the

color and the snow-white cheek patches marks distinctly of the Blue-winged Teal". There was also a report in *The Auk* of a hybrid of this type in Texas in 1951. From the observation of this bird and the markings it may be speculated the preponderance of genetic influences are that of the Cinnamon Teal but exactly what percentage cannot be assumed with any certainty. *E. Manson Brackney, 5025 - 12th Ave. S., Minneapolis, Minnesota.*

**Boreal Chickadees at Morris** — The Boreal Chickadees which were seen at Morris throughout the fall (from October 29, 1966 to November 28, 1966), also were observed during the early part of December. They were seen in a pine shelterbelt and cemetery, the same place they were seen during the fall. Boreal Chickadees were observed in the following numbers: December 2—1; December 7—3; December 8—1; and December 14—1.

A field description of the chickadees is as follows: A chickadee of about the same size as the Black-capped Chickadee, with a definitely brown cap. The bib was black and the flanks a russet color. The underparts were more dusky than those of the Black-capped Chickadee, and the back had a small patch of brown in it. The tail of the Boreal Chickadee was slightly shorter than the tail of the Black-capped Chickadee. The voice of the Boreal Chickadee was more nasal than the voice of the Black-capped Chickadee. The difference in voice between the two species was so obvious, it was easy to locate the few Boreal Chickadees simply by sound. *John A. Hart, 309 E. Second Street, Morris, Minnesota.*

**Boreal Chickadees at Morris** — On October 29, 1966, Dick Grant of Morris informed me that he had seen several Boreal Chickadees in pine trees in a shelterbelt area and cemetery at Morris. Together, we went out and tried to relocate them. Although we could not find them that day, I went out the next day (October 30), and spotted seven.

Seven Boreal Chickadees at once was the largest I ever saw the flock. Most of my observations consisted of sightings of single birds, or two or three chickadees together, although on November 13, I saw five chickadees together.

The Boreal Chickadees seemed to forage almost exclusively in pine trees. They also were seen almost always in the area where they were originally spotted. An exception to this was on November 10, when one was seen foraging in a pine tree about seven blocks from the area in which it was normally expected to be seen. Another exception was on November 21, when one came to my feeder and ate suet. My feeder is located about four blocks from the pine area which was the normal foraging area for the chickadees.

Since Dick Grant and I had no trouble finding the chickadees almost every time we went out looking for them, we thought that the flock probably numbered around a dozen birds. I last saw the chickadees on December 2. *John A. Hart, 309 East Second Street, Morris, Minnesota 56267.*

**Hoary Redpoll Observations** — On February 25, 1967, while birding in a cemetery at Morris, Stevens County, I observed two Hoary Redpolls in company with five Common Redpolls. The observation was made at a distance of 20 feet with 7x35 binoculars. The weather at the time of observation was clear and cold with a strong wind from the west. Total time of the observation was about five minutes. A field description of the Hoary Redpoll is as follows: A very white Redpoll about the same size as the Common Redpoll. The breast is less streaked than in the Common Redpoll and the back markings are gray streaks on a white background, instead of dark brown streaks on a tan background. The rump was pure white with no streaks; the undertail coverts were also pure white.

On February 28, 1967, ten miles east of Wheaton, Traverse County, I observed one Hoary Redpoll feeding in company with seven Common Redpolls in a small weed patch. The observation was made at a distance of 100 feet using a 15x60 power scope. I compiled a field description of this Redpoll similar to the one in the preceding paragraph, except that when this Redpoll flushed, the white rump

was very obvious, but until the bird flushed, it was hard to see. *John A. Hart, 309 East Second Street, Morris, Minnesota 56267.*

**Possible Ivory Gull in Cook County** — Sometime about the last week in December, 1966 a strange gull appeared at the fishing station of J. R. Hendricks at Hollow Rock, just southwest of Grand Portage, Cook County, Minnesota. Mr. Hendricks recognized that it was not like the Herring Gulls that remain in that area all winter. It was tamer than the other gulls and fed frequently on the fish debris in front of his fishing shack. During the Christmas vacation Mr. Hendricks' daughter Mary took a colored picture of it which I have. Unfortunately, the gull is too small and blurred for identification from the photo.

Late in January Raymond Naddy of the Duluth News-Tribune received a letter from Anne W. Sundquist of Grand Marais describing the gull which she had seen early that month. Mrs. Sundquist's letter is as follows:

"On Monday Jan. 2nd we had gone up to check a cabin at 'Hollow Rock' a few miles west of Grand Portage, and while there walked down to the Hendricks fishing place to watch the sea gulls feeding on the remains of their morning catch. There we saw a bird we had never seen before. It was white with black dots on his wings and tail. It was smaller than the sea gull — about like a dove — and our bird books have nothing like it.

I have 'World Bird Book' besides our own 'Roberts' book and we thought you might know. No one had ever seen one before, and the Hendricks said it had been there about a week. He was feeding with the gulls on the fish remains that Mr. Hendricks had put out for the gulls and when he finally flew, he showed his dotted tail feathers. He settled down on the floating ice with the gulls.

Would you have any idea of what he could be? We are only curious."

Mr. Naddy showed me the letter and because Mrs. Sundquist's description was so good, I did not hesitate in telling him that she had in all probability seen an immature Ivory Gull.

On January 28, 1967 Robert B. Janssen, George N. Rysgaard and I drove up to Grand Portage to see if we could find the bird. When we arrived at Mr. Hendricks' fishing station it was late afternoon and he was just returning from checking his nets. He told us that the gull had not been there since early that week (about January 23rd). When we showed him the plate of immature gulls in Robbins, Bruun and Zim, *Birds of North America* (p. 140-141), he agreed that it looked like the picture of the immature Ivory Gull except that the black marks on the bird he saw appeared more like dots rather than a continuous line.

This is the third time that the Ivory Gull has been reported from the Minnesota shore of Lake Superior. Miss Olga Lakela saw an immature at French River, St. Louis County on December 27, 1948 (*The Flicker*, v. 21, p. 21). A bird identified as this species was seen at Two Harbors, Lake County early in January, 1956 by Mr. and Mrs. R. B. Evans. This latter observation has never been reported before in the literature because Mr. and Mrs. Evans were not aware that they should do so. However, they took complete notes on the bird and reported the observation in detail at a meeting of the Duluth Bird Club. Dr. P. B. Hofselund, a professional ornithologist, was present at that meeting and concurred in their identification. Unfortunately, the only record of this observation is in the minutes of the Duluth Bird Club since the Evans' original notes have been destroyed. These minutes only mention that the bird was seen.

Since none of these records is substantiated by an identifiable photograph or by a specimen, this species must remain as hypothetical on the list of Minnesota birds. (*Mrs.*) *Janet C. Green, 9773 N. Shore Dr., Duluth, Minn. 55804.*

**Mountain Bluebird Near Moorhead** — I first saw this species at Cache Creek, British Columbia, on September 19, 1964, and have observed it at close range in Washington State many times since.

On March 25, 1967, I took an extended birding trip to the Hawley vicinity. As I was returning to Moorhead at about 4:45 P.M. — Temp. 44, Wind 15 mph — I

passed a farmyard located on the Buffalo River 10¼ miles northeast of Moorhead. I slowed down as I observed several birds on telephone wires which appeared to be Eastern Bluebirds. Then my attention was drawn to one which was a much lighter blue. I was curious to see whether it could possibly be the Mountain Bluebird and followed it around for some time until I was able to see it from all angles, especially its breast. For twenty minutes I watched this bird, noting the over-all lovely turquoise blue, the lighter breast fading into the white abdomen, the thrushlike bill, posture straighter than the Eastern Bluebird, and its habit of hovering over the ground before alighting to eat. I heard no singing nor chirping. . . . I returned to the scene the following day but found neither the Mountain Bluebird nor its four Eastern Bluebird companions. *Mrs. Leslie Welter, 124½ 4th Street North, Moorhead, Minnesota.*

**Wintering Whistling Swan** — Having reports of a Whistling Swan on the St. Cloud Christmas count, Ray Glassel and I drove to that area on February 26, 1967. We saw the Whistling Swan on the Stearns County side of the river, about one-half mile south of the Sartell bridge. It was resting on the shore ice. When we approached the bird, it raised up and started walking toward the open water. As it swam away from shore, we viewed it through a 25x spotting scope. The yellow mark at the base of the bill was easily seen — this is a good field mark of a Whistling Swan. Distance from the bird was from 100 to 200 yards. Residents along the river said it was frequently seen flying up and down the river. This is the most northerly and probably the fifth wintering bird of this species in Minnesota. *Donald Bolduc, 4211 Blaisdell Ave., Minneapolis, Minnesota.*

**Unusual Winter Visitors at Northfield** — The winter season in Northfield has been fairly typical with the exception of a few conspicuous visitors to the feeders. An immature male Baltimore Oriole first appeared at our feeder on November 29, 1966 and was a regular visitor until December 27. He fed mainly upon suet and grain and even took to bathing in the heated drinking water during the sub-zero days. On December 2, Mr. George Campbell reported a Varied Thrush in his yard, and this proved to be an adult male which was often accompanied by a Robin. It fed on the crab apples, primarily, but occasionally sampled the suet supply. The Varied Thrush was last seen on December 21. A Brown Thrasher was observed with regularity from mid-December to mid-January. It fed on bread crumbs and raisins placed under a large spruce where an area remained clear of drifting snow. An adult Red-winged Blackbird put in an appearance at the feeder on January 7, 1967 and was seen daily until the end of January. *George N. Rysgaard, 913 East 4th, Northfield, Minnesota.*

**Gray Gyrfalcon in Cook County** — On November 5, 1966 at about 9 a.m., Ray Glassel, Emmett Hermanson and I drove to the town dump near Tofte, Minnesota. When we stopped the car, we saw a Rough-legged Hawk (light phase) sitting on a limb in a tree to our northwest. In order to flush it, we all stepped out of the car and advanced toward the tree in which the hawk was perched. When flushed, it flew southward, then turned in a northeasterly direction. As it was departing, we noticed a large falcon swoop out of a tall spruce tree adjacent to the dump. It turned and flew easterly, partially screened by tag alders and other small trees. It then disappeared from view. After searching for several minutes, we saw it on top of a large spruce tree about 250 yards away. We observed the bird with binoculars and a 30-power Bausch & Lomb spotting scope for about 30 minutes. Temperature was about twenty degrees above zero. The sky was clear. The bird appeared to be uniformly dark gray on top of the back, tail and wings. When perched, it was facing us. There were dark brown or gray streaks from the throat down to belly as far as was visible. The head was dark gray with no visible "sideburn" markings. A light area at the cheek was in evidence.

We drove on another side road, where we approached the bird to within 75 yards before it flew away to the southwest. The flight appeared to be leisurely, yet the bird disappeared in a matter of seconds. The long tail, together with the heavy body, was a stand-out feature as the bird flapped steadily away. We believe that this bird was an immature gray-phase Gyrfalcon. *Don Bolduc, 4211 Blaisdell Avenue South, Minneapolis, Minnesota 55409.*

**Unusual Winter Records for Stearns County** — Several species of birds were seen in Stearns County this winter that have not previously occurred in this area in winter or are represented by only one or two reports.

**Whistling Swan**—a dark billed swan, presumably a Whistling Swan, was seen by Kim Eckert and myself on December 8, 1966 on the Mississippi River at Sartell, Minnesota. The swan sat on some thin ice at mid-stream in company with Common Goldeneyes and Mallards. We watched the bird for about ten minutes from the west bank of the river, about 150 yards from the bird. All field marks were easily noticed except for the yellow lores which could not be seen with our binoculars from that distance. Whistling Swans were late departing from central Minnesota this fall, remaining at Lake Minnewaska near Glenwood until mid-November and at Lake Koronis until about the nineteenth of that month. I heard reports that other observers saw this swan later in December but have no confirmation of this. A rather thorough search of the river in January produced only Common Goldeneyes.

**Eagle (Sp?)**—On January 13, 1967, I observed an unidentified eagle flapping slowly over the wooded hills south of Avon, Minnesota. I was about a mile from the bird at the time and had no chance at a proper identification except that a light area underneath may have signified an immature bird. Both species are practically unknown in this area in winter, especially later than early December. Do Bald Eagles occur away from open water in Minnesota in winter? If not, the fact that this bird was over eighteen miles from open water, may be significant.

**Wood Duck**—A female Wood Duck has been present all winter on Watab Lake at Collegeville, Stearns County, Minnesota. The bird is in perfect plumage and health. This record is one of the furthest north winter records for Minnesota and the first for the county in winter. Sixty miles to the south two females and one male Wood Duck are wintering on Howard Lake. The situation is similar—a warm stream entering a lake, plentiful food, and flocks of geese and ducks present.

**Gray Jay**—A Gray Jay has been present at Collegeville since early December and has been observed numerous times. In December Kim Eckert and I observed an unusual gray-colored bird flying around the pines but it was not until February 11, 1967 that we saw the bird perched next to a Blue Jay and positively identified it. The bird lacked much white on the head and was likely an immature. Gray Jays are casual outside the boreal zone although the Collegeville area, with its many stands of mature spruce and pine, provides somewhat of an outpost for wintering boreal birds. *Robert P. Russell, Collegeville, Minnesota.*

**A Late Date for the Black-Crowned Night Heron** — T. S. Roberts, in his *Birds of Minnesota* Volume 1, 1932 gives November 15, 1924, as the latest fall date for the Black-crowned Night Heron. Roberts also gives two December dates which he states are "exceptional".

I think it is noteworthy therefore to record the observation of an immature Black-crowned Night Heron on November 26, 1966, on the Pomme de Terre River, several miles north of Morris, Stevens County. The heron, which was in typically nondescript immature plumage, seemed in good health, and flew at my approach. Even though the Pomme de Terre River was free of ice (a week of warm weather and rain had caused this), and even though there was food for the heron, I was surprised to find it, since the Pomme de Terre had frozen earlier in the month, and I thought that all water birds had left the area. *John A. Hart, 309 East Second Street, Morris, Minnesota.*

**Purple Sandpiper at Grand Marais, December 17, 1966** — Because all boreal species of birds will not come to me in LaCrosse, I have tried to make an annual trip during the winter to places within the Canadian life zone to see them. An extensive trip to Ashland, Bayfield, Douglas, and Sawyer counties in northwestern Wisconsin on January 23 and 24, 1966 was most disappointing, as it netted only 275 individuals of 20 species. There were miles of road even between House Sparrows.

A trip to Duluth on December 17 and 18, 1966 with Jan Green of Duluth and Jerry Rosso of LaCrosse was more interesting, as it produced 33 species and 3 life birds. One was the Boreal Chickadee at the Encampment. The other two were visitors to Minnesota like myself: The Green-tailed Towhee, an accidental, and the Varied Thrush, a casual Minnesota visitor.

The wild episode of the trip occurred at Grand Marais. Having noted from the Coast Guard residence parking lot the disappointing lack of ducks in the harbor, I began to roll up the car window, but stopped when I saw a shorebird fly low over the water and disappear north behind the Coast Guard residence. Immediately we walked the shoreline between the Coast Guard residence and the steel retaining wall, but did not find the bird. Thinking that the bird may have circled and returned to the breakwater, we drove back to the parking lot, got out of the car, and walked the rocky breakwater. This maneuver was also unsuccessful.

Continuing the search, we checked under some docks at fishing houses located in the northwest quadrant of the harbor. This maneuver proved successful, as Jerry Rosso and I flushed a dark shorebird, about Pectoral size, with a broad but faint wing stripe. The bird was reluctant to leave what was possibly its roost, and circled back toward us. At a distance of about 30 feet, the bird changed his direction of flight 90 degrees in order to avoid us. As he did so, he momentarily extended bright orange legs. This was the last time I saw the bird.

Jan Green, however, saw the bird fly east along the shoreline of the harbor, where it disappeared from her sight near ice hanging over rocks on the shoreline at the east end of the steel retaining wall. We attempted to flush the bird from this place without success, after which I walked the entire interior harbor shoreline and the breakwater a second time, also without success.

Finally, we carefully and painstakingly searched with a flashlight beneath the ice overhang where Jan saw the bird disappear, but did not find the roost or the bird. Fortunately, the Grand Marais police did not observe our somewhat irregular behavior.

This episode began some time between 3:15 P.M. and lasted until about 4:30 P.M., when we checked underneath the overhang. Light conditions were only fair because the sky was overcast and snow was falling.

The field marks of the bird were these:

1. A dark colored shorebird of Pectoral size. The bird was not brown, but in the fair light was a deeper color, perhaps black or purple.
2. A faint but broad wing stripe.
3. Bright orange legs. I alone observed the leg color.

The rocky shoreline habitat was similar to that of the Purple Sandpiper, but certainly not like that commonly frequented by the Pectoral Sandpiper. I have seen the Purple Sandpiper at Racine, Wisconsin where it occurs irregularly along a rocky slope of shoreline at Wind Point. Minnesota birders should be on the alert for this species along the north shore of Lake Superior. *Fred Leshner, 509 Winona St. LaCrosse, Wisconsin.*

EDITOR'S NOTE: On December 20, 1967 I returned to Grand Marais with David Pearson. The Purple Sandpiper (*Erolia maritima*) was located and collected by Mr. Pearson. It was feeding along the shore of the harbor in front of a fisherman's shack. It is new specimen No. 22252 in the Minnesota Museum of Natural History. Its weight and measurements are as follows: T. L. 220 mm.; T. 60 mm.; Tar. 24 mm.; W. 125 mm.; Ext. 390 mm.; Wt. 73.8 gms. According to Dr. Dwain W. Warner the stomach contained fish eggs. (Mrs.) *Janet C. Green, 9773 N. Shore Dr., Duluth, Minnesota 55804.*



**Boreal Owl Observation from Hubbard County** — On February 12, 1967, Mr. T. S. Long of Morris saw and took pictures (see photo) of a Boreal Owl which was perched on a bird feeder at his cabin six miles southeast of Park Rapids, Hubbard County. The owl was first observed at 2 P.M. and was still in the area when the Longs left for Morris at 7 P.M. During the time of its stay, except when it captured a small shrew which it ate while standing on a snowdrift, the Boreal Owl was perched on the top of a bird feeder six feet off the ground.

The owl was very tame and did not harass other birds which came to the feeder at the same time it was there.

The next weekend (February 18) I went up to Park Rapids with the Longs in hopes of finding the Boreal Owl again. We were unable to find it, however.

The Longs wrote the following description of the owl: A small bodied owl with a largish head and no ear tufts (the owl itself was slightly smaller than a Screech Owl). The owl had a cream colored belly and breast, heavily streaked with reddish-brown. The back was dark brown and heavily spotted with tan and gray. The tail was short and rounded with no distinct pattern to it. The forehead was dark and heavily spotted with white, and the face was grayish, distinctly outlined with black. The irises were yellow, and the bill was a pale grayish-yellow. *John A. Hart, 309 E. Second St., Morris, Minnesota.*

**Partially Albino Robin Observed at Morris, Stevens County** — On October 22, 1966, Judge S. S. Flaherty invited me to his home to observe an unusually plumaged bird, a partially albino Robin, which was at his feeding station. The Robin had a normal bill and eye, and the head was white except for a few small black spots and a large area of black on the crown. The back was dark and irregularly spotted with white. The tail was normally colored except that the outer tail feathers were predominantly white. The breast was a light orange, barred with an even lighter orange.

Judge Flaherty has seen partially albino Robins before, but none he said had such a mixture of black and white on the back, and head, nor had he ever seen a Robin with a barred effect on the breast. *John A. Hart, 309 East Second Street, Morris, Minnesota 56267.*



On April 2, 1967 a Common Egret was seen inland from French River in Duluth Township, St. Louis County. It was seen several times during the next few days by residents in the area. On April 5th it was found about a mile from where it was first seen in a starved condition. It allowed itself to be approached and picked up and it died that night. It is now in the specimen collection of the University of Minnesota, Duluth. This is the first record for the Common Egret in St. Louis County. (Photo taken by John C. Green on April 2nd)

**Varied Thrush Records from Carlton and Lake Counties** — During the winter of 1966-67 Raymond Naddy of the Duluth News-Tribune received letters from two readers of his nature column about Varied Thrushes that they had at their feeders. Mr. Naddy relays all unusual reports to me and were able to check out both of these birds, one in Carlton County and the other in Lake County.

The first report came from Mrs. George Carlson who lives on the Moorhead Road, Cloquet, Carlton County (just north of Iverson on Hwy. 210). Since late November, 1966 she had had a Varied Thrush visiting her feeder daily for suet. On December 18, 1966 Frederick Z. Leshner, Jerry Rosso and I went to her house to see if we could find the bird. We were successful and identified it as a male Varied Thrush. My notes taken at the time are as follows: "bird size and shape of a Robin with a Robin type bill; clear orange breast with black uninterrupted breast band, orange eye stripe and two orangish wing bars." This same bird was seen on February 4, 1967 by Ronald L. Huber, Raymond Glassel and Elizabeth Campbell. My husband, John C. Green, and I saw it again on February 26, 1967. Mrs. Carlson reported to me that she last saw it sometime during the last week in March, 1967.

The other bird was at the feeder of Mrs. Ted Fenstad in Little Marais, Lake County. Mrs. Fenstad stated that the bird came around Thanksgiving time, 1966 and was last seen on April 14, 1967. On February 18, 1967 Frederick Z. Leshner, Robert B. Janssen, Elizabeth and Rex Campbell and I stopped at Mrs. Fenstad's and waited until the the bird appeared. We had a good view of it from her kitchen window and Fred Leshner took colored 35 mm. slides of it which are very identifiable. Two colored prints from these slides are on file in the Minnesota Museum of Natural History. The bird was a male, possibly a first year bird since only the throat was a bright orange — the breast below the dark, uninterrupted breast band being a paler, mottled orange. (Mrs.) Janet C. Green, 9773 N. Shore Dr., Duluth, Minn. 55804.

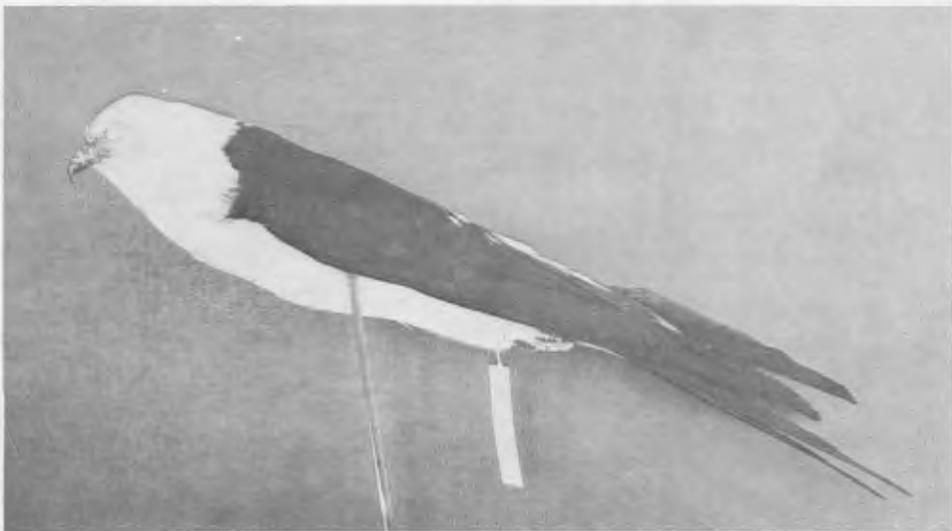
**Smith's Longspurs Observed in Traverse County** — On October 20, 1966, in a large pasture about ten miles east of Wheaton, Traverse County, I saw two Smith's Longspurs along with about 100 Lapland Longspurs and a large number of Horned Larks. I first noticed the Smith's Longspurs perched on a telephone wire about 20 feet from my car, (which made a very handy blind). While the Smith's Longspurs were on the wire, I got an excellent view of their extremely buffy breasts. When they flew down onto the field, I was able to compare them to Lapland Longspurs and to Horned Larks, which were also on the field. My total time of observation was about ten minutes.

Two days later, on October 22, 1966, I returned to this same area, and although I searched for about half an hour, I found no Smith's Longspurs. In fact, all I saw in the area were about 30 Horned Larks.

The field description I wrote up as the Smith's Longspurs were under my observation is contained in the following paragraph.

A longspur of the same size and proportions as a Lapland Longspur. The crown of the head was a dull dusky brown and above the eye was a lighter colored buffy brown. The entire breast and belly were a very striking, bright buff. These buffy underparts contrasted so strongly with the underparts of Lapland Longspurs, that it was very easy to separate the two Smith's Longspurs from the around 100 Lapland Longspurs. The breasts of the Smith's Longspurs also contained a few black streaks, but not enough to say that they had well streaked breasts. The backs of the two Smith's Longspurs were about the same color as the crown. The wings were a buffy brown with faint tinges of reddish brown on the primaries. There was a small but distinct *white patch on the shoulders*, and there were two whitish but not very distinct wing wing-bars.

Little is known of the migration of the Smith's Longspur in Minnesota. T. S. Roberts in *Birds of Minnesota Volume 2*, 1932, states that the Smith's Longspur is "An uncommon migrant, spring and fall, through the extreme western part of the state." It has been reported however in recent years during spring and fall migration in *The Loon*, which indicates it still migrates infrequently through the western part of the state. *John A. Hart, 309 East Second Street, Morris, Minnesota 56267.*



On April 29, 1966 a Swallow-tailed Kite was found dead beside State Highway 95 at Marine-on-St. Croix, Washington County, Minnesota by Charles P. Stone. It was given to the Minnesota Museum of Natural History where it is now in the specimen collection. Although the Swallow-tailed Kite once nested in Minnesota (up until 1907), there have been no reliable records since a bird was found shot in Fillmore County in August, 1949 (*The Flicker*, v. 21, p. 71-72). (Photo taken by Janet C. Green)

**Possible Yellow Rail in Minneapolis** — About nine o'clock in the forenoon on October 26, 1966, I stopped at the northeast corner of Grass Lake (on 59th Street and Girard Avenue South) hoping to see the Common Snipe again. This is a reedy corner, but the lake has been high, so about the only above-water patch was out about 100 feet. This was a little muddy, reedy place about two feet across. I noted a bird feeding there and flipping its tail like a rail. It occurred to me that it was a very small bird. There were sparrows and blackbirds around for comparison. Studying it with my 8 x 30 Zeiss glasses, I noted that it was quite pale yellow around the face and head, and underparts. The *legs were pale* and the whole bird seemed quite light for a Sora (I was thinking it could be an immature Sora). Then I noted a white patch on the wing. When it turned around, the same marking was on the other side. Shortly after that it disappeared and I did not find it again. Having Peterson's guide with me, I was checking the immature Sora and found the Yellow Rail looked very much like my bird. Descriptions of it made me more convinced. I called up Mr. Janssen and others, hoping that they might see it and verify my sighting, but they were unable to locate the bird. Mr. Janssen said from my description that it might have been a Yellow Rail. I had the bird in good light for 4 or 5 minutes. *Mrs. William H. Lender, 2817 Robbins, Minneapolis, Minnesota 55410.*

**Late Lark Sparrows** — On September 17, 1966, I was, at the suggestion of Mr. Phil Taylor, Director of the St. Paul Science Museum, investigating some "new" territory between Stacy and Lindstrom in southern Chisago County. Apparently very little birding has been done in this area, so I took this opportunity to look over the terrain and do some "last minute" insect collecting. The general area is very sandy and appears to be an eastward extension of the Anoka Sand Plain. About 3 miles north of Chisago City, not far from the Sunrise River, I was surprised to see an adult Lark Sparrow. The face-pattern was considerably less distinct than in the spring birds I have often seen, but the tail-pattern and manner of flight was quite distinctive. The bird hopped and flew nervously but I was able to approach within about fifty feet. Although I had left my binoculars in the car, the day was warm and very sunny and I saw the bird in good light when it flew up from the road and while it was moving through some low shrubbery. Nearby sandy, grassy areas looked suitable for breeding. Perhaps this area might prove to be the northernmost limit for nesting in the eastern part of the state.

The following day, September 18, I headed for Winona to pay a visit to Dr. Mel Doner, entomologist for the Watkins Company and one of the founders of the Hiawatha Valley Bird Club. Enroute, I stopped at a favorite insect-collecting spot in Wabasha County, just north of Dumfries. Again I was surprised to see an adult Lark Sparrow, feeding on the ground in a grassy pasture-knoll bisected by Trout Brook, a tributary to the Zumbro River. This bird had the more normal chestnut face markings than yesterday's bird, but I walked over and flushed it to get the diagnostic tail pattern. As with the previous sighting, I relied on my naked eye in bright morning sunshine at about 75 feet. I believe these to be the latest dates on record for Minnesota. *Ronald L. Huber, 480 State Office Bldg., St. Paul, Minnesota 55101.*

**A Varied Thrush in Chisago County** — Although I had on several occasions in northern Idaho watched Varied Thrushes and listened to their eery songs issuing from high hidden perches in Douglas-fir or hemlock stands, I never observed one so well in that western state as one that came to my deer-hunting stand last fall near Stacy. It was on November 13, 1966, which I stood on a platform some six feet above the ground on a hardwood island in a swamp, that this robin-like bird approached. It sat a moment on a leaning chokecherry stem, perhaps 50 feet from me; then it flitted closer, ran down a fallen tree trunk, and soon rummaged among the leaves near the upturned roots. Except for pockets under such blow-downs, the ground was covered a foot or more deep with snow. Robin-like, the thrush threw leaves aside with its beak and found some bits to eat. After awhile it

perched again in the thin shrubbery, occasionally flirting its tail. Again it flew down to the snow and hopped down into a squirrel diggings where it dug amid the debris. On this bright morning, the brilliant orange and black of the thrush's face and breast were striking. Rufous wing-patches and a sooty reticulate pattern on the yellowish flanks and sides were noticeable when the bird was still, as I viewed it through 9x binoculars. The short time, 8 or 10 minutes, during which I watched him well repaid me for the want of deer that day. The exact location of the observation was: S. 27, T. 134 N., R. 21 W. in Chisago County, Minnesota. *Wm. H. Longley, Forest Lake, Minnesota.*

**Strange Plumaged Buteo Observed in Stevens County** — On September 17, 1966, as Lincoln Gray and I were driving to Artichoke and Salt Lakes we stopped at a slough about five miles west of Morris in Stevens County. There, as I was glancing over the large assemblage of American Coots and puddle ducks on the slough, Lincoln with his binoculars searched over a field on the other side of the road from the slough. He told me he thought he saw a hawk perched in a brush pile about 400 yards from the road.

With my binoculars, all I could see of the hawk was that it had an extremely dark back. We set up the spotting scope (15x60 zoom), and since the light was exceptionally fine and at our backs, we were able to use magnification of around 40 through 60 power to observe the hawk.

For about fifteen minutes, Lincoln and I took turns observing the bird through the scope. Each of us also took field notes which we later compared. Because Lincoln and I could not see the color of the hawk's belly or tail from our angle of observation, we walked 200 yards through a corn field until we were about 150 to 200 yards from the hawk. Just as I got the scope set up, the hawk flushed from its perch in the brush pile; however, I was able to follow its flight with the scope. I observed that the hawk's belly was a tawny rusty color and that its tail was white at the base and black at the tip, very similar to the tail of a Rough-legged Hawk. When the hawk had flown about half a mile (I was still able to see it through the scope), another bird, either a hawk or a Common Crow, flew from the corn field over which the hawk was flying and joined the hawk. One other interesting observation I made was that the brush pile on which the hawk had been perched was full of Savannah Sparrows as well as several other sparrow species. There must have been close to 30 sparrows flitting about in the dead branches. Often they flew within inches of the hawk, which made no effort at all to catch any of them.

The complete field description Lincoln and I wrote up as the hawk was under our observation is as follows. A Buteo, about the size of a Red-shouldered Hawk. Its wings were also on the order of a Red-shouldered Hawk's wings — not chunky and rounded as in a Red-tail's wings. In coloring, this hawk was dark on the upper parts, with a slightly lighter head; the back was a sooty brown while the head was more of a true brown. The eye was dark colored and the cere was a bright yellow. The breast was dark brown, about the same color as the back. The belly was a very striking tawny or rusty color. The tail was white at the base and black at the tip. (About two thirds of the tail was white while one third of it was black.) When the bird flew, it flapped several times and then glided with its wings set slightly above the horizontal, very similar to a Marsh Hawk's manner of flight. When the hawk had vanished from sight, Lincoln and I checked descriptions of Buteos in our field guides, *A Field Guide to the Birds* and *A Field Guide to Western Birds* both by R. T. Peterson. Since we were not able to find a description of our hawk in these two volumes, we made a check in other volumes when we got home. The results of our search in these volumes are the following notes on the various plumages of several Buteos.

**Red-tailed Hawk** (Western Subspecies): Of the three color phases of this species, none resemble the hawk which Lincoln and I saw, because in all phases of this species the tail is usually red. An intermediate between the erythristic and melan-

istic phases of this species is known to have a dark back and breast, and reddish underparts, but of course it would have a red tail, not a black and white one.

**Broad-winged Hawk (Melanistic Phase):** Since in this phase of the Broad-winged Hawk, the tail is all black with only a very slight sign of barring, and since the entire body is dark; the melanistic phase of the Broad-winged Hawk has little resemblance to the hawk observed.

**Harlan's Hawk:** Although this species of hawk has a dark back, and a black and white tail, it differs considerably from the hawk observed. For one thing, I could find nothing in any literature which stated that this species ever has reddish underparts. Another point is that the tail of the Harlan's Hawk has too little black on it as compared to the tail of the hawk which Lincoln and I observed.

**Ferruginous Hawk:** Size alone would immediately separate this species from the species observed. Bent in *Life Histories of North American Birds of Prey* Volume 1, 1961, states that the Ferruginous Hawk is "the largest, most powerful and grandest of our Buteos,".

One note on the plumage of all phases of this species (the normal, melanistic and erythristic phases are known to occur), is that in all cases the tail is white or a light gray, without any black terminal band. This of course contrasts with the black and white tail observed by Lincoln and myself in our hawk observation.

**Rough-legged Hawk:** In all phases of this species, the tail is black at the tip and white at the base. This tail coloration of course is similar to the tail coloration observed by Lincoln and myself in our hawk observation.

In every source I checked however, I could find no information given on a color phase of the Rough-legged Hawk which had a dark breast and an orange belly.

**Swainson's Hawk:** The tail of the Swainson's Hawk is slightly barred, and shades from dark at the tip to light at the base. The contrast between the dark and light on the tail varies with individuals. The Swainson's Hawk occurs in three phases, a normal, a melanistic and an erythristic phase. The erythristic phase as described by Bent in his *Life Histories of North American Birds of Prey* is as follows: "In adults of the extreme erythristic phase the upper parts are as in the normal phase; the breast band is similar but mixed with "tawny"; the remaining under parts are deep, rich "tawny"; or "hazel", streaked on the belly with dusky or black, and the upper and under tail coverts are as in the melanistic phase." Bent also describes the melanistic phase. "In the extreme melanistic phase of the adult, the entire body plumage is "warm sepia" or a dark sooty brown, except for some white bars and tips on the upper tail coverts and white, tawny, and dusky barred under tail coverts; the wings and tail are merely somewhat darker than in the normal phase." Intermediates between the phases occur. Bent states: "Extremes of the other two color phases [erythristic and melanistic] are not common, but intermediates between them and the normal phase, or light phase are often in evidence especially in immature birds." I was however, unable to find any information on the plumages of these intermediates.

Even after completing my notes on the various plumages of Buteos, I was still unable to identify the hawk.

One possibility is that the hawk may have been an intermediate between the erythristic and melanistic phases of the Swainson's Hawk. I do not know however whether an intermediate between these two phases ever occurs. Also, the extreme black and white tail we observed is not generally considered to be a field mark of the Swainson's Hawk, but may have been some extreme coloration.

Another possibility is that the bird may have been some color phase, or a mixture of some color phases of the Rough-legged Hawk. Although I found no reference made to a plumage of a Rough-legged Hawk with a coloration similar to the hawk which Lincoln and I saw, the bird may still have been a Rough-legged Hawk, since they are known to have a wide variety of plumage colorations.

I would welcome any readers knowledge of a hawk with a description similar

to the hawk considered in this essay, since my identification of this hawk is uncertain. *John A. Hart, 309 East Second Street, Morris, Minnesota.*

EDITOR'S NOTE: Ronald Huber and Janet Green feel that the above mentioned bird is a probable Rough-legged Hawk. We would appreciate comments from our readers.

## BOOK REVIEW

*BIRDS OF THE NORTHERN FOREST* by John A. Livingston. Paintings by J. F. Lansdowne. 56 color illustrations. 248 pages. Houghton-Mifflin Co., 2 Park Street, Boston, Massachusetts. 1966. \$20.00.

This is a beautifully done book. James F. Lansdowne, with the publication of his 56 color plates in this book, will have to be considered one of our leading bird artists. He is only thirty years of age and no doubt will be heard from quite often in the future. The layout of the book is quite interesting, each plate is first prefaced with a black and white illustration showing Lansdowne's sketches of the bird in different poses and positions, next follows a page of text and then the six-color illustration. On the whole the color illustrations are most beautifully done. The artists fresh approach to illustrating the birds is interesting, for example the White-winged Scoter female in plate six shows the bird diving underwater. The position of wings and feet is something that few bird-watchers have ever seen. Plate 13, one of the best in the book in my opinion, shows a male Spruce Grouse in mating pose. The reproduction on all of the plates, which was done in Italy, is of the highest quality as is the paper.

In many books chiefly concerned with illustrations the text is sometimes sub standard. This is not the case with this volume. The text greatly enhances each plate and the reader should pay particular attention to the author's purpose for the text as stated in the Introduction.

—Editor

## SUGGESTIONS TO AUTHORS

As you all know the editor's job is a voluntary one and to make this job a little easier and less time-consuming I would like to make a few suggestions to authors when they submit articles and notes for publication in *The Loon*.

As editor I would like to encourage people to send articles, notes and observations to me. If possible all articles and notes should be typewritten and double spaced on one side of the paper. This is the only way they can be submitted to the printer. The more material received the better the magazine will be. When submitting observations of birds, either rare, accidental, or difficult to identify please try and follow the suggestions made by Janet C. Green in her article "What Constitutes an Acceptable Bird Record," (*The Loon*. Vol. 36, No. 1, pages 4-6). If photos are submitted with articles they should be clear, *black and white prints*. If the author of an article would like reprints please let me know when the article is submitted. Reprints will be furnished at the author's expense. Cost of reprints depends on length of article and number wanted.

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Instead of visiting friends or family, try visting the birds. They may not be predictable or friendly, but a certain amount of perverse elusiveness does to a birdwatcher what the loved one does to the lover. It only makes him try harder. We were inspired by the Water Ouzel, said to be found in Glacier National Park, Montana. Its peculiar habit of submerging, together with its strange name were enough to attract us 1400 miles in a 5 year old Rambler boasting 75,000 miles.

It is properly called the Water Dipper, *Cinclus mexicanus*, but we prefer Ouzel, as it recalls one of those zany songs from A Midsummer Nights' Dream (the only Shakespeare we undersatnd):

The ouzel cock, so black of hue,  
With orange tawney bill,  
The throistle with his note so true,  
The wren with little quill.

The finch, the sparrow, and the lark,  
The plain-song cuckoo gray,  
Whose note full many a man doth mark,  
And dares not answer nay.

It doesn't matter that "The Ouzel cock" perhaps refers to the Ring Ouzel, *Turdus torquatus*, not related to the British Dipper, *Cinclus cinclus*, or to the North American species. It did give us an opportunity to mention our quest for the Ouzel, then elaborate on Shakespeare's use of the name in Bottom's song. We doubt if the exercise did much to allay the worst suspicions of our colleagues. But supporting a mad quest with a mad reference was irresistible.

The first Ouzel hunt resulted from climbing 7900 foot Altyn Peak, immediately south of the Many Glacier campground. This peak was irresistible. Its slope was deceptively gradual from a distance and presented no vertical surfaces. But our two hours spent in reaching a crest below the peak testifies that appearances can indeed be deceiving. And rather than retrace our route we descended the opposite side of the slope.

The valley or bowl shaped cirque was inviting. We passed down easily, at first, enjoying the alpine meadows, flowers, a lake, and a line of 33 Mountain Goats moving away from us across a talus slope and onto narrow ledges on the mountain above. But soon we found why no trails reached Altyn Peak. Apekunny Creek descends from the highest level of the bowl in three wild cataracts, and only the lowest, Apekunny Falls, is reached by trail. The middle cataract is even more spectacular than the lowest, and proved impossible to descend as we had the highest cataract, which was rather gentle.

It was while we rested and considered the possible routes out of the inviting valley, which now seemed more of a trap, that Ouzel number one flew to a stone in the stream, dipped, and winked a white eyelid, or was it a nictitating membrane? We could not be sure, but it seemed that the membrane moved from front to back. The tarsi and toes seemed long for the body, and at least the toes were white with dark bands at the "knuckles" or joints. The dips were made with the entire body and the hinge for the vertical movement was at the heel of the "leg." This bird fluttered with stiff wings, low over the water toward the falls, but never entered the water. "Quail like" is an apt description of the wing beat, and wren-like fits its bob-tailed appearance and chunky body.

Obviously, we made it down the valley, safely and somewhat wiser about mountain hiking. The rewards for leaving the beaten path may not only be more spectacular, but also accompanied by greater hazards.

On a saner hike (22 miles) on well marked trails through Piegan and Siyeh Passes we heard above the rush of Cataract Creek a metallic "chink" or "cheep" which led to a young Ouzel being fed by one parent. The adult stood in the water on a submerged rock, then dove quickly but gracefully into the water. The arc of the body reminded us of the arc a Lesser Scaup makes briefly above the water as it gains momentum for a dive. The Dipper, however, remained submerged for only one or two seconds before it reappeared and flew to the young with food. This maneuver was repeated three times. Each time, the bird moved either up or across stream, but we were not able to see its method of underwater locomotion. Soon the adult flew off upstream, but the young remained to pose for its picture, which we were happy to take.

Two days later we returned with wife and children, determined that they too should see this strange bird. As we ate our lunch of candy bars and freshly picked huckleberries washed down by cups of cold water from the stream, one Ouzel reappeared. He performed admirably before a family which had come a long way to find him.

Fred Lester

Mrs. J. Milton Dahm

## WINONA BIRDING

Old phrases, *To Each His Own* and *By Nature Blest*, come to mind when one considers, ornithologically, the Winona area in southeastern Minnesota. Indeed, occasional rare migrants and some relatively rare summer residents and winter visitors make our section of the state appealing to birders all year long.

We may never have a Red-throated Loon such as Duluth offered MOU members May 27-28, 1967, nor can we boast a Varied Thrush or Townsend's Solitaire; but Henslow's Sparrows and Bell's Vireos continue to be our specialties and we shall try to help you find them.

*Henslow's Sparrows* are in East Burns Valley, in the high meadows skirting the road just south of the J. F. Opsahl farm home. (Well-marked mailbox.) Listen for Short-billed Marsh Wrens, too.

We recommend that you inquire at the tourist information booth on Hwy. 14-61, near the Fish Shop, for directions from the stoplight intersection at Holiday Inn. This is east, on Highway 61.

The *Bell's Vireos* are west; turn north below St. Mary's College from Highway 14. Follow the blacktop road past a marshy slough and pasture, and past a bridge on your right. Here, in high shrubs above the lake, along the road, are the vireos. There are spots where you can park with ease. (Bonuses may be Yellow-headed Blackbirds, Sora, and Least Bitterns.)

*Yellow-crowned Night Herons* are back at *Moor's Landing*, near La Crosse, Wis., where Brother Theodore found them nesting in 1956, a record for Minnesota. Turn left at La Crescent, about a mile toward LaCrosse. Drive along the road parallel to the highway and across from an Imperial gas station, in the Shore Acres area. The herons feed here regularly. Often a Prothonotary Warbler is around, too.

Most of our birding spots are excellent for roadside watching. At Mud Lake, one mile east of Holiday Inn, ducks of all kinds appear in March. Here the Western Grebe graced the cold waters in late April, 1962.

Lake Winona in early April to early May has had visiting Common Loons the past six years. Mergansers, both Common and Red-breasted, are numerous in April and a *Horned Grebe* may be a pleasant surprise.

Lake Winona is our handsome "front door." A replica of the Steamer Wilkie will guide you from Highway 61 to Lake Drive.

*Prairie Island* is another fine area for warblers, shorebirds, hawks. Ask for directions in west end of Winona. Road and dike improvements are now in fair order after our flood problems there.

Maybe you want to travel a *Bluebird* trail? Gordon Baab, retired, 1113 West Fifth Street (Tel. 4200), will accompany you if you write in advance. Forty boxes house many broods in beautiful rural habitat.

Hiawatha Valley Bird Club members in Winona invite you to bird here and gladly will assist you. Winona is a lovely city; we like to share it and its abundant birdlife, local and nearby. Grace Dahm (Tel. 4281), Francis Voelker (4424), or U.S. Fish and Wildlife personnel, in particular Ken Krumm (4232), are suggested contacts.

Hazards? There are none, really. Only rules of the road.

Cordially,

Hiawatha Valley Bird Club  
of Winona

Mrs. J. Milton Dahm (Grace)

# THE EFFECTS OF WEATHER ON SPRING MIGRATION OF WATERFOWL NEAR ST. PAUL, MINNESOTA

*Paul D. Arneson*

Much literature has been devoted to the effects of weather on the migration of waterfowl. However, authors tend to disagree as to the factors spurring on spring migration once it is under way. Bagg *et al.* (1950), in Massachusetts, concluded that the northward movement of migrants begins when there is a barometric gradient falling from east to west. In other words, a high pressure system is followed by a low pressure system, and the barometer readings are falling. Richardson (1966) in Ontario and Bagg *et al.* (1950) thought only tailwinds were conducive to migration, while Williams (1950) studying in Texas and Thomson (1953) thought that ducks will fly no matter what direction of wind as long as it is not strong. Most authors agreed that milder temperatures should be prevalent when migration occurs.

Dense cloud cover could also be an important factor in deterring migration if celestial navigation is used as suggested by Kramer (1952).

The purpose of this study was to determine which of these factors were present when waterfowl arrived and departed from the St. Paul area and to compare these results with those of previous investigators.

## STUDY AREA

Data for this report were collected principally on Round Lake, T30N, R23W, in Ramsey County. This area had been frequently used as a stopping over place for migrants in the past and proved again to be so during this study. Although near the city, there are few inhabitants around the lake to disturb the resting migrants. A minimal amount of emergent

vegetation is present, making ducks visible on most of the water. An elevated point of land on the east shore was an ideal location to observe the entire lake without having to change locations.

Observations were also taken at two other lakes in the vicinity. Lake Valentine had only one inhabitant on its shores and appeared to be ideal but apparently carp had made it unsuitable for diving ducks. Lake Josephine, south of the other two lakes, was used by many migrants as a resting and feeding spot. Human activity on this lake during warmer weather tended to disturb the ducks making migration data inaccurate. Data from these two lakes were only used in comparing nights of migration to those on Round Lake.

The St. Paul area where the observations were made is on the migrational route of the Mississippi Flyway. Ducks do not winter in this area, and of the species analyzed in this report, only the Mallard is a resident during the nesting period.

## OBSERVATIONAL METHOD

A 30 power spotting scope with a tripod and a 7x35 power binoculars were used in making the observations. Observations were made daily at about 3:00 P.M. from March 28 through May 28, 1966. This time of the day was found ideal for observation. It was a stable period in the activity of the ducks with little flying taking place. No ducks were seen to move into Round Lake from adjacent lakes while observations were made.

The spotting scope with tripod was placed on the elevated point of land overlooking Round Lake. Starting from either

end of the lake depending on light conditions, wind direction, or the observer's preference, the open water was carefully scanned. By mentally noting landmarks on the shore after scanning short distances, the observer was able to go back and view the same area several times. Emergent vegetation (cattail, bulrush, and others) were surveyed carefully for any ducks resting or feeding there. Since most of the migrants were divers, extreme care had to be used to get an accurate count.

If a raft of Lesser Scaup, for example, was spotted, much time was spent counting and recounting the group within a certain area to make sure all those that were underwater at the first observation were counted in subsequent countings. Since most of the ducks observed emerged reasonably close to where they dived, the relative positions of all the ducks in the area could be mentally recorded; therefore, the total number in the area was in most cases accurately known.

It was often found helpful to first watch the area with binoculars to get the total number of ducks present. Then the spotting scope was used to distinguish species and sex until the total number found previously was obtained.

Shoreline vegetation could have been a cause of inaccurate counting. Dabbling ducks would often be seen feeding and resting in the cattails of the northern and southern ends of the lake. Despite these problems, it was felt a rather accurate count of the ducks was made.

Weather conditions recorded at the time of observation included wind velocity and direction (using Smith's specifications, 1947), cloud cover, and precipitation together with the time of observation. Most of the meteorological data used in the analysis came from the U. S. Weather Bureau station at the International Airport, Minneapolis.

#### ANALYSIS METHOD

Since Lesser Scaup, Ring-necks, and Mallards were the predominating species, only their data were analyzed. Because samples were so small, no statistical analysis was attempted.

As an indication of migration taking place a change in the total numbers of a species of twenty or more was arbitrarily

selected. It was felt that this number would include any error in censusing. Using this for a basis, there were fifteen nights when there was a migration of Lesser Scaup, eleven nights for Ring-necks and one for Mallards. Of these twenty-seven nights only four overlapped. Using this change of twenty birds from one day to the next as a basis for migration did not account for the possibility of as many ducks moving in as those moving out. It could have been an ideal night for migration and a large number of ducks moved out, but almost the same number could have migrated in from a point south, and it would not show up in the analysis as a night of migration.

In addition to the night of migration, weather data were analyzed for two days before migration. This was done to allow for the fact that weather previous to the night of a migration may have been the stimulus for it. In this way also, tendencies of temperature and barometric pressure could be found.

Spring migration is reported to take place between sunset and midnight; therefore, all weather data were averages of the hours between 5:00 P.M. and 12:00 midnight except temperature and barometric pressure which were daily averages. If there was an increase in temperature of 3° F. for at least one of the two days before migration without a drop of that amount, it was classified as a warmer temperature. Similarly, if there was an increase in barometric pressure of 0.10 inch for at least one of the two days before migration without a drop of that amount, it was considered a rising barometric pressure. Conversely, cooler temperatures and falling barometric pressure were decreases of the same amount. A fluctuating temperature and barometric pressure was where there were opposite changes of 3° F. and 0.10 inch for the two days before migration. A stationary temperature and barometric pressure did not change more than 3° F or 0.10 inch during either day before migration.

Using a circular scale as used by U. S. Weather Bureau standards, wind directions are taken as 36 for north, 9 for east, 18 for south, and 27 for west. Since many ducks tend to migrate in a north westerly direction from the Twin Cities (Pettingill, 1953), head winds were selected for any

wind direction average between 27.0 and 4.5, tail winds between 9.0 and 22.5, and side winds between 4.5 and 9.0 and 22.5 and 27.0.

#### RESULTS

During the course of observation between March 28 and May 28, a total of fifteen species of ducks was identified on the primary study area, Round Lake. These included Lesser Scaup, Ring-necked Duck, Redhead, Canvasback, Mallard, Blue-winged Teal, Green-winged Teal, Gadwall, Common Goldeneye, Bufflehead, Red-breasted Merganser, Wood Duck, American Widgeon, and Shoveler.

For both Lesser Scaup and Ring-necks migration took place more often with head winds than with tail or side winds (Tables 1 and 3). Winds two days before migration up to the night of migration were consistently over five knots for both species. It was more often mostly cloudy than not cloudy the night of migration. Instead of falling, the barometric pressure was rising the greater share of the time for both species. Temperatures fluctuated more often than either falling or rising steadily in the two day period (Tables 2 and 4). Rain or snow fell on five nights that migration took place. (The one Ring-neck record of migrating during rain coincided with that of the Lesser Scaup.)

The numbers of Lesser Scaup observed rose rapidly between April 9 and April 11 reaching a peak of 233 on April 17 (Figure 1). They also diminished rapidly between May 4 and May 10.

Ring-neck numbers fluctuated more than the Lesser Scaup's and reached a peak sooner. There were 98 Ring-necks present on April 15. Ring-necks also arrived earlier than the Lesser Scaup.

Mallards were the first to arrive of the three species and reached a peak of 40 on April 10. They soon reached a fairly stable level presumably of residents.

Male Lesser Scaup were more prevalent during the beginning of the observational period making up over 71 percent of the total Lesser Scaup seen. During the end of April and the beginning of May, more females moved in dropping the male percentage to 58. The percentage of males then rose steadily reaching 100 percent at the end of the observations.

Ring-necked Ducks followed a similar pattern, although there was a lower percentage of from 63 to 67 percent males present at the beginning of the observation.

Male and female Mallards were present in nearly equal numbers at the beginning of the observation, but gradually a greater percentage of males was seen on the water until the end of the period.

Of the fifteen nights of migration of Lesser Scaup taking place on Round Lake, there was a major change in total numbers of a species present or in total numbers of species on seven of the nights on Lake Josephine and four on Lake Valentine. There were also seven nights on Lake Josephine and one on Lake Valentine where changes in numbers and species coincided with the Ring-neck migration of Round Lake.

#### DISCUSSION

The results of this study do not agree with most authors of previous studies. The weather conditions under which I noted a change in the number of migrating birds exactly opposed earlier hypotheses. For both Lesser Scaup and Ring-necked Ducks a change in numbers occurred when the barometric pressure was rising three times more often than when it was falling. This would not indicate a high pressure system followed by a low pressure system inducing migration as Bagg *et al.* (1950) and others suggested. Temperatures fluctuated more often than it rose as it should have according to previous investigators. The wind, too, was slightly more often a head wind than a tail wind and its velocity was seldom less than five knots. This contradicts several authors including Richardson (1966) who found migration to be with the wind. Lack (1960) said that lighter winds are more favorable for migration than stronger winds, but Richardson (1966) and I found this not to be the case.

Since skies were mostly cloudy the night of migration more often than they were mostly clear, navigation by celestial bodies (Kramer, 1952) would appear unlikely. However, the data did not show the intensity of cloud cover, and birds migrate up to 2,000 feet—possibly above the cloud cover. Along with the cloud cover, on five of the nights of migration precipitation in the form of rain or snow

occurred during the hours of prime migration time. All previous authors had stated that precipitation arrested migration.

From Figure 2 it would appear that the male Lesser Scaup were the first to migrate in the spring. More females gradually came in lowering the proportion of males. From a low of about 58 percent, the proportion rose to 100 percent males. A possible interpretation of this would be that as mated pairs left, the non-mated males were the only ones present. A similar interpretation could be applied to the Ring-necks. Females came in gradually at about the same time as for the Lesser Scaup and at the end of the observation period the percent of males went up also paralleling the Lesser Scaup.

In Figure 2 the Mallard sex ratio could be interpreted more easily. Mostly mated pairs were present in the beginning. As more hens began nesting the percent of males present went up. Minor periodic

lowerings in the percent of males could be interpreted as hens being more often seen away from the nests on clear, warm days.

The changes in total numbers of a given species and in the numbers of species seen on Lake Josephine and Lake Valentine help support the fact that a migration took place on Round Lake. Over one half of the combined nights of migration on Round Lake showed up as nights of migration on Lake Josephine. Five of the nights of migration on Round Lake were present on the little-used Lake Valentine as nights of migration.

To make more valid conclusions, the project should be carried on for several springs. However, weather conditions spurring on waterfowl spring migration may differ markedly from those stimulating migration of other birds. Therefore, ducks may not always migrate under the "ideal" weather found by the previous investigators.

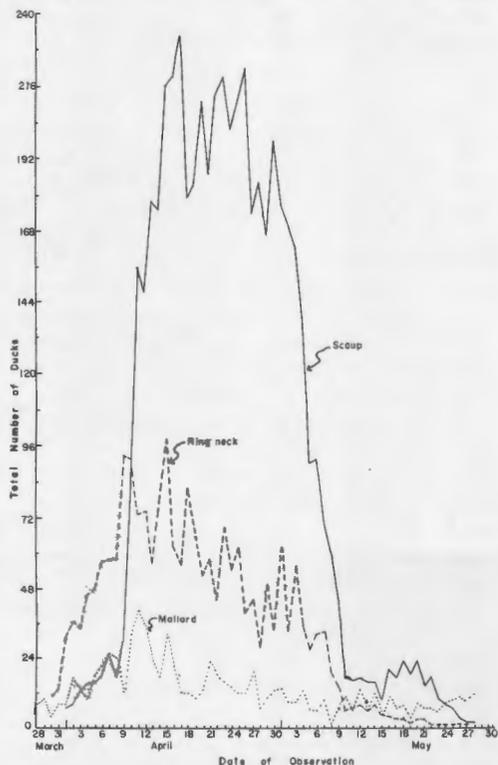


FIGURE 1. Total number of ducks present by species during the observation period on Round Lake in the spring of 1966.

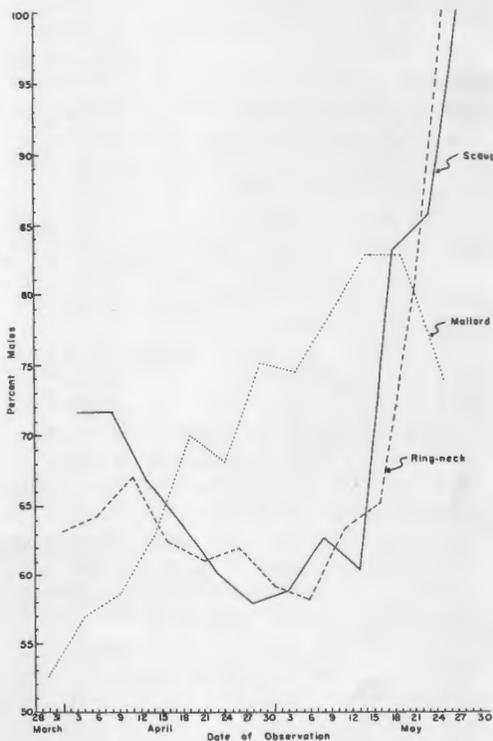


FIGURE 2. Percent males present in three species of ducks observed on Round Lake in the spring of 1966. (Five day averages.)

TABLE 1. Number of times given weather conditions present the night of migration and the two preceding nights for Lesser Scaup on Round Lake.

		Two Nights Before	One Night of Night Migration Before	Migration
Cloud Cover (tenths of sky)	0 - 3.5	3	5	6
	3.5+ - 7	3	3	2
	7+ - 10	9	7	7
Wind Velocity (knots)	0 - 5	1	2	4
	5+ - 10	7	5	7
	10+ - 15+	7	8	4
Wind Direction	Head	7	9	8
	Tail	5	2	6
	Side	3	4	1

TABLE 2. Number of times given weather conditions present prior to the Lesser Scaup migrations to and from Round Lake.

Falling Barometric Pressure.....	2
Rising Barometric Pressure.....	7
Fluctuating Barometric Pressure.....	5
Stationary Barometric Pressure.....	1
Warmer Temperature .....	1
Cooler Temperature .....	4
Fluctuating Temperature .....	7
Stationary Temperature .....	3
Precipitation on Night of Migration..... (Rain or Snow)	5

## LITERATURE CITED

- Bagg, A. M., W. W. H. Gunn, D. S. Miller, J. T. Nichols, W. Smith, and F. P. Wolfarth. 1950. Barometric pressure-patterns and spring bird migration. *Wilson Bull.* 62:5-19.
- Kortright, F. H. 1942. The Ducks, Geese and Swans of North America. The American Wildlife Institute, Harrisburg. 476pp.
- Kramer, G. 1952. Experiments on bird orientation. *Ibis* 94:265-285.
- Lack, D. 1960. The influence of weather on passerine migration. *Auk* 77:171-209.
- Peterson, R. T. 1947. A Field Guide to the Birds. Houghton Mifflin Company, Boston. 290pp.

TABLE 3. Number of times given weather conditions present the night of migration and the two preceding nights for Ring-necks and Mallards on Round Lake. (One Mallard observation — M.)

		Two Nights Before	One Night of Night Migration Before	Migration
Cloud Cover (tenths of sky)	0 - 3.5	3	3	3 M
	3.5+ - 7	2	3	3
	7+ - 10	6 M	5 M	5
Wind Velocity (knots)	0 - 5	2	0	4 M
	5+ - 10	6 M	6	4
	10+ - 15+	3	5 M	3
Wind Direction	Head	3 M	7 M	4 M
	Tail	5	4	3
	Side	3	0	4

TABLE 4. Number of times given weather conditions present prior to the Ring-neck and Mallard migrations to and from Round Lake.

Falling Barometric Pressure.....	2
Rising Barometric Pressure.....	5 M
Fluctuating Barometric Pressure.....	3
Stationary Barometric Pressure.....	1
Warmer Temperature .....	3
Cooler Temperature .....	2
Fluctuating Temperature .....	4
Stationary Temperature .....	2 M
Precipitation on Night of Migration..... (Rain)	1

- Pettingill, Jr., O. S. 1953. A Guide to Bird Finding West of the Mississippi. Oxford University Press, New York. 709pp.
- Richardson, W. J. 1966. Weather and late spring migration of birds into southern Ontario. *Wilson Bull.* 78(4):400-414.
- Smith, W. 1947. Weather and bird migration. *Inland News* 19:5-7.
- Thompson, A. L. 1953. The study of visible migration of birds: an introductory review. *Ibis* 95:165-180.
- Williams, G. C. 1950. Weather and spring migration. *Auk* 67(1):52-65.

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## EFFECTS OF A SEVERE WINTER BLIZZARD ON PHEASANTS

*Earl D. Kopischke and Robert A. Chesness*

An extremely severe blizzard struck much of Minnesota's Ring-necked Pheasant rane on March 17, 18 and 19, 1965. The snowfall of up to 19 inches in some areas was accompanied by high northwest winds and below normal temperatures.

At Madelia, in the south-central region of Minnesota, snowfall began about 7:00 a.m. on Wednesday, March 17, and continued until Friday morning, March 19. About 14 inches of snow fell during this period in the New Ulm and Madelia areas while about 7 inches of snow fell at Fairmont. The snowfall was accompanied by northwest winds averaging 40 m.p.h. and gusting up to 75 m.p.h. The extremely high winds kept the snow in constant movement so that one could not tell when the snowfall actually ended. Temperatures ranged between 15 and 28 degrees F during the day on March 17, dropping to 1 degree that night. The maximum and minimum temperatures on March 18 were 8 degrees and 0 degrees, respectively. The maximum and minimum temperatures on March 19 were 24 degrees and 0 degrees, respectively.

Drifting was severe and snow drifts in the cover tracts averaged about 4½ feet deep and ranged up to about 14 feet after the wind died down on March 19 (Fig. 1 and 2). Highway traffic was at a complete standstill in the Madelia area from about 6:00 p.m. on March 17 until about 10:00 a.m. on March 19. Most secondary roads were not opened until March 21. High winds caused a hard crust on drifts and soil blown from plowed fields accumulated atop the packed snow.

It is important to note that much cover had already been depleted by a preceding storm on March 1, 2, and 3 when this

area received about 12 to 14 inches of snow. This snowstorm was accompanied by northwest winds at 25 to 35 m.p.h. which persisted through March 6, causing severe drifting. Fortunately temperatures during this storm period were relatively mild, ranging between 16 and 36 degrees.

### METHODS AND RESULTS

Poststorm investigations were made on 18 areas in the vicinity of the Madelia Game Research Center, Watonwan County and Fraser Township, Martin County during the period March 19-22. Ring-necked Pheasants on most of these areas had been censused in mid-February prior to the storm; thus, it was possible to obtain what we believe to be reasonably accurate data on pheasant mortality due to the storm.

A total of 574 pheasants was counted on 14 areas during the February census largely in a study block of 10 sections of Fraser Township. Immediately following the March 17-19 storm, counts on these same areas indicated a population of 256 pheasants, a decline of 55 per cent. Thus, 318 pheasants had disappeared during the interval between the two counts. On the post-storm counts, 109 of the 318, or 34 per cent, were found dead as storm kills. However, our observations indicated the 109 birds found dead did not represent the total storm mortality on the areas checked and it is almost certain that substantial numbers were buried in the deep snowdrifts or were carried away as carrion by predators.

Foxes and avian predators including Common Crows, Great-horned Owls and Rough-legged Hawks were quick to take advantage of the bountiful food supply of

weakened and dead pheasants. Fifty-five per cent of the carcasses we observed showed signs of having been fed upon, mostly by Common Crows. We found at least 13 instances where fox had dug out carcasses buried in the snow. On one occasion a fox dug almost straight down through 2½ feet of snow to remove and carry away the carcass of a hen. Tufts of feathers at the bottom of the hole and fox tracks around the entrance told the story.

Some indication of the proportion of birds which we missed because they were buried in the snow was obtained by repeated searches on the 160-acre tract encompassing the Madelia Game Research Center. Here about 75 per cent of the woody cover plantings and food plots of standing corn were searched on March 19, immediately following the storm. Eighteen live and seven dead pheasants were found. However, of the 18 live birds observed, we released three from beneath the crusted snow after finding them buried alive. Two of these hens were completely covered by snow excepting for the tips of their tails (Fig. 3). The third hen was entirely covered by about 6 inches of snow.

The same tracts of cover were rechecked on April 1 and 7 after much of the snow had melted and an additional nine carcasses were found. Although we could not be positive, we are confident that all of them had been completely covered by snow during the initial search.

Four of the nine carcasses were emaciated because the birds had slowly starved to death while buried in the snow. Of these, a cock weighed only 30 ounces and two hens weighed 16 and 17 ounces, respectively. The weight of the fourth bird, a hen, was not obtained. Weights for pheasants in Minnesota during March and April normally average 46 ounces for cocks and 35 ounces for hens. In each of these cases of starvation, the place in the snow where the bird had been entombed and the area around the bird's vent was covered with feces which had accumulated during the bird's confinement (Fig. 4). Ironically, one of the starved hens died about 1 foot from an ear of corn in a snow-filled food plot (Fig. 5).

Storm-killed pheasants were found in a variety of cover types ranging from dense willow thickets and cattail - bulrush

marshes to open fields. Many areas which ordinarily provided adequate storm cover were rendered useless to pheasants by being filled in with drifting snow.

Most of the storm-killed birds were found partially buried in the snow (Fig. 6) in the leeward portions of the cover. However, dead pheasants were also found in open areas downwind (southeast) of the snow-filled cover. About one-third of the dead birds were found from a few yards to several hundred yards from the cover. There was no indication that these birds had been caught out feeding during the storm but, rather, it appeared that they had left the snow-filled cover in an effort to find protection from the driving wind and snow.

About one-third of the storm-killed birds were found with their beaks open and filled with ice (Fig 7). Such icing was most prevalent among birds picked up in open areas away from cover. It appeared to have occurred in the late stages of exposure, possibly as the bird lapsed into a coma prior to death. In many cases, the bird's feathers were "fluffed" and the space between them was filled with drifting snow. Frequently, the driving wind had also blown the dead or dying bird over on its side or back.

Most of the live pheasants observed on the poststorm census appeared to be alert and good fliers. However, a few were reluctant to fly and it was not uncommon to see birds which had lost their long tail feathers, apparently after having been partially "anchored" in the wind-packed snow. In a few cases tufts of breast feathers were noted in roosting bowls where they had been pulled from the birds as they left.

Mortality to pheasants during this severe storm was heavy primarily because adequate winter cover was scarce. Farm groves frequently provide the only winter cover remaining in this intensively farmed region of Minnesota. Unfortunately, most of them do not offer adequate protection for pheasants during severe storms. Most groves are composed of mature deciduous trees which are of inadequate depth to sufficiently slow down the wind and drifting snow. Many are overgrazed and lack dense, low cover. Only about 10 to 15 percent of them have conifers, which are preferred

by pheasants for roosting cover in this area. Even where conifers are present they are often poorly distributed within the grove.

Most cattail-bulrush-willow marshes, which normally provide good winter cover, offered little protection during this storm because they were filled in by the heavy snowfall prior to and during the storm of March 17-19 (Fig. 8). An exception was the 150-acre Eagle Lake Marsh near the village of Welcome. About 100 pheasants survived the storm with little difficulty there. This marsh consists of cattail and river bulrush and lies in a broad basin surrounded by relatively high banks. These banks offered protection from the northwest winds during the storm and snow in the main part of this marsh averaged only slightly over 1 foot deep as compared to about 4 feet in the other marshes checked.

This investigation dramatically demonstrated a need for improved winter cover for pheasants in this intensively farmed region of Minnesota. A practical means of providing such cover would be a cooperative effort between agricultural interests and wildlife agencies in improving windbreaks around farm building sites.

#### SUMMARY

An extremely severe blizzard struck much of Minnesota's pheasant range during March 17-19, 1965. The snowfall of up to 19 inches in some areas was accompanied by high northwest winds and below normal temperatures. Prestorm and poststorm counts of pheasants indicated a loss of about 55 percent in the Fairmount-Madelia area. The storm dramatically demonstrated the need for improved winter cover for pheasants in this region of Minnesota.

#### ACKNOWLEDGEMENTS

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Fig. 1. The snow storm blocked many rural roads for 4 or 5 days. Photo in Fraser Township, Martin County, March 22, 1965.

Fig. 2. Excessive snowfall and drifting filled in much cover during the storm of March 17-19. Some trees in this white cedar cover planting at the Madelia Game Research Center were about 15 feet tall.

Fig. 3. Hen pheasant buried in snow drift in corn food plot at the Madelia Game Research Center. This bird was alive when dug out on March 19.

Fig. 4. Cock pheasant found at the Madelia Game Research Center on April 7 after the snow drifts had partially melted. This bird had been completely covered by snow. The carcass had a thin breast and weighed only 30 ounces which, in combination with the accumulated feces beneath the bird, indicated that the bird probably starved to death.

Fig. 5. Dead hen pheasant found on April 1 after the snowdrifts were partially melted in a corn food plot at the Madelia Game Research Center. The carcass weight of only 17 ounces and the accumulated feces indicated that this hen starved to death while buried in the snow about 1 foot from an ear of corn.

Fig. 6. Maynard Nelson collecting storm-killed pheasants on March 20. Many of the dead birds were found with only part of their tail or back sticking out of the snow. Note how the packed snow supports Nelson's weight. Because of the compacted snow, most buried birds could be removed only after first kicking a trench out next to the carcass with the heel of one's boot.

Fig. 7. Hen pheasant found dead in open alfalfa field adjacent to marsh. Note open, iced beak and windblown snow in feathers. About one-third of all carcasses found were in this condition.

Fig. 8. Marsh in section 21, Fraser Township, Martin County. This tract supported about 100 pheasants prior to the storm. After the storm, 17 live pheasants and 40 dead pheasants were observed here. Others undoubtedly were buried in the 5 to 6-foot drifts. This marsh, one of only three in the entire township, has now been drained and converted to cropland.



Fig. 1



Fig. 2



Fig. 3



Fig. 4

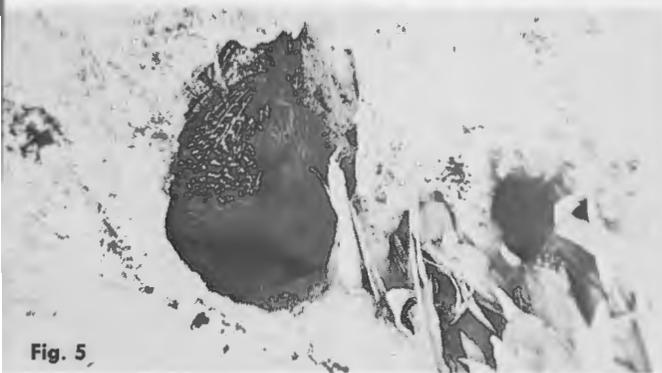


Fig. 5



Fig. 6



Fig. 7



Fig. 8

1967

March was extremely cold but we still experienced some unusually early duck arrival dates. The bleak beginnings of migration gave way to a sudden short warm spell the last few days of March when temperatures soared to 78 degrees (or warmer?) and some astonishingly early dates were gleaned for some species of migrants. Hibernating butterflies such as the Mourning Cloak and the Hop Merchant came out to bask and Earl Kopschke noted the first signs of vertebrate hibernators awakening: Eastern Chipmunk, Thirteen-lined Ground Squirrel and Leopard Frogs became active from March 24 onward. April did a turnabout with more cold weather (*four degrees below normal* at Fargo!) thereby producing a noticeable gap in the migration before the later migrants finally arrived. May, too, was very cold (*six degrees below normal* at Fargo!). On May 6, Avifaunal Club members noted honeybee activity in Nicollet County, but no other insects. May 7, we found Dutchman's Britches in full bloom in Winona County and on May 17 the Trilliums were in bloom in southern Pine County. In spite of the colder than normal weather in May, a number of unusual southern species turned up in our state and apparently some of our surrounding states as well.

**Common Loon:** early dates, 4-1 Kanabec Co., RHJ; 4-3 Washington Co., BL; 4-5 Winona (FV/HVBC), Hennepin (FN/MAS) and Morrison (LSR) Co's.

**Red-throated Loon:** 5-27 Duluth, St. Louis Co., 3, RBJ, JCG, many others.

**Red-necked Grebe:** early dates 4-13 Hennepin (FN/MAS) and Morrison (LSR) Co's.; 4-15 Hennepin Co., HFH; 4-16 Nicollet Co., EMB; 4-17 Hennepin Co., DB.

**Horned Grebe:** early dates 3-25 Wabasha (DGM) and Dakota (EMB) Co's.; 4-6

Hennepin Co., FN/MAS; 4-8 Hennepin Co., DB; 4-16 Wright Co., EC.

**Eared Grebe:** 3-30 Alberta, Stevens Co., 4, ES (very few March records) "March" in Olmsted Co., CMJ, JPF; next records 4-23 Crow Wing Co., 8, JGH; 4-26 Carlton Co., 6, JGH; 4-27 Becker Co., LJK; 4-28 Stevens Co., JAH; 4-29 Hennepin Co., TKS; 5-4 Lac Qui Parle Co., JAH; 5-6 Lyon Co., PE; 5-12 Marshall Co., AWR; 5-13 to 5-16 Hennepin Co., EHH, FN/MAS, RBJ; 5-16 to 5-23 Fargo-Moorhead, EGA, LWJ; northeasterly records are most unusual.

**Western Grebe:** 4-16 Big Stone Co., JAH; 4-21 Marshall Co., AWR; 4-23 Ramsey Co., 1, Art Wilde, good details; 4-29 Lac Qui Parle Co., EHH, DB; 5-12 Nobles Co., HSH and Marshall Co., 12, AWR; 5-24 Fargo-Moorhead *vide* EGA.

**Pied-billed Grebe:** early 3-1 Dakota Co., EMB; 3-8 Goodhue Co., VL; 3-11 Dakota Co., EMB; 3-14 Wabasha Co., DGM.

**White Pelican:** 4-5 Nobles and Jackson Co's., HSH; 4-7 Stearns Co., 50, FN/MAS; 4-14 Traverse Co., RPR; 4-15 Jackson Co., DB; 4-18 Big Stone Co., JAH; 4-22 Lyon Co., PE, and Marshall Co., AWR; 4-24 Rice Co., OAR; 4-25 Wabasha Co., EHH; 4-29 Cottonwood Co., LAF; 4-22 to 5-10 Fargo-Moorhead, *vide* EGA; 5-1 (25), Duluth, Mrs. H. Q. Sims; 5-6 Jackson Co., 500, EMB; 5-7 Stevens Co., JAH; 5-8 Faribault Co., EDK; 5-9 Winona Co., FL; 5-11 Rice Co., OAR; 5-12 Ottertail and Grant Co's., JAH; 5-14 Winona Co., GD and Jackson Co., HSH; 5-20 Jackson Co., 50, TEM; 5-21 Stevens Co., JAH.

**Double-crested Cormorant:** early 4-1 Lac Qui Parle Co., DB, HFH; 4-8 Traverse Co., EHH; 4-11 Marshall Co., AWR; 4-12 Fargo-Moorhead *vide* EGA; 4-14 Pope Co., RPR.

**Great Blue Heron:** early 3-19 Pope Co.,

WH; 3-22 Rice Co., OAR and Ramsey Co., BL; 3-25 several reports, north to Aitkin Co., CEP.

**Green Heron:** early 4-23 Hennepin Co., JAJ; 4-25 Hennepin Co., FN/MAS; 4-27 Winona Co., FV/HVBC; 4-29 Goodhue Co., RBJ.

**LITTLE BLUE HERON:** 4-18 Prairie Island, Winona Co., 1 ad + 1 imm, FV, GD; compares nicely with one photographed at Valley City, North Dakota, by Leo Grim on 5-28. (See Notes of Interest)

**CATTLE EGRET:** 4-15 to 4-26 Root River near Hokah, Houston Co., 1 seen in the exact same spot where another was seen several years ago by Avifaunal Club members, FL, GD, RLH, HFH, WRP, many others; coincidence of locale raises the possibility that this could even have been same individual bird both times?

**Common Egret:** early 4-1 Houston Co., FL; 4-10 Hennepin Co., PE; 4-13 Wabasha Co., DGM and Marshall Co., AWR; 4-14 Carver Co., RPR.

**SNOWY EGRET:** what with the occurrence of the other unusual herons here, it seemed noteworthy to mention a record of this species on 5-25 from Valley City, North Dakota, seen by Leo Grim.

**Black-crowned Night Heron:** early 3-28 Carver Co., 1, VL, EWJ, SW; 4-14 Stearns Co., RPR, Washington Co., DS and Marshall Co., AWR; 4-15 Swift Co., JAH, Nobles Co., DB, and Hennepin Co., HFH; 4-16 Nicollet Co., EMB.

**Yellow-crowned Night Heron:** 4-29 to 6-1 LaCrescent, Houston Co., RBJ, FV/HVBC, HFH, EHH, FGD; 5-5 Ramsey Co., RJC; 5-11 Wright Co., EC.

**Least Bittern:** 5-1 Itasca Co., JAM; 5-26 Ramsey Co., FN/MAS.

**American Bittern:** early 4-12 Marshall Co., AWR; 4-15 Duluth, JGH, Dakota Co., RJC, Lac Qui Parle Co., DB; 4-16 Winona Co., FV/HVBC and Nicollet Co., EMB.

**GLOSSY IBIS:** 4-24 to 5-7 Heron Lake, Jackson Co., 1 ad with white face, found by Mr. Herman Becker and seen by DB,

HFH, BT, EHH, RBJ, WRP, BL, RLH. (See Notes of Interest)

**Whistling Swan:** early 3-5 Stearns Co., 1, EMB (almost certainly the same bird that overwintered there); 3-19 Wabasha Co., RJC; 3-27 St. Cloud area, 2, *vide* BOT; 3-29 Wabasha Co., 50, DGM; 3-30 Stevens Co., JAH; late 5-6 Marshall Co., AWR, St. Louis Co., VFB, NJH, Cook Co., MOP; 5-13 Reservation River, Cook Co., LC.

**Canada Goose:** early 3-19 Clay Co., 50, LWJ; 3-21 Traverse Co., 30, JAH; 3-23 Watowan Co., EDK.

**White-fronted Goose:** 3-22 Nobles Co., 6, HSH, MSB; 3-25 Lac Qui Parle Co., 9, JAH; 4-8 (EHH) and 4-15 (DB) Lac Qui Parle Co.

**Blue-Snow Goose:** early 3-22 Nobles Co., enormous numbers, some estimates running to 50,000 birds, HSH, MSB; 3-25 Lac Qui Parle Co., 20, JAH; 3-29 Stearns Co., RPR and Olmsted Co., CMJ, JPF; late 5-17 Wabasha Co., DGM, Marshall Co., AWR and Stearns Co., RPR; 5-20 Carver Co., RBJ; 5-23 Lake Co., JGH.

**Black Duck:** early 3-1 Dakota Co., EMB; 3-5 Goodhue Co., FN/MAS; 3-19 Olmsted Co., RJC; 3-21 Ramsey Co., ACR; 3-30 Aitkin Co., CEP.

**Gadwall:** early 3-21 Rice Co., OAR and Hennepin Co., RBJ; 3-29 Nobles Co., 35, HSH and Marshall Co., AWR.

**Pintail:** early 3-22 Nobles Co., MSB; 3-23 Fargo-Moorhead *vide* EGA; 3-24 Hennepin Co. RBJ and Stevens Co., 30, JAH.

**Green-winged Teal:** early 3-28 Dakota Co., ACR, BL; 3-29 Olmsted Co., CMJ, JPF; 3-30 Aitkin Co., 12, CEP; 3-31 Clay Co., LWJ and Nobles Co., 125, HSH.

**Blue-winged Teal:** early 3-26 Dakota Co., EMB; 3-28 Dakota Co., 15, ACR; many reports by 3-31.

**CINNAMON TEAL:** 4-9 to 4-11 Eggleston, Goodhue Co., 1 ad male hybrid with Blue-winged Teal, EMB, HFH, ELC, RLH, many others; 5-6 New Sweden, Nicollet Co., ad male, DB, BT, EHH.

**American Widgeon:** early 3-22 Nobles Co., MSB; 3-23 Rice Co., OAR; 3-25 Lac Qui Parle and Traverse Co's., JAH and Hennepin Co., RBJ.

**Shoveler:** early 3-25 Lac Qui Parle, JAH, Hennepin, RBJ, Wabasha, DGM and Dakota, EMB Co's.; many reports by 3-31.

**Wood Duck:** early 3-8 Wright Co., EC; 3-12 Goodhue Co., FN/MAS; 3-15 Dakota Co., EMB; 3-19 Olmsted Co., MHM.

**Redhead:** early 3-4 Nobles Co., 8, HSH; 3-7 Goodhue Co., 2, FN/MAS (these may be the two earliest dates on record?); next records 3-19 Rice (OAR), Olmsted (RJC) and Dakota (EMB) Co's.

**Ring-necked Duck:** early 3-4 Nobles Co., HSH; 3-10 Wabasha Co., DGM; 3-15 Dakota Co., EMB.

**Canvasback:** early 3-20 Rice Co., OAR; 3-22 Wabasha Co., DGM; 3-25 Lac Qui Parle Co., JAH.

**Greater Scaup:** early 4-1 Carver Co., EST; 4-2 Hennepin Co., RBJ; 4-15 Swift Co., JAH; 4-18 Washington Co., DS; late 5-21 Washington Co., DS; 5-23 Stearns Co., RPR; 5-28 Duluth, HFH and Lake Co., RBJ.

**Lesser Scaup:** early 3-4 Nobles Co., HSH; 3-8 Dakota Co., EMB; 3-10 Wabasha Co., DGM.

**BARROW'S GOLDENEYE:** 3-8 and 3-12 NSP Blackdog Plant, Dakota Co., 1 male, EMB; 4-12 Chisholm, St. Louis Co., 1 male, FVS. (See Notes of Interest)

**Bufflehead:** early 3-1 Dakota Co., 2, EMB (wintering ?); next 3-22 Ramsey Co., BL; 3-23 Nobles Co., 8, HSH; 3-24 Winona Co., FV/HVBC; 3-25 Rice Co., OAR; latest 5-24 Washington Co., DS; 5-27 Duluth, ME; 5-31 Fargo-Moorhead, *fide* EGA.

**Oldsquaw:** latest 4-24 Cook Co., 10, RLG; 5-28 Cook Co., 7, RBJ.

**Harlequin Duck:** 3-4 Virginia, St. Louis Co., 1 male, overwintered, EHH.

**White-winged Scoter:** 5-15 Marshall Co.,

3, AWR; 5-27 Lake Co., 1, RBJ; 5-30 Cook Co., EMB.

**Surf Scoter:** 5-27 Lake Co., 1, RBJ, JCG, RLH.

**Common Scoter:** 5-27 Lake Co., 1, RBJ, RLH, JCG; 6-2 St. Louis Co., 4, BL.

**Ruddy Duck:** early 3-27 Ramsey Co., BL; 3-29 Rice Co., OAR; 3-21 Olmsted Co., CMJ, JPF and Watonwan Co., EDK.

**Hooded Merganser:** early 3-18 Hennepin Co., RBJ; 3-21 Wabasha Co., DGM; 3-23 Rice Co., OAR.

**Common Merganser:** early 3-7 Wabasha Co., 8, FN/MAS; 3-8 Wabasha Co., 36, VL; 3-10 Wabasha Co., 18, DGM; 3-18 Goodhue Co., 35, EMB, Nobles Co., 4, HSH and Hennepin Co., 4, RBJ.

**Red-breasted Merganser:** early 3-22 Wabasha Co., 4, DGM; 3-24 Rice Co., OAR; 3-26 Anoka Co. *fide* BOT; one northerly record in March: 3-31 Duluth, 6, LTM.

**Turkey Vulture:** early 3-31 Wright Co., 1, EC; 4-1 St. Louis Co., LTM; 4-8 Traverse Co., JAH; 4-9 Goodhue Co., RBJ.

**Goshawk:** throughout March, Aitkin Co., CEP; 3-22 Marshall Co., AWR; 3-31 Stevens Co., ES; 4-15 Itasca Co., ACR; 5-23 Clearwater Co. *fide* RPR.

**Sharp-shinned Hawk:** early 3-2 Wabasha Co., DGM; 3-9 Washington Co., DH; next 3-25 Hennepin Co., CKS and Dakota Co., EMB.

**Cooper's Hawk:** early 3-25 Hennepin Co., WJB; 3-28 Dakota Co., BL; 3-29 Sterns Co., RPR; 3-30 Roseau Co., PEB.

**Red-tailed Hawk:** early 3-1 Dakota Co., EMB; 3-4 Washington Co., DS; 3-5 Rice Co., OAR; 3-8 Washington Co., WWL and Goodhue Co., FN/MAS.

**Red-shouldered Hawk:** observers in Iowa have commented on the scarcity of this species in their state during the past four or five years so it comes as a surprise that this March we had records from Washington, Olmsted, Winona, Stevens, Stearns, Goodhue, Wabasha, Dakota, Hennepin and Carver Co's., plus Fargo-Moorhead; in

April it was reported from Nobles, Anoka and Hennepin Co's.; in May it was reported from Goodhue, Wabasha and Lake Co's. (5-3 Two Harbors, 1, RK).

**Broad-winged Hawk:** early 3-25 Hennepin Co., FN/MAS; 3-28 Washington Co., WWL; 3-28 Goodhue Co., ACR; 4-8 Roseau Co., PEB; unless there is some confusion with the preceding species, this marks the earliest flight period on record for Minnesota; the March records in T. S. Roberts have been discounted for that very reason, plus the fact that there are **no specimens** in the collection from earlier than mid-April.

**Swainson's Hawk:** 4-8 Washington Co., EMB; 4-15 Lincoln Co., BL; 4-15 Nobles Co., DB; 5-13 Wilkin Co., JAH; 5-20 Pine Co., MIG; 5-30 Goodhue Co., FN/MAS.

**Rough-legged Hawk:** reported in March from Fargo-Moorhead plus Goodhue, Rice, Aitkin, Watonwan, Blue Earth, Stearns, Nobles, Wabasha, Roseau, Lac Qui Parle, Ramsey, Dakota, Traverse, Olmsted, Marshall, Hennepin, Carver and St. Louis Co's.; reported in April from Wright, Goodhue, Wabasha, Ramsey, Marshall, Olmsted, Beltrami, Lac Qui Parle, Traverse and St. Louis Co's.; latest dates 5-5 Dakota Co., RJC; 5-16 Fargo-Moorhead, *fide* EGA.

**FERRUGINOUS HAWK:** 5-12 Collegeville, Stearns Co., 1 light-phase adult seen, RPR.

**Golden Eagle:** 3-1 Marshall Co., 2, AWR; 3-28 Hennepin Co., 1 imm, EWJ; 4-7 Marshall Co., 7, AWR; 4-9 Washington Co., 1 imm, DH.

**Bald Eagle:** numbers in March varied as follows at the two best-known wintering spots: Read's Landing, Wabasha Co., 3-6 (25), 3-7(30), 3-8 (20), 3-11 (6), 3-12 (26), 3-18 (8), 3-19 (15) and Red Wing, Goodhue Co., 3-6 (5), 3-8 (6), 3-18 (22), 3-28 (1); also reported in March from Stearns, Roseau, Aitkin, Lake, Cass, Itasca, Beltrami and Washington Co's. plus Fargo-Moorhead; reported in April from Hennepin, Wabasha, St. Louis, Beltrami, Cass, Lac Qui Parle, Morrison,

Cook, Marshall and Winona Co's. plus White Rock, South Dakota, which is right on the Traverse County border.

**Marsh Hawk:** early 3-3 Fargo-Moorhead, *fide* EGA; 3-5 Nobles Co., HSH; 3-8 Watonwan Co., EDK and Rice Co., OAR; 3-10 Blue Earth Co., EDK.

**Osprey:** early 3-26 Washington Co., 2, DH; 4-3 Stearns Co., RPR; 4-15 Hennepin Co., VL; 4-19 Goodhue Co., DB.

**Peregrine Falcon:** 5-2 Sterns Co., 1, RPR; 5-6 Watonwan Co., 1, DB, EHH; 5-9 Marshall Co., 1, AWR; 5-12 Marshall Co., 2, AWR; 5-20 Aitkin Co., 1, RHJ; 5-20 Marshall Co., 2, AWR.

**Pigeon Hawk:** early 3-15 Nobles Co., HSH; 3-25 Hennepin Co., RBJ; 4-5 Kanabec Co., RHJ; 4-7 Wabasha Co., DGM.

**Sparrow Hawk:** early 3-1 Dakota Co., EMB; 3-2 Wabasha Co., DGM; 3-4 Hennepin Co., VL; 3-7 Nobles Co., HSH; 3-10 Blue Earth Co., EDK.

**Spruce Grouse:** 4-16 Beltrami Co., 4, MG; 5-17 St. Louis Co., 1 male, LTM.

**Greater Prairie Chicken:** 4-9 Wilkin Co., 9, EHH; 5-20 Becker Co., 1, DB.

**Sharp-tailed Grouse:** 3-4 (3), 3-8 (6), 3-23 (7) Marshall Co., AWR; 3-25 Lake-of-the Woods Co., BL; occasionally throughout March, Aitkin Co., CEP; 4-9 Beltrami Co., 4, MG; April-May, St. Louis Co., 6, VFB; late April, Collegeville, Stearns Co., *fide* RPR.

**Bobwhite:** throughout March, Wabasha Co., 1 to 5 birds, DGM; 4-3 Wabasha Co., 4, DGM.

**Chukar:** 3-4 Ely, St. Louis Co., 10, EHH; their last stronghold.

**Gray Partridge:** March, Nobles Co., HSH; 3-1 (8), 3-12 (4) Dakota Co., EMB; 3-25 Dakota Co., 4, RBJ; 4-10 Dakota Co., 1, EHH; 4-19 Dakota Co., 3, VL; 5-1 to 5-16 Fargo-Moorhead *fide* EGA.

**TURKEY:** 5-21 Clay Co., 3 miles SE of Felton, 1 ad male and 1 ad female seen together at the virgin prairie spot where the Chestnut-collared Longspurs usually nest, RLH, HEH; clean, crisp plumage;

both ran swiftly when pursued; presumed to be a mated pair; successfully introduced by conservation forces in northeastern South Dakota and also introduced by sportsmen's clubs near Dilworth, a few miles to the south of Felton. Observers in the westernmost counties should keep an eye open for this one.

**Sandhill Crane:** 3-25 Hennepin Co., VL; 3-31 Washington Co., WHL; 4-1 Lac Qui Parle Co., 16, DB; 4-9 Wilkin Co., 250, EHH; 4-14 Stevens Co., JAH; 4-15 Lac Qui Parle Co., 1, DB, BL; 4-22 Marshall Co., 10, AWR; 4-26 Roseau Co., PEB; 5-23 Marshall Co., 2, AWR; 5-29 Aitkin Co., 2, CEP.

**Virginia Rail:** early 4-16 Hennepin Co., RBJ; 4-18 Winona Co., GD; 4-29 Stearns Co., RPR.

**Sora:** early 4-19 Olmsted Co., CMJ, JPF; 4-20 Beltrami Co., JAM; 4-23 Fargo-Moorhead *vide* EGA.

**Common Gallinule:** 5-7 Winona Co., GD; 5-12 Hennepin Co., FN/MAS; 5-21 Houston Co., FL; 5-27 Stearns Co., RPR.

**American Coot:** early 3-1 Dakota Co., EMB; 3-8 Wright Co., EC; 3-19 Ramsey Co., RJC.

**Semipalmated Plover:** early 4-16 Nicollet Co., EMB; 4-24 Swift Co., JAH; 4-29 Lac Qui Parle Co., DB, EHH; late 5-24 Stevens Co., JAH; 5-27 Duluth, ME; 6-7 Duluth, BB.

**Piping Plover:** 5-4 Lac Qui Parle Co., 10, JAH; 5-16 Carver Co., 1, RDT; 5-17 (EHH), 5-18 (FN/MAS), 5-19 (DB), 5-20 (HFH) Carver Co.; 5-27 Duluth, ME; 5-27 Wilkin Co., JAH; 5-23 Fargo-Moorhead, *vide* EGA; 6-7 Duluth, BB.

**Killdeer:** early 3-2 Fargo-Moorhead, *vide* EGA; 3-10 Wabasha Co., DGM; 3-11 Dakota Co., EMB; 3-19 Olmsted Co., JPF, CMJ.

**American Golden Plover:** early 3-27 Pig's Eye Sewage Disposal Plant, Ramsey Co., 1 in winter plumage, BL, RLH, probably earliest date on record; 4-18 Big Stone Co. and Stevens Co., JAH; 5-2 Blue Earth Co., EDK; 5-5 Lyon Co., PE; late

5-23 Marshall Co., AWR; 5-24 Stevens Co., JAH; 5-28 St. Louis Co., MIG.

**Black-bellied Plover:** early 5-15 Fargo-Moorhead *vide* EGA; 5-16 Carver Co., RDT; 5-20 Clay Co., DB; 5-27 Duluth, ME, MIG; 6-2 Norman Co., RPR; 6-7 Duluth, BB.

**Ruddy Turnstone:** 5-7 Winona Co., GD; 5-14 Swift Co., HSH; 5-23 Fargo-Moorhead, *vide* EGA; 5-27 Duluth, ME; 6-8 Duluth, BB; 6-9 Lyon Co., PE.

**American Woodcock:** early 3-28 Anoka/Washington Co., WHL; 3-29 Olmsted Co., CMJ, JPF; 3-30 Duluth, JGH.

**Common Snipe:** early 3-25 Ramsey Co., ACR; 3-29 Rice Co., OAR; 3-31 Washington Co., WHL, Blue Earth Co., EDK and Hennepin Co., FN/MAS.

**Whimbrel:** 5-27 Duluth, 1, RBJ, JCG, RLH, many other observers.

**Upland Plover:** 4-28 Scott Co., 2, JIM; 5-2 Hennepin Co., FN/MAS; 5-4 Watonwan Co., EDK; 5-6 Brown Co., HFH and Nicollet Co., EHH.

**Spotted Sandpiper:** 4-25 Beltrami Co., JAM; 4-29 Houston (HFH), Anoka (PE), Wright (EC) and Lac Qui Parle (EHH) Co's.; 4-30 Ramsey Co., BL and Stearns Co., RPR.

**Solitary Sandpiper:** early 4-16 Nicollet Co., EMB; 4-24 Rice Co., OAR, Washington Co., DS and Fargo-Moorhead *vide* EGA; 4-29 Goodhue Co., RBJ; late 5-19 Dakota Co., RJC; 5-21 Fargo-Moorhead *vide* EGA; 5-22 Carver Co., VL and Hennepin Co., RDT.

**Willet:** 5-2 Olmsted Co., JPF, CMJ, Carver Co., FN/MAS, Dakota Co., FN/MAS and 4-30 (2), 5-5 (5), 5-20 (1) Duluth, JCG, 5-4 Stevens Co., JAH and Fargo-Moorhead *vide* EGA; 5-6 Lyon Co., PE; 5-13 Martin Co., BL; 5-14 Carver Co., RDT; 5-15 Marshall Co., AWR; 5-21 Clay Co., LWJ.

**Greater Yellowlegs:** early 3-31 Marshall Co., 7, AWR; 3-31 Nobles Co., HSH; 4-1 Lac Qui Parle Co., HFH, Houston Co., FL, Wright Co., MHM and Carver Co., 3, EST; late 5-18 Aitkin Co., CEP; 5-21 Washington Co., DH; 5-23 Fargo-Moorhead *vide* EGA.

**Lesser Yellowlegs:** early 3-25 Lyon Co., PE; 3-31 Nobles Co., HSH; 4-1 Lac Qui Parle Co., DB and Stevens Co., JAH; late 5-10 Wabasha Co., DGM; 5-21 Clay Co., LWJ; 5-23 Marshall Co., AWR.

**Knot:** 5-27 Duluth, St. Louis Co., RBJ, ME, JCG, RLH, many other observers.

**Pectoral Sandpiper:** early 3-30 Wabasha Co., DGM; 3-31 Clay Co., LWJ; 4-1 Carver Co., 4, EST; late 5-18 Carver Co., FN/MAS and Aitkin Co., CEP; 5-20 Winona Co., FGD and Duluth, BB; 5-28 Dakota Co., ACR.

**White-rumped Sandpiper:** early 5-4 Lac Qui Parle Co., JAH; 5-8 Winona Co., GD and Carver Co., EHH; 5-13 Jackson Co., BL; late 5-23 Fargo-Moorhead *vide* EGA; 5-24 Stevens Co., JAH; 6-10 Lyon Co., PE.

**Baird's Sandpiper:** early 3-31 Clay Co., LWJ; 4-1 Carver Co., 3, EST and Lac Qui Parle Co., HFH; 4-4 Stevens Co., JAH; late 5-20 Carver Co., MHM; 5-21 Clay Co., LWJ; 5-24 Stevens Co., JAH.

**Least Sandpiper:** early 4-29 Wabasha Co., RBJ, HFH; 5-2 Fargo-Moorhead *vide* EGA; 5-3 Carver Co., VL; late 5-24 Stevens Co., JAH; 5-28 St. Louis Co., MIG; 6-1 Fargo-Moorhead *vide* EGA.

**Dunlin:** early 4-11 Dakota Co., DB and Goodhue Co., BL; 4-12 Goodhue Co., RBJ; 4-29 Wabasha Co., HFH; late 6-1 Fargo-Moorhead *vide* EGA; 6-3 Goodhue Co., RBJ; 6-10 Lyon Co., PE.

**Short-billed Dowitcher:** 4-14 Chippewa Co., RPR; 5-6 Nicollet Co., DB, EHH; 5-20 Carver Co., HFH, RBJ and Lake Co., RK; included here are only those reports which bear call-note citation.

**Long-billed Dowitcher:** 4-29 Wabasha Co., RBJ; 5-6 Jackson Co., EHH, HFH; since this and the preceding species can only be differentiated by call-note, I have used here only those reports which indicated call-note.

**Dowitcher, species ?:** 5-11 Blue Earth Co., EDK; 5-16 Wilkin Co., *vide* EGA; 5-20 Winona Co., FGD and Duluth, JGH.

**Stilt Sandpiper:** 4-8 Big Stone Co., JAH; 5-9 Carver Co., FN/MAS, RDT; 5-16 Wilkin Co., *vide* EGA; 5-20 Carver Co., MHM; 5-27 Wilkin Co., JAH and Duluth, ME.

**Semipalmated Sandpiper:** early 4-14 Chippewa Co., RPR; 4-22 Lyon Co., PE; 4-29 Lac Qui Parle Co., EHH; late 6-2 Becker Co., RPR; 6-7 Duluth, BB; 6-10 Lyon Co., PE.

**Marbled Godwit:** 4-14 Stearns Co., RPR; 4-16 Stevens Co., JAH; 4-25 Marshall Co., AWR; 4-29 Traverse Co., EHH; 5-21 Roseau Co., flock of 75+ RLH.

**Hudsonian Godwit:** 4-22 McLeod Co., DB; 5-6 Lyon Co., PE; 5-7 (RBJ), 5-15 (EDK) Watonwan Co.; 5-9 (FN/MAS), 5-14 (RDT), 5-18 (FN/MAS), 5-20 (MHM, RBJ) Carver Co.; 5-16 and 5-23 Fargo-Moorhead *vide* EGA; 5-20 Lake Co., RK, BB.

**Sanderling:** early 4-29 Lac Qui Parle Co., EHH; 5-2 Carver Co., FN/MAS; 5-4 Lac Qui Parle Co., JAH; late 5-28 Duluth, HFH; 6-7 Duluth, BB.

**American Avocet:** 4-15(VL), 4-29(EHH), 5-4(JAH) Lac Qui Parle Co.; 5-7 Nicollet Co., HFH; 4-22 to 5-23 Fargo-Moorhead *vide* EGA.

**Wilson's Phalarope:** early 4-29 Goodhue Co., RBJ, HFH and Lac Qui Parle Co., EHH; 4-30 Carver Co., MHM; 5-2 Dakota Co., FN/MAS and Washington Co., BL.

**Northern Phalarope:** 5-16 Wilkin Co., *vide* EGA.

**Herring Gull:** early 3-20 Nobles Co., 4, HSH; 3-24 Houston Co., 17, FL and Rice Co., OAR; 3-25 Lake Vermilion, St. Louis Co., MMP and Lac Qui Parle Co., JAH.

**Ring-billed Gull:** early 3-24 Wabasha Co., DGM.; 3-25 Nobles Co., many, HSH and Lac Qui Parle Co., JAH; 3-28 Goodhue Co., 10, ACR.

**Franklin's Gull:** early 4-1 La Qui Parle Co., HFH; 4-4 Fargo-Moorhead *vide*

EGA; 4-8 Traverse Co., JAH and Cottonwood Co., LAF.

**Bonaparte's Gull:** early 4-7 Wabasha Co., DGM; 4-20 Ramsey Co., BL; 4-22 Carver Co., RBJ and Lyon Co., PE; late 5-15 Hennepin Co., EHH; 5-20 Goodhue Co., EMB.

**Forster's Tern:** early 4-8 Nicollet Co., DB and Ramsey Co., BL; 4-9 Hennepin Co., FN/MAS; 4-12 Wright Co., EC.

**Common Tern:** early 4-16(RJC), 4-19 (MHM), 4-20(VL), Hennepin Co., 4-22 Lyon Co., PE and Jackson Co., HSH.

**Caspian Tern:** early 5-7 Duluth, BB; 5-11 Wabasha Co., DGM; 5-13 Hennepin Co., RDT and Goodhue Co., RBJ; late 5-27 Duluth, ME, MIG and Cass Co., JAM; 5-29 Ramsey Co., RJC.

**Black Tern:** early 4-30 Hennepin Co., VL and Stearns Co., RPR; 5-1 Ramsey Co., RJC; 5-2 Olmsted Co., JPF, CMJ and Carver Co., MHM.

**Mourning Dove:** early 3-5 Nobles Co., HSH; 3-12 Nobles Co., many, HSH and Washington Co., WWL; 3-18 Ramsey Co., ACR; one March record for Cook Co., 3-31, MOP; 4-1, Lake Co., JCG.

**Yellow-billed Cuckoo:** early 5-21 Washington Co., DS; 5-27 Hennepin Co., JAJ and Jackson Co., HSH; 5-30 Wabasha Co., DB and Winona Co., FGD.

**Black-billed Cuckoo:** early 5-9 Olmsted Co., CMJ, JPF; 5-23 Hennepin Co., FN/MAS; 5-25 Murray Co., WHL.

**Screech Owl:** reported in March from Pope, Stevens, Nobles, Washington, Hennepin Co.'s; in April from Stearns, Washington and Olmstead Co.'s; in May from Hennepin and Aitkin Co.'s.

**Snowy Owl:** five reports in March; latest dates 4-21 Marshall Co., AWR; 5-5 Duluth, J. Bronoel 5-16 Beltrami Co., MG.

**Burrowing Owl:** 5-20 Traverse Co., DB.

**Long-eared Owl:** 4-2 Cook Co., MOP; 5-7 Fargo-Moorhead *fide* EGA; 5-14 Hennepin Co., JAJ.

**Short-eared Owl:** 3-19 Hennepin Co.,

EHH, EMB; 3-20 Watonwan Co., EDK; 3-25 Fargo-Moorhead *fide* EGA; 4-15 Swift Co., JAH and Nobles Co., BL; 4-23 Marshall Co., AWR; 4-24 Big Stone Co., JAH; 4-29 Anoka Co., PE; 5-3 Fargo-Moorhead *fide* EGA; 5-13 Stearns Co., RPR; 5-20 Duluth, JGH.

**Saw-whet Owl:** 3-11 Winona Co., 1, FL; 5-28 Roseau Co., PEB.

**Whip-poor-will:** early 5-20 St. Louis Co., NJH and Roseau Co., PEB; 5-21 Hennepin Co., HFH and Washington Co., DH; 5-24 Marshall Co., AWR.

**Common Nighthawk:** early 4-29 Stevens Co., JAH; 5-5 Hennepin Co., FN/MAS; 5-10 Winona Co., GD.

**Chimney Swift:** early 4-29 Wabasha Co., DGM and Lincoln Co., EHH; 5-1 Winona Co., FV/HVBC, Morrison Co., LSR and Duluth, RL.

**Ruby-throated Hummingbird:** early 5-8 Olmsted Co., CMJ, JPF; 5-9 Cottonwood Co., LAF; 5-12 Nobles Co., HSH.

**Belted Kingfisher:** early 3-24 Hennepin Co., RBJ; 3-25 Dakota Co., EMB and Ramsey Co., RJC; two northerly records in March: 3-30 Crow Wing Co., MSB and Marshall Co., AWR.

**Yellow-shafted Flicker:** early 3-1 Wabasha Co., DGM; 3-5 Rice Co., OAR; 3-8 Nobles Co., HSH.

**RED-SHAFTED FLICKER:** 3-24 Cyrus, Pope Co., 1 female from description, WH and Pomme de Terre Lake, Stevens Co., 1 good description, JAH. Two reports on same date is an interesting coincidence.

**Red-bellied Woodpecker:** usual reports from southeast; northernmost March record, 3-20 Kanabec Co., 1, RHJ.

**Red-headed Woodpecker:** 3-10 Blue Earth Co., EDK; next date 3-31 Hennepin Co., MHM.

**Yellow-bellied Sapsucker:** early 3-26 Dakota Co., ACR; 3-29 Stevens Co., good details, JAH; 3-30 Hennepin Co., FN/MAS; 4-1 Wright Co., EC.

**Black-backed Three-toed Woodpecker:** 3-8 Sucker River, St. Louis Co., 1 DOR,

JCG; 3-12 Tofte, Cook Co., 1, MOP; 3-21 Grand Marais, Cook Co., LC; 5-12 St. Louis Co., NJH; 5-23 Itasca Park, Clearwater Co., *vide* RPR.

**Eastern Kingbird:** early 5-4 Wabasha Co., DGM; 5-6 Nicollet Co., EHH; 5-11 Wright Co., EC and Washington Co., DH.

**Western Kingbird:** early 5-3 Wabasha Co., photographed, DGM; next date 5-17 Rock Co., HSH; 5-18 Hennepin Co., HFH and Stevens Co., JAH; 5-19 Dakota Co., MRL.

**Great Crested Flycatcher:** early 5-11 Rice Co., OAR; 5-13 Jackson Co., HSH; 5-15 Goodhue Co., FN/MAS; 5-16 Hennepin Co., RDT.

**Eastern Phoebe:** early 3-28 Dakota Co., ACR; 3-29 Stevens Co., JAH; 3-30 Hennepin Co., FN/MAS, Washington Co., WHL, Morrison Co., LSR and Fargo-Moorhead *vide* EGA.

**Yellow-bellied Flycatcher:** early 4-28 Nobles Co., HSH; 5-6 Duluth, ME; 5-15 Goodhue Co., EHH; 5-20 Pine Co., MIG.

**Trail's Flycatcher:** early 5-10 Dakota Co., MRL and Olmsted Co., CMJ, JPF; 5-11 Wright Co., EC; 5-14 Rice Co., OAR and Dakota Co., RJC.

**Least Flycatcher:** early 4-29 Nobles Co., HSH; 5-8 Hennepin Co., MHM; 5-9 Winona Co., FV/HVBC.

**Eastern Wood Pewee:** early 5-11 Wright Co., EC and Rice Co., OAR; 5-13 Jackson Co., HSH, Ramsey Co., ACR and Hennepin Co., CKS; 5-14 Stevens Co., JAH.

**Olive-sided Flycatcher:** early 5-10 Carver Co., FN/MAS; 5-12 Hennepin Co., RDT; 5-15 Wabasha Co., EHH; 5-20 Anoka Co., PE and Goodhue Co., EMB.

**Horned Lark:** earliest in north, 3-1 Marshall Co., AWR; 3-2 Lake Co. *vide* RK; 3-4 Carlton Co., EHH; 3-5 Roseau Co., 30, PEB.

**Tree Swallow:** early 3-31 Washington Co., 5, WHL; 4-1 Winona Co., FV/

HVBC; 4-2 Dakota Co., HFH; 4-5 Cass Co., JAM; 4-7 Lake Co., VF.

**Bank Swallow:** early 4-21 Stearns Co., RPR; 4-22 Hennepin Co., RBJ; 4-28 Nobles Co., HSH.

**Rough-winged Swallow:** early 4-9 Chisago Co., ACR; 4-16 Anoka Co., MHM; 4-18 Hennepin Co., FN/MAS; 4-20 Stearns Co., RPR.

**Barn Swallow:** early 4-18 Hennepin Co., FN/MAS; 4-20 Washington Co., BL; 4-21 Lyon Co., PE.

**Cliff Swallow:** early 4-28 Nobles Co., HSH; 4-30 Goodhue Co., EMB; 5-1 Ramsey Co., BL; 5-2 Hennepin Co., VL.

**Purple Martin:** early 4-4 Rice Co., OAR and Winona Co., FV/HVBC; 4-5 Cottonwood Co., LAF and Anoka Co., WHL; 4-7 Wabasha Co., DGM.

**Gray Jay:** usual records from Cook, Lake, Itasca & Beltrami Co's.; southernmost records, 3-12 Duluth, LTM; 3-11 McGregor, Aitkin Co., CEP; throughout March, Colledgeville, Stearns Co., 1, RPR.

**Black-billed Magpie:** 3-13 Cass Co., 4 JAM; 3-25 Lake-of-the-Woods Co., 1, BL; 5-4, Duluth, Bruce and Helen Hale; 5-6 Roseau Co., 1, PEB; 5-26 Stearns Co., 1, *vide* RPR; 6-4 Roseau Co., 2, EST.

**Common Raven:** usual records from Cook, Lake, St. Louis and Itasca Co's., south and west to Aitkin Co., (CEP), Marshall Co., (AWR).

**CLARK'S NUTCRACKER:** 5-10 Fargo area, Dave Noezel *vide* EGA, good details.

**Boreal Chickadee:** usual records from northeast, with 2 westerly records: 3-2 Moorhead, Clay Co., 1, LWJ; 3-9(5), 3-26(3), 5-29(3) Morris, Stevens Co., JAH, last remnants of the flock that wintered there.

**Tufted Titmouse:** very few March records north to Mpls.-St. Paul area; 4-12 Duluth *vide* JCG; 4-29 Houston Co., RBJ; 5-14 Dakota Co., RJC; throughout period, Hennepin Co., 1 pair, MEH; many observers have commented on the scarcity of this species for the past several years.

**Red-breasted Nuthatch:** southern and western records: 3-2 Clay Co., LWJ; 3-27 Washington Co., WWL; 3-28 Goodhue Co., ACR; 4-17, 5-11 Stevens Co., JAH; 5-17 Hennepin Co., RDT, PE.

**House Wren:** early 4-29 Wabasha Co., DGM and Goodhue Co., RBJ; 4-30 Fillmore Co., DB; 5-2 Hennepin Co., MHM; 5-4 Washington Co., DH.

**Winter Wren:** early 3-31 Hennepin Co., 1, VL; 4-4 Hennepin Co., FN/MAS; 4-15 St. Louis Co., NJH; late in south 5-13 Hennepin Co., EMB; 5-21 Benton Co., JAH; unusual westerly record, 4-21, 5-10 Stevens Co., JAH.

**Long-billed Marsh Wren:** early 4-1 Lake Koronis, Stearns Co., 1, RPR; next 4-30 Fillmore Co., EHH, DB; 5-5 Goodhue Co., FN/MAS; 5-11 Stevens Co., JAH; 5-15, Duluth, JCG.

**Short-billed Marsh Wren:** early 5-4 Blue Earth Co., EDK; 5-7 Duluth, BB; 5-8 Olmsted Co., CMJ, JPF; 5-9 Winona Co., FV/HVBC.

**Mockingbird:** no less than 13 reports!! 4-14 Wright Co., EC; 4-20 Cook Co., MOP; 4-22 Nobles Co., HSH; 4-24 Winona Co., FV/HVBC; 4-30 St. Louis Co., BB; 5-1 Aitkin Co., CEP; 5-4 Winona Co., DGM; 5-4 Hennepin Co., CFC; 5-7 Jackson Co., RBJ; 5-13 Hennepin Co., AWD; 5-25 Beltrami Co., MG; 5-27 Anoka Co., RBJ; 5-27 Cook Co., DH.

**Catbird:** early 5-5 Rice Co., OAR; 5-6 Washington Co., WWL and Duluth, ME.

**Brown Thrasher:** early 3-30 Fargo-Moorhead *vide* EGA; 4-8 Stearns Co., RPR; 4-14 Hennepin Co., FN/MAS.

**Robin:** early 3-9 Rice Co., OAR; 3-15 Olmstead Co., CMJ, JPF; 3-18 Nobles Co., HSH.

**VARIED THRUSH:** all winter thru third week of March, Iverson, Carlton Co., MGC; all winter until 4-14, Little Marais, Lake Co., VF.

**Wood Thrush:** early 4-24 Hennepin Co., MHM; 5-1 Washington Co., WWL; 5-10 Rice Co., OAR; one very northerly record 5-28 Cook Co., RBJ.

**Hermit Thrush:** early 3-30 Clay Co., LWJ; 3-31 Washington Co., 3, WHL; 4-1 Hennepin Co., VL, EMB.

**Swainson's Thrush:** early 4-10 Hennepin Co., VL; 4-15 Winona Co., FV/HVBC; 5-1 Washington Co., WWL.

**Gray-cheeked Thrush:** early 4-18 Pope Co., WH; 5-1 Washington Co., WWL; 5-3 Nobles Co., HSH; 5-5 Ramsey Co., BL; late 5-21 Ramsey Co., RJC, Winona Co., FV/HVBC, Cass Co., JAM and Washington Co., DH; 5-23 Hennepin Co., FN/MAS and Crow Wing Co., MSB; 5-26 Clearwater Co., JAH; 5-28 Hennepin Co., JAJ.

**Veery:** early 5-5 Washington Co., WWL; 5-6 Goodhue Co., MIG; 5-9 Stevens Co., JAH.

**Eastern Bluebird:** early 3-10 Rice Co., OAR; 3-23 to 3-25 many reports from Rice, Watonwan, Blue Earth, Swift, Nobles, Olmsted, Hennepin, Ramsey, Carver, Dakota, Stearns, Stevens and Clay Co's.

**MOUNTAIN BLUEBIRD:** 3-25 Clay Co., 10 miles NE Moorhead, 1 adult, good details, LWJ. Probably the sixth state record.

**TOWNSEND'S SOLITAIRE:** 3-14 to 3-17 Virginia, St. Louis Co., 1, good details, Everett Blomgren; 4-21 to 5-4 Sherburn, Martin Co., WRL. (See Notes of Interest)

**Blue-gray Gnatcatcher:** early 5-1 Hennepin Co., PE; 5-7 Hennepin Co., VL; 5-13 Goodhue Co., RBJ; 5-20 Winona Co., FGD; 5-30 Wabasha Co., DB.

**Golden-crowned Kinglet:** early 3-4 Stearns Co., RPR; 3-10 Nobles Co., 3, HSH; 3-18 Ramsey Co., ACR.

**Ruby-crowned Kinglet:** early 3-20 Fargo-Moorhead *vide* EGA; 3-29 Hennepin Co., VL; 3-30 Stearns Co., RPR and Clay Co., LWJ; 3-31 Washington Co., JO.

**Water Pipit:** 4-1 Hennepin Co., RBJ; 4-11 Goodhue Co., BL and Dakota Co., DB.

**Bohemian Waxwing:** Swift Co., 3-23(3), HSH; Hennepin Co., 3-1(12, WJB), 3-2(30, CKS); Ramsey Co., 3-5(20, ACR),

3-10(1, RLH); Washington Co., 3-14 (17) to 3-21(30), WHL; Aitkin Co., 3-2 (100), CEP; Stevens Co., 3-1(25) to 3-20(25), JAH; Clay Co., 3-1(300), 3-26(50), 3-27(25), LWJ; Duluth, 3-9 (50), HEP; Virginia, 3-27(14), NJH; Two Harbors, 3-30(70), RK; Kanabec Co., 3-6, RHJ; Marshall Co., 3-1(20), AWR.

**Northern Shrike:** reported in March from Wabasha, Dakota, Hennepin, Cass, Aitkin, St. Louis, Lake & Cook Co's.,; latest dates 4-1 Nobles Co., HSH and Lac Qui Parle Co., DB; 4-2 Lake Co., RK; 4-3 Duluth, BB; 4-13 St. Louis Co., MMP.

**Loggerhead Shrike:** early 3-9 Hennepin Co., 1, singing, VL, exceptionally early; next 3-30 Hennepin Co., HFH; 3-31 Wabasha Co., 3, DGM; 4-1 Renville Co., DB.

**Bell's Vireo:** 5-31(FGD), 6-1(FV/HVBC) Winona Co.

**Yellow-throated Vireo:** early 5-14 Goodhue Co., HFH; 5-18 Stearns Co., RPR; 5-20 Winona Co., FGD and Pine Co., MIG.

**Solitary Vireo:** early 5-10 Olmsted Co., CMJ, JPF and Hennepin Co., RDT, EHH, RBJ; 5-12 Ramsey Co. ACR; 5-13 Martin Co., BL, Goodhue Co., MIG and Winona Co., FGD.

**Red-eyed Vireo:** early 5-8 Kanabec Co., RHJ; 5-14 Wabasha Co., RLH; 5-20 Hennepin Co., RDT and Goodhue Co., EMB.

**Philadelphia Vireo:** 5-10 Olmsted Co., CMJ, JPF; 5-17 Stevens Co., JAH; 5-19 Hennepin Co., EHH and Stearns Co., RPR; 5-20 St. Louis Co., VFB.

**Warbling Vireo:** early 4-30 Houston Co., DB, EHH; 5-11 Stevens Co., JAH; 5-12 Hennepin Co., VL, MHM; 5-13 Ramsey Co., ACR, Winona Co., FV/HVBC, Goodhue Co., MIG.

**Black - and - white Warbler:** early 4-12 Lake Co., VF; next 5-5 Morrison Co., LSR and Cook Co., RLG, 5-6 Washington Co., WWL; 5-7 Jackson Co., HSH, Wright Co., EC, Hennepin Co., JAJ and Duluth, BB.

**Prothonotary Warbler:** early 5-13 Goodhue Co., MIG; 5-14 Goodhue Co., HFH, EMB; 5-18 Winona Co., FV/HVBC.

**WORM - EATING WARBLER:** 5 - 13 Theodore Wirth Park, Hennepin Co., 1, good details, HFH.

**Golden-winged Warbler:** early 5-10 Olmsted Co., CMJ, JPF; 5-14 Winona Co., FGD and Rice Co., OAR; 5-16 Hennepin Co., FN/MAS.

**Blue-winged Warbler:** early 5-20 Winona Co., FGD; 5-21 Goodhue Co., EMB; 5-23 Olmsted Co., CMJ, JPF.

**Tennessee Warbler:** early 5-5 Wright Co., EC; 5-10 Hennepin Co., RDT, Olmsted Co., CMJ, JPF and Morrison Co., LSR; 5-11 Ramsey Co., BL.

**Orange - crowned Warbler:** early 4 - 16 Olmsted Co., CMJ, JPF; 4-18 Ramsey Co., BL; 4-23 Washington Co., JO; late 5-22 Ramsey Co., ACR; 5-23 Kanabec Co., RHJ; 5-26 Lake Co., VF and Clearwater Co., JAH.

**Nashville Warbler:** early 4-25 Ramsey Co., ACR; 5-10 Hennepin Co., RDT and Stevens Co., JAH; 5-11 Wright Co., EC, Morrison Co., LSR, Anoka Co., WHL and Stearns Co., RPR.

**Parula Warbler:** early 5-4 Hennepin Co., EWJ; 5-8 Hennepin Co., HFH; 5-10 Olmsted Co., CMJ, JPF; 5-11 Wright Co., EC.

**Yellow Warbler:** early 4-16 Anoka Co., ACR; 5-3 Winona Co., GD and Cottonwood Co., LAF; 5-6 Anoka Co., WHL and Crow Wing Co., MSB.

**Magnolia Warbler:** early 5-2 Hennepin Co., FN/MAS; 5-5 Washington Co., WHL; 5-11 Wright Co., EC, Ramsey Co., BL, Stevens Co., JAH, Kanabec Co., RHJ, Stearns Co., RPR and Washington Co., WHL.

**Cape May Warbler:** early 5-11 Hennepin Co., MEH and Washington Co., WHL; 5-13 Goodhue Co., MIG, Hennepin Co., TKS and Kanabec Co., RHJ; 5-14 Goodhue Co., HFH, EMB.

**Black-throated Blue Warbler:** 5-16 Hennepin Co., FN/MAS; 5-26 Duluth, RL;

5-28 Cook Co., RBJ, JCG; 5-29 Cook Co., EMB; 6-2 Clearwater Co., Lake Itasca, RPR.

**Myrtle Warbler:** early 3-31 Hennepin Co., HFH; 4-5 Hennepin Co., EMB; 4-8 Scott Co., RBJ; 4-9 Cook Co., MOP.

**Black-throated Green Warbler:** early 4-29 Hennepin Co., EMB; 5-10 Hennepin Co., RDT and Morrison Co., LSR; 5-11 Anoka Co., PE, Washington Co., WHL and Hennepin Co., VL.

**Cerulean Warbler:** early 5-17 Rice Co., OAR; 5-18 Goodhue Co., EWJ; 5-19 Stearns Co., RPR.

**Blackburnian Warbler:** early 5-10 Rice Co., OAR and Olmsted Co., CMJ, JPF; 5-12 Hennepin Co., VL; 5-13 Ramsey Co., ACR and Jackson Co., HSH; 5-16 Hennepin Co., FN/MAS.

**Chestnut-sided Warbler:** early 5-2 Hennepin Co., FN/MAS; 5-11 Hennepin Co., DB; 5-12 Winona Co., FV/HVBC; 5-13 Jackson Co., BL.

**Bay-breasted Warbler:** early 5-18 Washington Co., DH; 5-20 Goodhue Co., EMB and Pine Co., MIG; 5-21 Hennepin Co., HFH.

**Blackpoll Warbler:** early 4-30 Washington Co., WWL; 5-5 Morrison Co., LSR; 5-7 Washington Co., WWL; 5-8 Hennepin Co., DB; late 5-27 Washington Co., DS, Hennepin Co., TKS and Stearns Co., RPR; 5-28 Hennepin Co., DB; 5-29 Kanabec Co., RHJ and Washington Co., WHL.

**Pine Warbler:** early 4-25 Washington Co., JO; 4-26, Duluth, JCG; 4-27 Hennepin Co., RDT; 5-2 Washington Co., WWL; 5-5 Ramsey Co., ACR.

**Palm Warbler:** early 4-29 Wabasha Co., HFH; 4-30 Hennepin Co., JAJ, Fillmore Co., EHH, Goodhue Co., EMB, Morrison Co., LSR, and Washington Co., WWL.

**Ovenbird:** early 5-4 Winona Co., FV/HVBC; 5-6 Hennepin Co., JAJ; 5-10 Olmsted Co., CMJ, JPF, Rice Co., OAR, Hennepin Co., MEH, Winona Co., GD, and Stevens Co., JAH.

**Northern Waterthrush:** early 4-29 Winona Co., RBJ; 4-30 Fillmore Co., EHH

and Olmsted Co., CMJ, JPF; 5-2 Washington Co., WWL.

**Louisiana Waterthrush:** 5-10 Hennepin Co., DB, EHH; 5-12 Hennepin Co., RDT; 5-12 Ramsey Co., ACR; 5-13 Ramsey Co., RJC; 5-15 Washington Co., WHL; 5-18 Hennepin Co., EWJ; 5-20 Ramsey Co., RJC.

**Connecticut Warbler:** 5-21 Hennepin Co., JAJ and Washington Co., WWL; 5-22 Hennepin Co., DB; 5-23 Hennepin Co., FN/MAS; 5-25 Hennepin Co., RDT.

**Mourning Warbler:** early 5-13 Jackson Co., HSH; 5-18 Stevens Co., JAH; 5-20 Stearns Co., RPR and St. Louis Co., NJH.

**Yellowthroat:** early 4-10 Hennepin Co., MEH; next 5-1 Washington Co., WWL; 5-9 Nobles Co., HSH; 5-10 Stevens Co., JAH, Hennepin Co., DB, Olmsted Co., JPF, CMJ, Ramsey Co., RJC and Carver Co., VL.

**Wilson's Warbler:** early 4-30 Olmsted Co., CMJ, JPF; 5-10 Hennepin Co., RDT and Morrison Co., LSR; 5-11 Ramsey Co., BL, Wright Co., EC and Anoka Co., PE.

**Canada Warbler:** 5-16 Hennepin Co., FN/MAS; 5-18 Goodhue Co., EWJ; 5-20 Goodhue Co., EMB, VL; 5-21 Washington Co., WWL, DS, DH, Winona Co., FV/HVBC, Hennepin Co., MHM, RDT, Ramsey Co., RJC, Sherburne Co., JAH and Olmsted Co., CMJ, JPF.

**American Redstart:** early 5-10 Hennepin Co., VL, EMB, Morrison Co., LSR, Olmsted Co., CMJ, JPF, Washington Co., WWL and Ramsey Co., RJC; 5-11 Wright Co., EC, Stearns Co., RPR, Cottonwood Co., LAF and Rice Co., OAR.

**Bobolink:** early 5-6 Jackson Co., EHH; 5-7 Jackson Co., RBJ; 5-10 Carver Co., VL and Kanabec Co., RHJ.

**Eastern Meadowlark:** early 3-11 Blue Earth Co., EDK and Cottonwood Co., LAF; 3-12 Dakota Co., EMB; 3-19 Olmsted Co., MHM.

**Western Meadowlark:** early 3-4 Nobles Co., HSH; 3-12 Wright Co., EC; 3-16 Stevens Co., JAH.

**Yellow-headed Blackbird:** early 4-1 Nicollet Co., DB; 4-5 Wabasha Co., DGM; 4-8 Hennepin Co., FN/MAS, Lac Qui Parle Co., JAH and Marshall Co., AWR.

**Red-winged Blackbird:** early 3-5 Hennepin Co., RBJ; 3-8 Washington Co., 60, WWL; 3-9 Nobles Co., 12, HSH.

**Orchard Oriole:** 5-13 Rock Co., HSH; 5-17 Winona Co., GD; 5-21 Ramsey Co., RJC; 5-30 Wabasha Co., DB.

**Baltimore Oriole:** early 5-1 Winona Co., GD; 5-6 Wabasha Co., DGM; 5-8 Winona Co., FV/HVBC; 5-9 Hennepin Co., FN/MAS.

**Rusty Blackbird:** early 3-13 Lac Qui Parle Co., 45, JAH; 3-15 Nobles Co., hundreds, HSH; 3-21 Hennepin Co., 6, VL; late 5-12 St. Louis Co., MMP; 5-13 St. Paul, RJC; 5-20 Beltrami Co., MG; 5-31 Lake Co., VF.

**Brewer's Blackbird:** early 3-24 Wahpeton-Breckenridge area, *vide* EGA; 3-25 Washington Co., DS; 3-26 Goodhue Co., EMB.

**Common Grackle:** early 3-1 Dakota Co., EMB; 3-8 Stevens Co., JAH; by 3-24 hundreds were reported by many observers.

**Brown-headed Cowbird:** early 3-28 Goodhue Co., ACR; 3-31 Washington Co., JO; 4-2 Dakota Co., EMB; 4-3 Hennepin Co., RBJ.

**WESTERN TANAGER:** 5-19 to 5-25 Duluth, feeder of AKA; photographed by JCG 5-22.

**Scarlet Tanager:** early 5-7 Blue Earth Co., EDK; 5-15 Goodhue Co., FN/MAS; 5-15 Cottonwood Co., LAF; 5-19 Lake Co., VF.

**Rose-breasted Grosbeak:** early 5-1 Winona Co., GD; 5-4 Hennepin Co., MEH; 5-6 Hennepin Co., FN/MAS; 5-7 Wright Co., EC.

**Indigo Bunting:** early 5-8 Winona Co., FDG; 5-10 Cottonwood Co., LAF; 5-14 Goodhue Co., HFH; 5-15 Hennepin Co., MEH.

**Dickcissel:** early 5-2 to 5-5, Duluth, JCG; 5-9 Olmsted Co., JPF, CMJ; 5-11 Nobles Co., HSH; 5-16 Hennepin and Carver

Co.'s, FN/MAS; 5-18 Goodhue Co., EWJ.

**Evening Grosbeak:** usual northerly reports; only March records away from coniferous zone: 3-2 Clay Co., LWJ and 3-24 Fargo *vide* EGA; only April record away from northeast: 4-11 Morrison Co., LSR; latest record south of breeding range was 5-31 Crow Wing Co., MSB.

**Pine Grosbeak:** latest 3-16 Cook Co., 4, LC; 3-18 Lake Co., RK.

**Hoary Redpoll:** 3-4 Lake Co., EHH; 3-4 Cass Co., JAM; 3-11 Lake Co., RK; 3-11 Cass Co., JAM; 3-13 to 3-20 Cook Co., MOP; 3-25 Itasca Co., BL; 3-28 Carver Co., VL; 4-23 Roseau Co., PEB.

**Common Redpoll:** latest 4-2 Lake Co., VF and Cook Co., MOP; 4-11 Crow Wing Co., MSB; 4-16 St. Louis Co., MMP.

**Red Crossbill:** reported in March from Hennepin, Stearns, Clay, Marshall, Cass, St. Louis, Beltrami and Kanabec Co.'s; reported in April from Hennepin, Cass and Stearns Co.'s; reported in May from Pine, Cass, St. Louis and Cook Co.'s. (See Notes of Interest)

**White-winged Crossbill:** only report 3-26 Fargo-Moorhead, 1, *vide* EGA.

**Rufous-sided Towhee:** early 3-30 Fargo-Moorhead, 1, *vide* EGA; next record 4-27 Hennepin Co., FN/MAS and Winona Co., FV/HVBC; 4-28 Hennepin Co., EMB; 4-29 Wabasha Co., RBJ; 4-30 Fillmore Co., EHH.

**Savannah Sparrow:** early 4-9 Nobles Co., HSH; 4-14 Stearns Co., RPR; 4-15 Nobles Co., DB; 4-18 Lac Qui Parle Co., JAH.

**Grasshopper Sparrow:** early 4-27 Hennepin Co., FN/MAS; 4-29 Wabasha Co., RBJ; 4-30 Winona Co., FGD, KK.

**BAIRD'S SPARROW:** 4-26 Warroad, Roseau Co., 3, PEB, very good details.

**LeConte's Sparrow:** 5-6, Cook Co., MOP, excellent details; 5-7 Jackson Co., RBJ and Duluth, BB; 5-12 Marshall Co., AWR.

**Henslow's Sparrow:** 5-26 Winona Co., GD.

**Sharp-tailed Sparrow:** 5-27 Becker and Mahnomen Co's., 3, JAH.

**Vesper Sparrow:** early 3-31 Stevens Co., JAH and Aitkin Co., CEP; 4-1 Renville Co., HFH; 4-4 Washington Co., DH; 4-5 Stearns Co., RPR.

**Lark Sparrow:** early 4-4 Hennepin Co., FN/MAS; 4-5(1), 5-13(2) Cook Co., MOP, excellent details; 4-14 Stearns Co., RPR.

**Slate-colored Junco:** latest in south, 5-6 Dakota Co., EST; 5-9 Dakota Co., FN/MAS; 5-10 Carver Co., FN/MAS; 5-22 Dakota Co., MRL.

**Oregon Junco:** reported in March from Wright, Kanabec, Stevens, Hennepin Carver and Washington Co's.; reported in April from Hennepin, Stearns, Marshall, Lake, Aitkin and Washington Co's.; reported in May only from Beltrami Co., MG.

**Tree Sparrow:** latest 5-15 St. Louis Co., MMP; 5-20 Cook Co., MOP; 5-22 Lake Co., RK; 5-27 Duluth, RBJ.

**Chipping Sparrow:** early 3-25 Ramsey Co., 4, RJC; 4-3 Cottonwood Co., LAF; 4-7 Lake Co., VF; 4-8 Carver Co., DB and Pope Co., WH.

**Clay-colored Sparrow:** early 5-3 Hennepin Co., PE and Lake Co., VF; 5-4 Dakota Co., DB and Washington Co., BL; 5-5 Dakota Co., MRL.

**Field Sparrow:** early, "March" Wabasha Co., DGM; 4-1 Hennepin Co., RBJ; 4-2 Hennepin Co., EMB and Cottonwood Co., LAF; 4-4 Rice Co., OAR and Washington Co., JO.

**Harris' Sparrow:** early 4-29 Traverse Co., DB and Roseau Co., PEB; 5-3 Stevens Co., JAH; 5-5 Winona Co., FN/MAS; 5-6 Lyon Co., PE; late 5-26 Washington Co., DS; 5-27 Lake Co., RK; 5-28 Beltrami Co., MG; 5-30 Lake Co., VF.

**White-crowned Sparrow:** early 4-16 Dakota Co., MRL; 4-17 Washington Co., WWL; 4-23 Lake Co., VF; late 5-24 Lake Co., RK; 5-25 Cook Co., MOP and Beltrami Co., MG; 5-31 Lake Co., VF.

**White-throated Sparrow:** early, "March"

Hennepin Co., MEH; 3-31 Hennepin Co., VL; 4-2 Hennepin Co., EMB; 4-2 St. Louis Co., MMP; 4-7 Hennepin Co., VL.

**Fox Sparrow:** early 3-24 Rice Co., OAR and Hennepin Co., MHM; 3-25 Hennepin Co., VL; 3-26 Dakota Co., EMB and Olmsted Co., JPF, CMJ; late 5-10 Stevens Co., JAH; 5-11 Stearns Co., RPR; 5-20 Lake Co., VF.

**Lincoln's Sparrow:** early 3-30 Hennepin Co., VL, EST; 3-31 Clay Co., LWJ; 4-7 Washington Co., DH; next 4-24 Hennepin Co., MHM; 4-29 Wabasha Co., HFH.

**Swamp Sparrow:** early 3-28 Goodhue Co., ACR; 3-31 Olmsted Co., 10, JPF, CMJ; 4-1 Hennepin Co., EHH; 4-2 Hennepin Co., JAJ; 4-3 Washington Co., WHL.

**Song Sparrow:** early 3-6 Nobles Co., HSH (overwintering?); next 3-24 Rice Co., OAR; 3-25 Ramsey Co., RJC; 3-26 Dakota Co., 40, EMB.

**Lapland Longspur:** latest 4-21 Lake Co., RK; 4-25 Traverse Co., JAH; 5-2 to 5-12 Cook Co., MOP.

**Chestnut-collared Longspur:** 5-20 Clay Co., DB.

**Snow Bunting:** latest 5-9 Lake Co., RK and Marshall Co., AWR; 5-12 Stearns Co., RPR; 5-19 Cook Co., MOP.

**SUMMARY:** Approximately 92 observers rallied through an unusually cold spring to record 292 species. While it is expected that something unusual will show up every Spring, this year was especially rewarding with the Cattle Egret, Little Blue Heron, Glossy Ibis, Cinnamon Teal, Barrow's Goldeneye, Red-shafted Flicker, Mountain Bluebird, Worm-eating Warbler and Western Tanager. Perhaps equally astonishing were some of the extremely early dates; so early in fact, that in certain instances I omitted them from this report until further details can be had. The April 1 Long-billed Marsh Wren listed above should be supported by details, this is one month ahead of normal.

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## MANITOBA CHECK-LIST

A new revised edition of the Check-List of Birds of Manitoba has been released.

Compiled by Dr. R. W. Nero of the Manitoba Museum of Man and Nature, and Harold Hosford, Conservation Education Officer with the Manitoba Government, the list includes 271 species regularly observed in the Province as well as 26 casuals. This is a preliminary list. A complete list will be published later when the status of about 30 more species has been clarified.

Copies of the Check-List may be obtained free of Charge from the:

Conservation Education Section,  
Room 1000 Norquay Building,  
Winnipeg 1, Manitoba.

The coolest May since 1907 was followed by the dulllest June in nine years, with only 223.6 hours of bright sunshine compared to the previous 8-year average of 276.2 hours. Sunshine records have been kept only since 1958. Rainfall was about average and so was the mean temperature of 57.1 degrees. No frost was reported during June, the last official spring frost being on May 25th. July temperatures were below normal, with a mean of 61.7 degrees. July 21 was the warmest day with a high of 85. The first half of the month was dry and the months total of 2.05 inches was 75 per cent of normal. No days were completely sunless. The winds were more from the West than other directions and thunderstorms occurred on eight days. August has been wet and cool, with a killing frost on the 23rd.

Despite the hesitant spring, with the warmth of June the flowering plants bloomed about normal times by June 15th. Wild callas and cottongrass were in flower near Kenora June 7 and ten days later Gay-wings were bright on the flats of Paipoonge. The first week of August Crown Vetch sweetened the air near Mokomon — this advent has spread rapidly during the past two years. The ripening fruits of Pin Cherries, Choke Cherries, Saskatoons (*Amelanchier*) and High Bush Cranberry add colour to woodland paths. The Mountain Ash are gay with red berries. An excellent crop awaits the migrants and winter residents. Only the Blueberry crop seems spotty.

Fungi may not attract many birds but they add to the attraction of fields and woodlands. An evening walk at Shebandowan Lake to view a new site for alum-root gave Tom Perrons an opportunity to show many species of *Amanita*, *Boletus*, *Cantharellus*, and *Russula*. Clusters of *Clavaria pistillarlis* were popping out of

the soil. Later we ate *Pholiota caperata*, the Gypsy mushroom. The damp weather has produced a bountiful crop.

Our Centennial summer did not present many surprises. The avian population was about the usual level, if bird song is a good indication. New and rare species have not been reported and the nesting records do not indicate any additions to our breeding species. Brewer's Blackbirds and Cliff Swallows continue to increase and occupy new nesting sites. Pintails were not seen in the local harbour during the summer and Chimney Swifts have not been reported to date, possibly because of reconstruction of some of their customary homes.

Yellowlegs are often present in July and two Greater Yellowlegs were seen July 28th. The first hint of the autumn migration came with the cold Arctic air that invaded the area August 23rd. Flocks of warblers were reported, many the "confusing fall warblers" so difficult to identify. A great flight of Common Nighthawks was noted flying south-west in a line from Lakehead University at 3:00 p.m. to Fort William where Sinclair Robb saw approximately 300 an hour later, and past the airport where Dorothy Smith saw many about half an hour afterwards. Mrs. Knowles noted them in Paipoonge Township in the evening.

**LOONS AND GREBES:** Common Loons have been common, despite the numbers that were caught in fishermen's nets during the spring. Pied-billed and Red-necked Grebes have been reported.

**CORMORANTS TO BITTERNS:** Double-crested Cormorants appear to have left Thunder Bay but have been reported along the shore eastward. The colonies of Great Blue Herons continued to flourish.

**SWANS TO MERGANSERS:** Swans were not reported this summer but seven

Canada Geese remained on a beach throughout the breeding season. No young were seen. Mallards and Black Ducks were nesting by May 5th. The Blacks appear to have had a good breeding season and many flocks of 5 to 6 have been seen across Northwestern Ontario. Common Goldeneyes have been successful in raising their young. Fewer Blue-winged Teal were reported with broods. Red-breasted Mergansers and Common Mergansers are in the usual numbers.

**VULTURES, EAGLES AND HAWKS:** Only one summer record of a Turkey Vulture, observed near Whitefish Lake, has been received. Bald Eagles have been reported at Sibley, Lake Nipigon, and Quetico Park. Pigeon Hawks may have increased in numbers and D. H. Elder found a nest at Geraldton. On June 23 a female Sparrow Hawk was carrying food to a nest hole in a Balm of Gilead on a Paipoonge farm. Sparrow Hawks are the most commonly seen hawk in the Lakehead area. Several Broad-winged Hawks are present but few Marsh Hawks have been seen recently.

**GROUSE TO COOTS:** Many large broods of Ruffed Grouse have been reported from the Geraldton area and Walter Rosser saw a female trying to keep an eye on 10 young chicks near Loon Lake on July 12. Numerous coveys, smaller in numbers, are to be found in the mixed woods west and south.

**PLOVERS TO TERNS:** Killdeer have had a successful summer and their calls are common. Young Spotted Sandpipers hatched about mid-June and were scrambling over rock shores on Lake Superior and the inland waters. The outstanding breeding record was made on June 24th at Loon Lake when the Rossers identified a Solitary Sandpiper with one young. Herring Gulls follow the fishing boats and often nest near a potential food supply. Tom Dyke saw many young swimming near Silver Islet on July 19th.

**DOVES TO KINGFISHERS:** Mourning Doves, scarce locally, appear to have increased near Rainy River. A Long-eared Owl, victim of a motor car accident, was found in Port Arthur by Mrs. R. Walker, on June 29th. Common Nighthawks were in their usual numbers but Whip-poor-wills are unusually scarce. Ruby-throated Hummingbirds were seen feeding young sitting on a wire fence by Mrs. G. Blake,

who also commented the species was very common this year. An unusual number have been reported this year. Mrs. R. Walker described how one female with two young chased House Sparrows away from where they were feeding. Despite the difference in size the sparrows retreated before the needle-like bill. Belted Kingfishers have nested in sand banks throughout the district.

**WOODPECKERS TO SWALLOWS:** Woodpeckers are raising large families and the Eastern Kingbird is a familiar sight. Tree Swallows are more numerous than noted in 1966 and Bank Swallows are making a come-back. Purple Martins nested in Dryden (Laura Howe) but not locally. Most of the flycatchers were scarce. The steadily spreading Cliff Swallow was seen as far north as Red Lake. Many are building on new sites on Lakehead farms. Tom Dyke reported nests falling from the eaves of buildings at Silver Islet and the same thing happened in other places throughout the district. The destruction of the young was mentioned. No one could recall high winds or other unusual occurrences that could have caused the nests to fall.

**JAYS TO WRENS:** The first nesting record for 1967 came to light when Max Selgrad brought the nest of a "Canada" or Gray Jay to me — the two young had died when the tree was felled by pulpwood cutters on April 10. The nest is now in Lakehead University. Immature jays were noted in early summer. Mrs. W. Knowles saw adult Common Ravens carrying twigs on February 27 and on May 28 found the nest with two young ready to leave in a jackpine in Paipoonge Township. Common Crows survive despite their many enemies. Wrens are present but in reduced numbers.

**THRUSHES TO STARLINGS:** Robins have raised two broods this year and a nest with two almost naked young were seen in Keewatin August 2. Unusual was the instance of a female Robin sitting on two eggs which were on the ground, without any sign of a nest, and in the open near a railway track, discovered by my son Robert who took me to the location. The eggs were gone on June 9, a week later.

An immature Ruby-crowned Kinglet was obtained after it hit a window at Loon Lake on July 28. Eastern Blue-

birds are scarce but some nested successfully in Paipoonge Township. Mrs. M. Cryer reported the unsuccessful nesting attempt of a Veery which laid its first egg June 12 and the fourth June 18th. Murray Kyle also found a nest of this species. Starlings are on the increase in the country.

**VIREOS AND WARBLERS:** Mrs. R. Walker found a Red-eyed Vireo nest occupied on July 28. Marion Smith watched a Yellow Warbler sitting on a nest June 28. Murray Kyle found a American Redstart nest June 11. Myrtle Warblers successfully nested in Centennial Park, Port Arthur. A large movement of warblers was noted between August 23 and 27th. Mrs. G. Blake saw many Tennessee and one Orange-crowned Warbler, Blackburnian, Black-throated Green, Black-throated Blue, and one Palm Warbler were observed in the southerly moving wave.

**BOBOLINKS TO SPARROWS:** Bobolinks were in the usual places. A Yellow-headed Blackbird was seen in the Geraldton area. Red-winged Blackbirds were not as common as last year. Cowbirds have been very plentiful. Many male Evening Grosbeaks were seen during the summer but no females. Chipping, White-throated and Song Sparrows were present in the customary numbers.

A partially flooded gravel pit was visited August 27. In one slough were 26 Black Ducks, many Killdeer, and a mixed flock of shorebirds including, Greater and Lesser Yellowlegs; Baird's, Semipalmated and Least Sandpipers; a Semipalmated Plover and one Northern Phalarope. Cedar Waxwings were catching insects in the air. The returning 'peeps' and the flocks of 'blackbirds' and Common Crows were nature's evidence that summer was past. *317 Morse St., Port Arthur, Ontario.*

## Notes of Interest

**Hoary Redpoll Identification** — On March 16, 1967 in Bemidji we trapped what appeared to be a Hoary Redpoll. After checking several references we found there seems to be some confusion over separating this species from the Common Redpoll. It was a windy, slowly clearing morning with much blowing snow. About ½ inch of snow had fallen the previous night which caused the early morning catch to be a bit heavier than usual due to food being covered.

This redpoll had pure white undertail coverts as described in the 1964 Workshop Manual Vol. III of the Eastern Bird Banding Association in an article by E. Alexander Bergstrom entitled *Ageing and Sexing Some Winter Finches*. He indicates the best identification mark is the lack of streaks on the under tail coverts of the Hoary Redpoll with the absence of streaks on the rump being less decisive. On the other hand, Roberts (*Birds of Minnesota*) and Peterson (*Field Guide to the Birds*) both consider the absence of streaks on the rump as being the important characteristic of the Hoary Redpoll. Our specimen had some dark markings on the rump, but much less than a typical Common Redpoll. The over-all appearance was much lighter or whitish than the typical Common Redpoll. There was a wash of rose across the breast and on the molar area of the head. The auriculars were buffy. There were fewer streaks on the sides when compared to a Common Redpoll. All evidence considered, we decided we had at last trapped a Hoary Redpoll. *Mr. and Mrs. John Mathisen, 2317 Park, Bemidji, Minnesota.*

**Results of Bald Eagle - Osprey Aerial nest search** — Another effort was made to locate Bald Eagle and Osprey nests from aircraft in cooperation with the Bureau of Sport Fisheries and Wildlife during the week of March 13 through 17, 1967. Glen Orton, U.S. Game Agent, was the pilot of the Cessna 180 owned by the Bureau.

The north half of the Chippewa National Forest was given special attention because of a relative lack of nest records for this area. Very little of this area was searched last year. However, parts of all Ranger Districts were searched for nests during the week. Most effort was placed along shorelines of lakes and streams. Approximately 13 hours flying time was utilized in the search.

The survey was again very successful with a total of 46 additional nests being located (26 Bald Eagle nests, 20 Osprey nests). The find rate was 3½ nests per hour of flying time, which was somewhat better than last year. A greater proportion were Osprey nests, compared to last year.

This brings the total number of known Bald Eagle nests on the Chippewa to 142, and total Osprey nests to 49. *John E. Mathisen, Wildlife Biologist, March 20, 1967*

**Townsend's Solitaire at Virginia** — On Wednesday evening, March 15, 1967, about 5:30 p.m., while en route home from work, I was stopped by the unusually melodic song of a bird perched high in a boulevard elm near my home in Virginia. The all-over gray color of the bird, the long and well-delineated tail, and the dark and relatively narrow beak — which ruled out a grosbeak — indicated a bird different than our customary winter birds. As I watched, the bird continued its delightful singing, then flew into the air and alighted on another branch directly above me. As it fanned its tail to alight on the new branch, white edging was visible along the tail. The wings appeared slightly darker than the remainder of the body but I could observe no distinctive wing markings. Without binoculars, and because of its height in the tree, I was unable to see if the bird had an eye ring. I was unable to find any drawings or pictures in Peterson's guide matching the bird I had seen and asked help of Miss Vera Barrows. She suggested Townsend's Solitaire. The new National Geographic bird book has a natural color picture which compares almost exactly with the bird I saw. On Friday morning, March 17, at approximately 6:15 a.m., atop a house about a third of a block down the avenue from where I had previously observed the bird, I saw it again, listened to its song, and noted in the sunlight a rusty tinge to the wings. Miss Barrows scouted the area the following morning but unsuccessfully and the bird has not been seen since. *Everett C. Blomgren, 517 5th Avenue S., Virginia, Minnesota.*

**Barrows' Goldeneyes in Twin Cities area** — I saw the first Barrow's Goldeneye on January 30, 1967 at the high bridge plant of the Northern States Power Company on the Mississippi River in St. Paul, after R. L. Huber mentioned that members of the Minneapolis Audubon Society had seen it again this year. The viewing conditions were not the best because of steam on the river; but the distinct coloration, head shape and markings were clear enough at forty yards for both my brother, Roger, and I to assure ourselves that this was a male Barrows' Goldeneye.

On February 11, while birding by myself at the N.S.P. Black Dog plant, I thought I saw another Barrows' — but the bird flew when I tried to move closer. I assumed that this might have been the same bird that I had previously seen in St. Paul, moving from one location to another. However, on February 26, as my brother and I were returning from a trip to Goodhue County, we decided to review the resident ducks at Black Dog. Among the hundreds of Mallards and approximately 100-125 Common Goldeneyes, two male Barrow's Goldeneyes were quite distinctive. Slightly separated from the other Goldeneyes and with one dark female, they were well within good viewing range at 35 yards, in clear and bright sunshine. All characteristics were noted for about fifteen minutes of excellent viewing.

Noted were the dark flanks and the marking on the body extending to the water line and the different shape of the head, sloped lower to the posterior and pitched more steeply to the anterior. The purplish sheen on the heads of both birds was an excellent comparison with the green on the heads of the adjacent Common Goldeneyes. One male had the cheek patch of a very definite crescent shape, while the other male Barrows' bore a cheek mark not so distinctly crescent, and much narrower.

The one female (associated constantly with the male Barrows' having the narrower, less-than-crescent-shaped cheek patch) was dark, with no markings of white on the body. They flew together when we frightened the birds to check the wing markings. No conclusions were made about the flight patterns.

Such an opportunity for observation and direct comparison possibilities under

ideal conditions make both my brother and I positive that we observed two male Barrows' Goldeneyes and possibly one female. I believe this may be the only multiple sighting I know of in the state. On March 1 I returned to Black Dog; but only a few Common Goldeneyes were present. *E. Manson Brackney, 5025 12th Avenue S., Minneapolis, Minnesota.*

**Wintering Fox Sparrow** — A single Fox Sparrow remained at the feeder of Mr. and Mrs. Ed Harms during the past winter. I first observed the bird on December 26, 1966 after it had been reported at the feeder since the middle of November. Mrs. Harms felt the bird first appeared on November 14, it was difficult to determine the exact date because of migrant birds in the area. I last saw the bird on February 4, 1967, when it appeared to be in good condition. Mrs. Harms stated the bird remained around their feeding station until at least March 27, 1967. On that date three Fox Sparrows were seen around the feeder. Fox Sparrows, up to 10 in number, were seen in the area until April 18, 1967. *Robert B. Janssen, 1817 W. 59th Street, Minneapolis, Minnesota.*

**Wintering Snow Goose** — There are few winter records for the Snow Goose in Minnesota. It has been reported wintering with the flock of Canada Geese on Silver Lake at Rochester, Olmsted County, but only on rare occasions. This is the only place in the state where winter records have been recorded until the past winter when a single bird was reported from an open water area around the power plant at Virginia, St. Louis County. On January 29, 1967, George Rysgaard and I observed and photographed this bird along with other wintering waterfowl at the above location. The bird, an immature, appeared to be in good condition and was able to fly (we flushed it several times). Other wintering waterfowl on the open water included about 50 Mallards, a few Black Ducks, two Wood Ducks, one Canada Goose and a sub-adult Harlequin Duck. It is not known how long the Snow Goose remained in the area but it was seen by other observers into the month of February. *Robert B. Janssen, 1817 W. 59th Street, Minneapolis, Minnesota.*

**Gyr Falcon in Roseau County** — On Wednesday, December 7, 1966, a female, gray phase Gyr Falcon was caught in a funnel-type Sharp-tailed Grouse trap about ten miles southwest of Warroad, Minnesota. The bird was a "haggard", probably about three years old. It is apparently unusual for such an older bird to migrate as far south as this. I was awaiting word from Bob Widmeier of Duluth as to records of previous Gyr Falcon captures in this state (through Jim Ruos) but have not heard anything as yet. *Paul E. Bremer, Grouse Research Project, Warroad, Minnesota 56763.*

**Winter Mockingbird** — I observed the Mockingbird every day from November 27, 1966 to January 12, 1967 at Randall, Morrison County, Minnesota. Every day he came on the window sill feeder several times and was eating and resting for quite long periods. He was just on the other side of the window from me. I had ample opportunity to observe him close-up. I didn't know what kind of bird it was but identified him by using Peterson's "Field Guide" and "Song and Garden Birds" by National Geographic. I used the books while the bird was in view. On the window sill feeder he looked exactly like the picture in Peterson and when flying just like the picture in the National Geographic book. He was shaped like a Brown Thrasher. His back was gray and breast pale gray. He had white wing-bars and a long tail. When he flew he had large white wing patches and white feathers at the sides of the tail. I didn't know Mockingbirds came to Minnesota but then I read in the National Geographic book that they do occasionally come this far North. Many people who came here saw the bird but the only ones who had seen one before were Mr. and Mrs. August Schwanke of Randall who had seen Mockingbirds in Tennessee and recognized it. I kept notes in my diary, and the history of the observation is as follows:

"November 27, we saw a strange bird eating some old marischino cherries I had

put out on the feeders several days before. He also found a few frozen crab apples clinging to the trees and ate them. He also ate sumac berries. November 28, I identified him from the bird books. I opened the window and played the Mocking-bird song record. He flew into a spruce tree at dusk. The full moon was just rising and he sang just a little. November 29, when he was on the window sill feeder I played the record of his song again. He kept flying against the window at his own reflection. He kept this up for a long time but finally gave it up. That night he sang a little more from the spruce but after that I didn't hear him sing any more. I chopped up meat and fruit for him every day. January 12 he was gone." *Hildur Dalquist, Randall, Minnesota.*

**Minnesota's first European Goldfinch—escaped or wild?**—Spring had taken a turn for the worse in the Twin City area beginning on April 21, 1967 when the winds shifted to the north and the temperature began to fall. Light snow fell on the 22nd and the temperature stood at 25 degrees at 6:00 A.M. with 30-40 MPH winds out of the north. The 23rd and the 24th weren't much better except the temperature rose slightly and the skies cleared but the north winds continued to blow. On the 23rd I received a call from Mrs. M. D. Madden of 2441 Youngman Avenue, St. Paul, stating that she had a European Goldfinch at her feeder. It had appeared in the morning and spent the day at or around the feeder. It wasn't until 4:00 P.M. on the 24th that I was able to get over to Mrs. Madden's to investigate. When I arrived the bird was not at the feeder, which was placed on a balcony outside of a doorway at her second floor apartment. After a 20 minute wait the bird came flying into the feeder. The following is a description of the bird taken from notes written down at the time of observation: Size—slightly larger than an American Goldfinch, bill—white, face—dull red, the red extending below the bill, area behind eye—a dirty gray, which also extended below the bill but was interrupted by the red of the face, top of the head—dark black, breast—dull yellowish brown streaked with dark brown, belly—whitish brown, back—brown with dark brown streaks, wings—black with yellow stripe and white area toward back of wing, tail—dark with white area near tip, feet—pink, eye—dark. Voice was similar to the American Goldfinch but note was stronger and more extended. The bird was observed from a distance of 10 to 15 feet with the naked eye and nine power binoculars. The plumage was in excellent condition, the bill was not worn nor were the nails on the toes long. I assumed the bird to be in a sub-adult plumage. The bird fed with Robins, American Goldfinchs, Downy Woodpeckers and Black-capped Chickadees. Mrs. Madden reported that the bird remained at her feeder for about a week and then disappeared. During its stay it spent the night in a wooded area along the Mississippi River just across the street from the apartment. Mrs. Madden, who has kept caged birds for years, stated that she felt this was a wild bird and did not act like her caged birds. From all my observations it certainly appeared to be a wild bird. There is, of course, the possibility with such a rare species as this, that it was an escaped cage bird. It is established only on Long Island (1957 AOU Check-List) but it is known to wander and small colonies have existed in the Chicago area (Brother Theodore) so who knows the answer to this mysterious bird? *Robert B. Janssen, 1817 W. 59th Street, Minneapolis, Minnesota.*

**Possible Little Blue Heron sighting**—The first sighting was as the two herons were flying towards us. The white bird was in front and the dark bird behind. At this distance with no binoculars, it appeared to be a Common Crow chasing a gull. This appearing odd, I checked with binoculars to see that the dark bird was a heron. Following this dark bird with the binoculars, they came closer and closer and finally landed in the very top of a pine tree only 100 feet from us. My first impression as I viewed the dark bird was that I had the Green Heron. As I observed the bird I saw the feet to be a dark color and not yellow like our green heron. I then moved the binoculars to the next tree and here I saw the other heron. This bird was almost all white with dark feet and the wings showed a small amount of dark coloration. In the sighting I do not remember the color of the bill of the

birds. At this point, the birds took flight and made a large circle about 1 mile in diameter and landed in the same trees as before. Just as they landed a car came by and they took flight again, never to be seen again.

Summary of the birds:

The dark heron:

- a. Slightly larger appearing than our Green Heron.
- b. Reddish-brownish head color running down the neck into the body.
- c. Dark slate gray body, wings the same.
- d. Dark feet.

The light heron:

- a. Same size as the other bird.
- b. Almost all white except from some dark coloration on the wing area, visible when sitting in the tree, appeared all white in flight.
- c. Dark feet.

The above record is taken from my wildlife diary recorded the day I saw these birds, April 18, 1967 at Winona, Winona County. *W. J. Draskowski, 866 Gilmore Avenue, Winona, Minnesota.*

**Red Crossbill nesting at Moorhead** — My first observation was made March 31, 1967 at which time I saw the male feeding the female, but could not be certain he was also feeding young. I watched these birds from one to two hours a day during the month of April, excepting for the 7th, 8th and 12th, until the evening of April 20 and at no time did the parents or young seem suspicious of me.

The first few days the male flew in from either the northeasterly or southwesterly direction, flying off in either direction. After that the parents flew directly southwest, returning from that direction. They announced their arrival with sharp metallic notes. It was most interesting to see transfer of hulled sunflower seeds to young.

The many hours spent in almost daily observation might appear to be a tiresome chore but, rather, it developed into a very interesting involvement in the several stages of development, each stage being longer than that of the Song Sparrow as described by Nice (1943).

I have picked the following dates for their significance:

- 4/1 Male fed female and 3 gaping young, red mouths and fluffy down noticeable.

Motor response of shaking and defecation.

- 4/5 Female left nest twice for five minutes.

- 4/9 Female left nest not returning for 1 hr. and 10 min. and didn't feed fledglings; made fed them twice during this time.

Exploratory pecking.

Wiping of bills.

- 4/11 Watched young, now quite large, 25 minutes.

Standing, preening, stretching.

Appeared to have their feathers, remains of fluff sticking up.

One young seemed somewhat larger; stuck its long red tongue out constantly.

All young chirped, especially when time between feedings lengthened.

- 4/12 Female couldn't cover all three young now; heads were popping up around her.

Fecal sacs hanging about nest.

- 4/13 Same performance as on 4/11.

Young adopting adult sleeping position; there no longer seemed room for them in nest.

Much moving about when female is absent.

Much strong wind and fog brought female back to brooding.

- 4/19 YOUNG OUT OF NEST.

5:00 P.M.—saw one fledgling being fed by mother on limb of neighboring tree; then moved to crotch of limb shielded from strong wind.

Quite large, heavily streaked with dusky brown and grayish-white olive brown.

Bill not yet crossed.

Lighter line extending above and beyond eye.

4/20 7:45 - 9:45—Baby seen on the same limb as on 4/19.

Located another nestmate on limb of tree some distance away.

Watched male fly in and alight on tree near first baby, baby chirping back at him. Male flew on limb near young but wouldn't feed it. Baby awkwardly climbed up limb to reach parent; parent flew short distance from branch to branch and twig to twig, baby following and finally fed.

I could clearly see transfer of hulled sunflower seeds.

Baby finally flew a considerable distance to another tree following mother. Great chirping both by parents and baby. Parents were frolicking, sometimes bumping into each other in their game of tag; lit on the ground and drank from a little pond; finally flew toward the southwest without paying any attention to the other young who hadn't uttered a chirp at any time. I never saw the third baby after it left the nest.

4/21 and 4/22, checked the area but couldn't find young or any sign of parents.

*Mrs. Leslie Welter, 124½ 4th Street N., Moorhead, Minnesota.*

**EDITOR'S NOTE:** The above information was contained in a letter received from Mrs. Welter. This represents the first documented nesting of the Red Crossbill in Minnesota. Many young have been observed but the nest has never been found till the above observation. It is my understanding that the nest was located on the Moorhead State College Campus in a tree situated next to one of the school buildings. We hope to have more details on exact nest location and construction.



**Albino Robin at Janesville** — An albino Robin was reared in the yard of Mr. and Mrs. Carl Arndt of Janesville, Waseca County during May 1967. The bird was reported to be a complete albino with pink eyes. The young Robin remained in the yard only a few days and was last seen on Sunday, June 4, 1967. The above photograph was taken by Ken Stepan of Janesville.

**White-faced Ibis at Heron Lake** — During the first week of May 1967 I heard via the "birdwatchers grapevine" that an ibis had been seen at the Herman Becker farm near Okabena, Jackson County on the shores of Heron Lake. On May 6, 1967 several members of the Avifaunal Club, including Brother Theodore, Harding and Ron Huber, Don Bolduc and Manse Brackney observed the bird under excellent weather conditions. A white area was noted at the base of the bill, the rest of the plumage was a rich brown. The bird was identified as a White-faced Ibis. It was found feeding in a large, shallow, grassy slough area on Mr. Becker's farm. On May 7, 1967 Bill Pieper and I journeyed to Heron Lake to see if the bird was still in the area. We were not allowed access to Mr. Becker's land but we did observe the bird from an adjoining farm as it flew into the slough. Since the White-faced Ibis nested at Heron Lake in the late 19th Century there have been few records of this species in Minnesota. In recent years there have been only two reports from the southern part of the state (*The Flicker*: 34:50). However the Heron Lake area should be watched for a re-occurrence of the nesting of this species in Minnesota. *Robert B. Janssen, 1817 W. 59th Street, Minneapolis, Minnesota.*

**Unusual Phalarope feeding** — On our annual excursion to Frog Lake and Salt Lake (May 13-14, 1967) we observed great numbers of phalarope. Most of them were Wilson's Phalaropes but at Salt Lake there also were a few Northern mixed in. None of us had ever observed the unusual behavior by several groups at Salt Lake — up to a dozen were clustered tightly around a pair of Shovelers who stirred up the water so the Phalarope did not need to spin, they merely picked at the food as fast as they could. The ducks paid absolutely no attention to the Phalaropes, but went about their feeding as usual. We wonder if other people have observed similar activity by other birds? *Jean McIntosh, Botany Dept., University of Minnesota, Minneapolis, Minnesota.*

**Cerulean Warblers Nesting in Mahnomen County** — As part of a study of the woodlands birds of northwestern Minnesota, a 20.7 acre plot in a maple-basswood stand in Mahnomen County has been censused during 1964, 1965, and 1966. This stand is located in the NW $\frac{1}{4}$  of the SW $\frac{1}{4}$  of section 17, R40W T143N, in Mahnomen County, and is one of the westernmost maple-basswood woods of the region. Cerulean Warblers have been present in this plot during all three breeding seasons, presumably for nesting purposes, although nests have never been located. This stand is situated approximately 100 miles northwest of Bay Lake, Crow Wing County, which is the most northerly location in Minnesota at which this species has so far been recorded (N. Roberts. 1966. Summer observations of Cerulean Warbler and Lincoln's Sparrow in Crow Wing County. *The Loon*, 38-142).

Cerulean Warblers may be extending their range northward (H. Ouellet. 1967. The distribution of the Cerulean Warbler in the Province of Quebec, Canada. *Auk*, 84:272-274). As the large tracts of mesic deciduous woods preferred by these warblers are rare north of Mahnomen and Clearwater Counties (R. Cunningham, A. Horn, D. Quinney, 1958. Minnesota's forest resources. USDA Forest Resource Report No. 13), opportunities for further expansion of the species' Minnesota range appear to be limited.

Observations on singing males in 1964 were made during seven separate censuses between May 26 and June 20, and 1.5 territories were judged to lie within the plot (much of which was not used by the birds). In 1965 singing male observations were made on eight censuses from May 21 to July 2, and 2.75 territories were located in the census area. Singing Cerulean Warblers were recorded on five censuses between May 27 and July 15 during 1966, when 1.5 territories were lying within the plot. This plot was not censused in 1967, though a singing male was observed there during a visit on June 16 of this year.

The 1965 observations are very interesting, as the number of Cerulean Warblers was apparently unaffected by a day long snowstorm that occurred on May 27 of that year. Mass bird mortality in northern Minnesota during this storm has been

reported by others (*The Loon*, 37:134-135; 38-40; 38:75-76). In the stand containing the Cerulean Warblers, nine out of eleven Redstart territories, and three out of three Least Flycatcher territories, were unused following the storm. Other birds in the stand may have been killed as well, but many species were still establishing territories at the time, and consequently additional pre- to post-storm comparisons are not justified.

In a comprehensive study of the birds of Wisconsin (R. Bond. 1957. Ecological distribution of breeding birds in the upland forests of southern Wisconsin. *Ecol. Monogr.*, 27:351-384), the author noted that Cerulean Warblers were most common in mature woodlands, but were also rather local in distribution, being absent from several climax forests which seemed to provide adequate conditions for nesting. This may be the case in northwestern Minnesota, as five other mature forests of the maple-basswood type have been censused in this region at one time or another during the past three years, and have yielded only one additional isolated observation of a Cerulean Warbler — this in a woods seven miles east of the one mentioned above. *Kevin Kelleher, James Ford Bell Museum of Natural History, University of Minnesota, Minneapolis, Minnesota.*

**Red-Tailed Hawk kills Pheasant Chick** — On August 2, 1967, while conducting the Annual Roadside Pheasant Census in southern Brown County about 5 miles northwest of Godahl, we observed an adult Red-tailed Hawk eating a freshly killed pheasant chick. The hawk was sitting on the ground about 20 yards from the road and did not flush when we approached with the car. We stopped parallel to the hawk and slammed the car door several times but the hawk merely looked up and then continued to eat. We got out of the car and threw several stones at the hawk in an attempt to flush it. It stopped eating and stared at us. We then proceeded to walk towards the bird and when we were about 10 yards away, the hawk flew into a nearby farm grove. We examined the half-eaten pheasant chick and determined its age to be about 8 weeks. Pheasant feathers were scattered in about a 1-foot circle near the still-warm carcass. This indicated that the hawk had killed the pheasant only minutes before our arrival. *Roger N. Johnson and Thomas S. Helget, Minnesota Division of Game and Fish, Game Research Center, Madelia, Minnesota.*

**Sparrow Hawks catch Mouse and eat Snake** — On June 16, 1967, as Roger Johnson and I were driving about 10 miles west of Vernon Center, Blue Earth County, we observed a Sparrow Hawk swoop down and pick up a mouse. We did not stop the car nor did we observe the bird with our binoculars. Since this took place on an abandoned farmsite, the mouse was most likely a *Peromyscus* since they are the most prevalent species of mice in such a place in this locality.

While driving home on July 3, I noticed four Sparrow Hawks sitting on a gravel road about 11 miles west of Vernon Center. As I approached, three hawks flew away. The fourth laboriously attempted to fly away, too, but was trying to carry a dead garter snake along. The Sparrow Hawk dropped the snake on the road and flew away. The snake was about 16 inches long and the flesh had been picked from the head and backward for about one-half inch. I could not tell whether the snake was killed by the Sparrow Hawks or had been killed by other means, such as being run over by a car.

I drove my car down the road and stopped to observe the snake and the hawks with my 8 x 30 binoculars. One hawk, apparently a juvenile, flew towards the snake and sat on the road about 2 feet from it. After several minutes, this bird flew into a farm grove 300 feet distant. I watched for about 5 minutes but did not see the remaining Sparrow Hawks. As I drove on, I then saw the two adults which had been sitting on the power line farther down the road. Here they apparently had been watching me and had refrained from returning to feed on the snake. *Earl D. Kopischke, Minnesota Div. Game and Fish, Madelia, Minn.*

## BOOK REVIEWS

*WHAT YOU SHOULD KNOW ABOUT THE PURPLE MARTIN* by J. L. Wade, 224 pages, illustrated in color and black and white. Published by Guaranteed Products Co., Griggsville, Illinois. 1967. \$4.95 plus 25¢ handling.

With the number of mosquitoes that were present in the Twin Cities, and probably throughout Minnesota this past summer it would be an excellent idea for all of us to follow Mr. Wade's suggestion . . . install a Trio-Musselman Purple Martin House in our yards. Each martin we attract will eat 2,000 mosquitoes every day. What a great and pleasant way to rid our yard of Minnesota's number one nuisance. This book is basically the story of Griggsville, Illinois, the Purple Martin Capital of the world. It is the enthusiastic story of a town devoted to a species of bird and their efforts to publicize the advantages of having Purple Martins co-exist with humans. Mr. Wade's company, Guaranteed Products Co., has developed the most up-to-date, successful martin house devised. He tells of its success throughout the Midwest and other parts of the country. Throughout the book suggestions are given on how to attract Purple Martins, how to care for the injured young and adults and just about anything you want to know about the Purple Martin. It is a delightfully readable book and one that should be read by every backyard birder. Many a bird club, lacking a project or complaining about not being able to do anything for the conservation movement should pass this book among its members. This is a book strictly for amateurs and I suppose this is why Mr. Wade is very anthropomorphic in his approach to the martin, but so be it . . . maybe in this day of the "rat-race" we need more down-to-earth pure enjoyment of the birds. One comment I might make to the author is that in the section on fall departure dates for the martin from various parts of the country, these must be average not final departure dates. Late dates run well into October in Minnesota and I am sure the same is true of Illinois and other parts of the Midwest.

— Editor

*ATTRACTING BIRDS: FROM THE PRAIRIES TO THE ATLANTIC* by Verne E. Davison, 254 pages, illustrations. Thomas Y. Crowell Co., 201 Park Avenue South, New York, New York. 1967. \$6.95.

This is another of the many books that have been published on attracting birds. This one isn't too much different from the past books, however, the material is concise and well presented except for the alphabetical listing of the bird species. We learn the A.O.U. Check-list order and then someone always feels another system is better. I don't agree in this case. Over 400 species of birds are presented plus the more than 700 species of plants and foods that are important to them. The illustrations of the bird houses and feeders are the same as we have seen for years. It is too bad that Mr. Davison didn't know about Mr. Wade's Purple Martin Houses mentioned above. A book containing primarily lists will never be very popular but no doubt this book will serve the needs of a few bird-watchers.

— Editor

*A FIELD GUIDE TO THE BIRDS OF BRITAIN AND EUROPE (2nd edition)* by Roger Tory Peterson, Guy Mountfort, and P.A.D. Hollom, 348 pages, 1,200 illustrations (670 in color) and 384 distribution maps. Houghton-Mifflin Co., 2 Park Street, Boston, Massachusetts, 1966. \$6.00.

A new revised and much enlarged edition of the work published originally in 1954. The color plates are outstanding and very well reproduced at least in the copy I have. Every serious American bird-watcher should have a copy of this book, even if he isn't going to Europe, just for the sake of broadening his knowledge of birds.

— Editor

## M.O.U. ENDOWMENT FUND

In this issue of *The Loon* you are being asked for a contribution to the Minnesota Ornithologists Union Endowment Fund. The establishment of an endowment fund for the M.O.U. has been made possible by the incorporation of the Union. This enables it to hold such money for the continuing benefit of birds and birding in Minnesota. The principal of the fund will be held in trust; while the income will be available to aid birding on our local level.

This source of an assured and continuing income will enable the M.O.U. to undertake larger and longer range bird projects such as scholarships, sanctuary support or nature areas which are not currently practical. Please don't think of it as just another solicitation for funds, but give it careful consideration. Isn't a gift to the M.O.U. Endowment Fund one of the best ways you can help future birding in Minnesota?

## SUGGESTIONS TO AUTHORS

As you all know the editor's job is a voluntary one and to make this job a little easier and less time-consuming I would like to make a few suggestions to authors when they submit articles and notes for publication in *The Loon*.

As editor I would like to encourage people to send articles, notes and observations to me. If possible all articles and notes should be typewritten and double spaced on one side of the paper. This is the only way they can be submitted to the printer. The more material received the better the magazine will be. When submitting observations of birds, either rare, accidental, or difficult to identify please try and follow the suggestions made by Janet C. Green in her article "What Constitutes an Acceptable Bird Record," (*The Loon*. Vol. 36, No. 1, pages 4-6). If photos are submitted with articles they should be clear, *black* and *white prints*. If the author of an article would like reprints please let me know when the article is submitted. Reprints will be furnished at the author's expense. Cost of reprints depends on length of article and number wanted.

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## THE LOON CRY

If one honestly, that is, ruthlessly, catalogs the thoughts and feelings which natural phenomena represents to him, the results may be frightening. *The Goshawk* by T. H. White, *Nausea* by Jean Paul Sartre and *The Diary of a Superfluous Man* by Ivan Turgenev, three books widely different in subject and purpose, demonstrate similar honesty in observing and recording thoughts and feeling represented by natural phenomena.

In a book which anyone interested in falconry or the disposition of a Goshawk in captivity should read, White describes the sight of maggots seething over the body of a dead sheep:

*The sheep seethed with them, yellow and pullulating,  
like a sack of oats poured into the hole: but live  
oats, busy, dry-sounding, crackling with life. The  
smell struck against the uvula, giving a dry feeling in  
the throat. . . .*

*The air of death; . . . It was a challenge to life. It was  
a tonic. The villeins, St. Thomas the Martyr, . . . the sheep,  
and later me: but perfectly acceptable, almost pleasant.  
They were living and busy maggots, clean, vital, symbolical  
of an essential life force perfectly persisting.*

Disgusting? Perhaps to you, but Mr. White finds such a lively visual and uvular experience a challenge, acceptable, pleasant. Apparently Mr. White, feels most alive and truest to himself when confronted by creatures the most antithetical to himself. Of "Gos", the bird of the title, he says: He was a Hittite, a worshipper of Moloch. He immolated victims, sacked cities, put virgins and children to the sword." Training the intractable bird-beast and the experience with the dead sheep occurred early in World War II. In those days, his intellectual friends said to him: "Why on earth do you waste your talents feeding wild birds with dead rabbits? . . . To arms! Down with the Fascists, and Long Live the People!" But Mr. White replies: "It was useless to tell them I would rather shoot rabbits than people." The point is that Mr. White saw what he needed to do, and tried to do it.

If Mr. White finds even in maggots a symbol of an "essential life force perfectly persisting," Sartre rather scoffs at such a "life force." Antoine Roquentin, th chief character of *Nausea*, observes a woods full of trees, each a duplicate of the other and thinks:

*There were those idiots who came to tell you about  
will-power and struggle for life. Hadn't they ever  
seen a beast or a tree? This plane-tree with its  
scaling bark, this half rotten oak, they wanted me  
to take them for rugged youthful endeavor surging  
towards the sky. . . .  
Impossible to see things that way. They (the trees)  
did not want to exist, only they could not help themselves.  
. . . Tired and old, they kept on existing, against the  
grain, simply because they were too weak to die,  
because death could only come to them from the outside, . . .*

What nauseates Roquentin is the burgeoning of existence, thrust upon him and upon all living things. (Including, one supposes, maggots!) The only positive alternative for him, a novelist, is to write a book which will remain behind him and offer a little clarity to existence. What kind of book? "I don't quite know which kind—but you would have to guess, behind the printed words, behind the pages, at something which would not exist, which would be above existence." The novelist or artist, then, can create something above existence, a something which

lurks behind the pages and defies definition. And the point is that Roquentin has found what he must do.

Or try *The Diary of a Superfluous Man*, published in 1850. The Superfluous Man has been told by a medical doctor that he will soon die. He resolves to keep a diary for the remaining weeks or months. Early in his diary he writes:

*O nature, nature! I love you so much, and from your womb I have emerged not even viable. Look, a male sparrow is hopping about with outspread wings; it calls—and every sound of its voice, every bristling little feathers on its tiny body, is quivering with health and strength. . . .  
What deduction follows from that? None whatever.*

Fred Lester

## FEEDING BEHAVIOR OF THE GREAT BLUE HERON IN ITASCA STATE PARK, MINNESOTA

*Stanley Hedeon*

The Great Blue Heron is most often thought of as a stately fisherman of shallow waters. Bent (1926) states that in its knee-deep fishing area, the heron employs two methods of fishing, still hunting and stalking. Bent also mentions that the bird may spend some time on land in search of prey.

Lowe (1954), in his very complete study of the European Grey Heron, cites several interesting instances of terrestrial feeding behavior. In this very close relative of the Great Blue Heron, both stalking and still hunting are used on land, as well as in the water. Twenty-four herons walking abreast in an oat field were thought to be rodent hunting, while herons standing silently around a dung-hill were known to be rat-catching (Lowe, 1954).

Finally, Bent (1926) lists a third type of feeding behavior in the Great Blue Heron: alighting on deep water. Most authors consider this method of feeding as being of rare occurrence (i.e. Roberts, 1932; Allen, 1962).

While a student at the 1967 Itasca Biology Session of the University of Minnesota, I observed the feeding behavior of Great Blue Herons in and around Itasca State Park. Most observations were made from May 24 to July 9. All of the herons noted were probably breeding birds with nests located about 2½ miles southwest of Lake Itasca, in a heronry just north of Kirk Lake. The possible feeding areas

which were searched intensively for birds included the Mississippi River, Lake Itasca, Mary Lake, East and West Twin Lakes, and Deming Lake.

### **Aquatic Feeding Behavior**

Terrestrial feeding was never observed during the study period. Nor, to the author's knowledge, has this type of feeding ever been observed in the Itasca region. All of the following types of feeding behavior, then, involve an aquatic situation.

#### DEEP-WATER FEEDING

Several instances of deep-water feeding were noted during the study period, all of them on Lake Itasca. The herons would either circle the fishermen's boats while looking for food, or land near the boats to search. The latter type of feeding behavior is probably restricted in this area to Lake Itasca, where some fishermen catch small fish in order to feed the waiting herons. Most of the fish taken in deep-water feeding are, however, not those of the fishermen, but are rather those resulting from the annual summer kill, a condition arising from higher temperatures and lower oxygen levels in the lakewater.

Deep-water feeding was entered into by one of two methods. Either the heron was flying toward (rarely from) the heronry when it began its searching, or it came off of a perch from which it had spotted either the prey or the fishing boat. A large White Pine at the north end of

Schoolcraft Island, Lake Itasca's only island, was often used as a perch in the latter case. However, the flying type of entry into the deep-water feeding area was much more prevalent. If no fish were immediately found by the birds on their way over the lake they would rarely spend any amount of time searching, but would rather continue on their way. This seems to indicate that deep-water feeding is somewhat incidental to the herons' usual food-gathering habits, even on Lake Itasca.

Finally, it should be mentioned that the author's observations of deep-water feeding were not extensive, and so the above discussion of this feeding method must be considered as rather preliminary. It is hoped that further observations of this interesting feeding behavior will be made in subsequent summers.

The more common types of aquatic feeding behavior are, as mentioned, still hunting and stalking. Both of these methods were observed, sometimes singly, sometimes in combination.

#### STILL HUNTING

When waiting for its prey, the heron relies on assimilation with its surroundings (Lowe, 1954). The only part of the body which moves is the neck. It may be stretched upward to its full length in order that the bird might observe as much of the surrounding feeding area as possible. Or it may be stretched to one side or downward when a possible prey organism has been located. It is only when the heron is about to strike that the remainder of its body is moved. This movement consists of the raising of the tail region and the lowering of the forebody, thereby

placing the body in a horizontal position. This posture places the origin of the neck closer to the prey, and results in a more posterior center of gravity to help balance the bird when it strikes forward for the prey. Oftentimes one or both legs are moved very deliberately to better position and balance the striking bird.

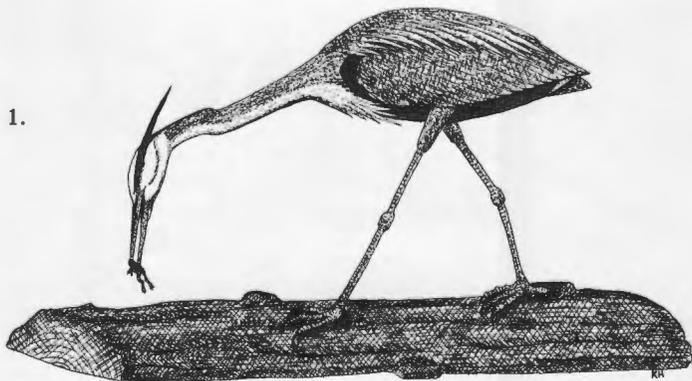
All of the above-mentioned movements of a feeding heron were best noted on June 12 at West Twin Lake. The bird was standing on a log floating next to the sedge mat which makes up the lake's shore, and so all of its body movements were obvious to the observer. Also, the bird was standing on one leg, an attitude not rare in feeding herons. When the bird spotted its prey between the log and the mat it slowly lowered its right foot to the log, tilted its body axis into a more horizontal position, stretched out its nose, positioned itself by moving its left foot forward, and with a final quick extension of the neck, caught a Mink Frog between the mandibles (Fig. 1).

The above instance included the only observation of a feeding heron standing on one leg. The bird appeared to be simply resting. But Moseley (1936) suggests that this position may be but another method of feeding in which the heron puts the second foot down quickly to catch and hold fish swimming under the bird. However, such an action would seem impossible to execute when a heron is standing out of water on a log!

#### STALKING

When seeking out its prey, the heron relies on stealth (Lowe, 1954). As it moves, the heron's body is held in the horizontal posture already mentioned as

FIGURE 1.



typical of striking readiness. Compared to its position during still hunting, the neck is now carried lower and further forward. From this stalking position, food-capture involves only a quick thrust of the neck and head.

#### SEIZURE OF THE PREY

The author has never observed the spiking of a prey organism by a heron's bill (and in fact considers it a matter of foke lore). Most food is taken crosswise in the mandibles, and then positioned for swallowing head-first. Smaller prey, i.e. dragonflies taken off the grass or the herons' neck, are seemingly swallowed without regard to position. Nor are smaller prey followed by drinks of water, as is oftentimes the case when larger prey, i.e. frogs and fish, are taken.

#### OTHER METHODS OF FEEDING

Drinkwater (1958) and Parks and Bressler (1963) mention the use of bill motion by some herons to catch prey. Such motion involves the splashing of water between the mandibles, creating a disturbance which attracts fish. Meyerriecks (1959, 1966) and Hoyt (1961) cite several instances of foot-stirring in herons, an action which either attracts prey or stirs them up from the bottom. Neither type of feeding behavior has ever been observed in the Great Blue Heron, in Itasca State Park or elsewhere.

One final type of feeding behavior should be noted, although it is mentioned only once in the literature on the Great Blue Heron. Audubon (1835) cites an instance of a heron chasing and forcing an Osprey to drop its fish, which the heron subsequently retrieved. On June 22, Peter Moyle observed a situation closely akin to such feeding behavior, in which a heron alighted on Lake Itasca at the same spot as where an Osprey had unsuccessfully dived seconds before. It was not noticed if the heron caught a fish there, but in any case the Osprey immediately dived at the heron which flushed and flew toward the heronry. For the next three minutes the Osprey pursued the heron, screaming and diving at it, while the heron dodged and struck back at the Osprey.

On June 11, 15, and 17, an Osprey was also seen attacking a heron, but these were during instances of territorial defense. The scene of the attacks was the south end of East Twin Lake. The at-

tacker was the male Osprey whose nest was located on the south shore of the lake. The attacked was a Great Blue Heron flushed from West Twin Lake just prior to the attacks. The three confrontations illustrated the existence of two territories: the nest territory of the Osprey, and the feeding territory of the heron.

#### Feeding Territories

In writing about the Great Blue Heron of Minnesota, Roberts (1934) states that "throughout the breeding season, it rarely strays beyond the territory that is the special preserve of the members of each colony." Lowe (1954) mentions that within this larger territory herons show such strong attachment to certain places that they might be called the herons' regular feeding grounds. Meyerriecks (1962) adds that territorial behavior is highly variable on such Great Blue Heron communal feeding grounds, although individual feeding areas may be vigorously defended during non-breeding season.

In Itasca State Park, the only area which might be considered a communal feeding ground is the deep water of Lake Itasca. The remainder of the Kirk Lake Heronry's feeding area is probably divided into many individual feeding territories. Although such territories have never before been noted during the Great Blue Heron's breeding season, this author is convinced that these territories exist extensively in the Itasca area.

Welty (1962) points out that only a few bird species are known to have feeding territories isolated from their nesting territories. One such bird that is often mentioned is the Atlantic coast Seaside Sparrow, which defends both a nesting site and a feeding territory along the shore. Lorenz (1938) adds to this category the European Black-crowned Night Heron — a distant relative of the Great Blue Heron, but a colonial nesting heron nevertheless. In the case of the European Grey Heron, a much closer relative of the Great Blue Heron, feeding territories during the breeding season have been hinted at, though not actually observed. Owen (1955), after thoroughly studying the food brought to seven nests in a British Grey Heron rookery, concluded that certain species of prey were more prevalent in some herons' catches than in others. He ascribed this fact to

the probable existence of each bird's "favourite feeding area."

#### THE TWIN LAKES FEEDING TERRITORY

A Great Blue Heron was noted at the Twin Lakes on 17 separate occasions between May 24 and July 8 (that there was only one bird is, of course, an assumption). Almost always it was noted on West Twin Lake, although it also frequented the north shore of East Twin Lake from time to time. The heron was observed at several points around the shore of West Twin, but it seemed to prefer the inlets and the outlets of the lake. Its usual perch was located approximately 100 feet down the outlet creek, on top of a solitary, 50-foot White Pine (See front cover). From this perch the bird was afforded a complete view of West Twin, its outlet, and the northern shore of East Twin, these three areas constituting the heron's feeding territory. This perch was almost always used when the heron returned from the heronry four miles away. Also, it was often used after a disturbing factor flushed the heron from its point of feeding.

The heron was never noted chasing another heron, nor was any other heron ever observed feeding in Twin Lakes. However, many herons flew over the area several times daily on their way to and from the heronry, and the Twin Lakes heron was thought to be calling at these birds on several occasions.

The interspecific activity of the heron and the male Osprey of East Twin has already been mentioned. It should be noted, however, that all of their fights took place relatively early in the study period, with none being observed after June 17. Perhaps the heron had learned after this date to restrict its feeding activities to the northern part of East Twin, the side of the Lake opposite from the Ospreys' nest.

A second interspecific reaction was also noted at any time when I was in sight of the heron. This reaction might involve flushing if I was too close, but would always involve one or more (up to eleven) hoarse *crarks*. These calls would be given from the shore or from the perch, or while the heron was either flying into or out of the Twin Lakes. Since it is rather rare to hear a heron calling away from the heronry, it is believed

that the Twin Lakes heron's oft-heard calls are indicative of the territorial behavior exhibited by this bird.

#### OTHER FEEDING TERRITORIES

Observations at other feeding areas in and around Itasca State Park reinforce the idea of breeding-season feeding territories. Although this impression was by no means proved, it seems that each large sedge mat area around the shores of Lake Itasca has "its" heron. This impression is heightened when one flushes a heron from one mat and notes that it rarely lands at the next mat along the shoreline, even if no heron is present on the next mat. On June 30, an excellent example of shoreline territorial behavior was observed when a single heron chased three intruders off of the extensive sedge mat of Lake Itasca's Floating Bog Bay.

Probably the most striking example of feeding territoriality was witnessed on July 8. I was given rather detailed directions to a small pond four miles south of Itasca State Park and was told that there would certainly be a heron feeding there, as there had been several times before this year. On the way to this pond several other bodies of water in the vicinity were checked for herons, but without success. However, upon driving over the rise at the bottom of which was the sought-for pond, the resident-feeding heron was, of course, seen.

Further evidence of feeding territories was provided by the other areas studied intensively, even though it is evidence of a negative nature. The Mississippi River near Minnesota Highway 31, Deming Lake, and Mary Lake were all frequently checked for feeding herons. No herons were ever seen in these spots, although all three areas exhibit the same sedge mat shoreline frequented by the birds on Lake Itasca, and contain even better fish and frog populations than those at Twin Lakes. The complete absence of herons at these waters supports the contention that random feeding is rare, while feeding territories are common, in the Itasca State Park area.

#### A FINAL QUESTION

Although the Twin Lakes heron was seen almost daily during the early and middle part of June, during the latter part of June and the early part of July the heron was seen less and less, until it dis-

appeared entirely after July 8. It must be assumed that the bird found other feeding sources during this time. But why would it leave an established feeding territory? Three possible answers present themselves.

The most obvious explanation would be disturbance. The Twin Lakes are bisected by a road bringing visitors into the park, and so the use of the road increases during mid-Summer. Also I oftentimes flushed the heron, and then remained on West Twin for two or three hours in order to work on another study. However, the disturbance theory must be questioned, for the bird became habituated to this observer, at least. During July, the heron often continued feeding on the opposite side of the pond from me.

Probably a better explanation of the absence of the heron is provided by Owen (1955) in his food study of the Grey Heron. He notes that in Britain in the second half of June there is an increase in some prey, especially mammals, and a decrease in eels. He attributes this fact to the rapid growth of vegetation in the ditches where the herons catch eels, thereby making these fish more difficult to find, and forcing the birds to seek other prey. Such a growth of vegetation was noted in the second half of June on the Twin Lakes, as was the accompanying increased difficulty of securing frogs. This growth of vegetation may very well be the reason for the heron's prolonged absences.

Finally, there is a third plausible explanation. Gross (1923) states that the American Black-crowned Night Heron selects smaller prey for its newly-hatched young. Possibly, the Twin Lakes heron was practicing a similar size-selection earlier in the breeding period by feeding on the dragonflies, frogs, tapoles, and small fish of the Twin Lakes. As the nestlings grew, probably larger prey were searched out in other feeding areas, with trips to the Twin Lakes territory becoming less and less frequent until they ceased altogether.

#### CONCLUSION

The Great Blue Herons of Itasca State Park exhibit three types of feeding behavior: deep-water feeding, still hunting, and stalking. The prey organisms caught by these methods are seized crosswise between the mandibles of the heron, and are

then positioned headfirst before being swallowed by the bird. Neither terrestrial feeding, nor aquatic feeding involving bill motion or foot-stirring, were observed during the study period.

Feeding territories are thought to exist within the feeding area of Itasca's Kirk Lake Heronry. One Great Blue Heron was noted feeding at the Twin Lakes on 17 separate occasions between May 24 and July 8, 1967. Observations of other herons feeding in the Itasca Park vicinity further suggest the existence of breeding-season feeding territories. Disturbance, vegetation growth, or nestling growth may cause a heron to shift its feeding grounds.

#### REFERENCES

- Allen, R. P. 1962. Habits of the Great Blue Heron. In Palmer, R. S., ed. Handbook of North American birds. Vol. 1. New Haven: Yale Univ. Press. Pp. 401-402.
- Audubon, J. J. 1835. Ornithological biography. Vol. 3. 638 pp.
- Bent, A. C. 1926. Life histories of North American marsh birds. U.S. Nat. Mus. Bull. No. 135.
- Drinkwater, H. 1958. Black-crowned Night Herons using bill motion to secure prey. Wilson Bull. 70: 201-202.
- Gross, A. O. 1923. The Black-crowned Night Heron (*Nycticorax nycticorax naevius*) of Sandy Neck. Auk 40: 1-30, 194-214.
- Hoyt, Sally F. 1961. Foot-stirring in the Green Heron. Wilson Bull. 73: 386.
- Lorenz, K. 1938. A contribution to the comparative sociology of colonial-nesting birds. Proc. 8th Int. Orn. Congr. Oxford, 1934: 207-218.
- Lowe, F. A. 1954. The heron. London: Collins. 177 pp.
- Meyerrieks, A. J. 1959. Foot-stirring feeding behavior in herons. Wilson Bull. 71: 153-158.
- . 1962. Reproduction of the Great Blue Heron. In Palmer, R. S., ed. Handbook of North American birds. Vol. 1. New Haven: Yale Univ. Press. Pp. 396-401.
- . 1966. Additional observations on "foot-stirring" feeding behavior in herons. Auk 83: 471-472.
- Moseley, E. L. 1936. Blue Heron colonies in northern Ohio. Wilson Bull. 48: 3-11.
- Owen, D. F. 1955. The food of the heron *Ardea cinerea* in the breeding season. Ibis 97: 276-295.
- Parks, J. M. and Sandra Bressler. 1963. Observations of joint feeding activities of certain fish-eating birds. Auk 80: 198-199.
- Roberts, T. S. 1932. The birds of Minnesota, Vol. 1. Minneapolis: U. of Minn. Press. 691 pp.
- Welty, J. C. 1962. The life of birds. Philadelphia: W. B. Saunders Co. 546 pp.
- Department of Zoology, University of Minnesota, Minneapolis, Minnesota.

# BALD EAGLE – OSPREY STATUS REPORT, 1967

## CHIPPEWA NATIONAL FOREST, MINNESOTA

*John E. Mathisen*

Bald Eagle and Osprey populations of Chippewa National Forest have been evaluated for the fifth consecutive year. The inventory of nest sites has continued with the cooperation of Ranger District personnel and the Bureau of Sport Fisheries and Wildlife. An attempt was made to observe as many nests as possible in early spring to determine occupancy. Occupied nests were again checked in mid-summer to determine nesting success. A nest was considered active if adults were present, or if droppings indicated substantial use of the nest tree. If young were present in late June or July, the nesting attempt was considered successful.

### New Nests and Nest Losses

Another effort was made to locate Bald Eagle and Osprey nests from aircraft in cooperation with the Bureau of Sport Fisheries and Wildlife during the week of March 13 through 17, 1967. The northern half of the Forest was given special attention. Approximately 13 hours' flying time were utilized in the search. The survey was very successful with 46 additional nests being located (26 Bald Eagle nests,

20 Osprey nests). The find rate was 3½ nests per hour of flying time.

A total of 39 eagle nests and 29 Osprey nests were added to the records in 1967. Nine eagle nests had blown down, and two were considered abandoned, which brings the total number on the Forest to 135. We now have a total of 59 Osprey nests on the records, with many more yet to be located.

### Nesting Success

Sixty-seven of the eagle nests were observed at least once during the 1967 breeding period. Forty-nine, or 73% were considered to be active (occupied by adults at time of observation). Thirty-eight were checked for young, indicating a nesting success of 55%. This was somewhat less than nesting success for 1966, but still well above average for the five-year period. The outcome of the other 68 nests is not known, but an estimate can be calculated by projecting data for known outcome nests.

The following table summarizes results of the 1967 breeding season:

District	Known Nests	Observed Nests	Active Nests *	Successful Nests	Number of Young
Bena .....	35	20	17(13)	5	8
Blackduck .....	11	5	6 (5)	1	2
Walker .....	12	6	2 (2)	1	1
Remer .....	8	3	2 (0)	0	0
Marcell .....	10	5	4 (3)	3	4
Cass Lake .....	32	15	8 (7)	5	7
Cut Foot Sioux .....	27	13	10 (8)	6	8
FOREST TOTAL .....	135	67	49 (38)	21	30
Percent .....		50%	73%	55%	1.4/nest
PROJECTED FOREST TOTAL			99	54	76

\* ( ) indicates number of active nests observed in summer, used for calculating % of successful nests.

The following table compares Bald Eagle nesting data on the Chippewa for the past 5 years:

Year	Nests Known	Observed Nests	Active Nests* No.	%	Successful Nests No.	%	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	37	1.5
1967	135	67	49	73	21	43	1.4

\*Only active nests with known outcome were used for calculating nesting success.

### Other Observations

An analysis of nesting success data from 1963-1966 clearly showed that eagle nests located in extremely isolated areas were no more successful than those in areas of frequent human presence. This material was accepted for publication and will soon appear in the *Journal of Wildlife Management*.

Of special interest this year was the frequent observation of sub-adult eagles prior to fledging. In previous years it was considered rare to observe a sub-adult eagle on the Chippewa, 2 or 3 observations being usual. Nineteen sub-adults were observed this year by the Forest Biologist.

Eight nestlings were banded by Dr.

Ronald L. Huber

## THE SUMMER SEASON

(June 1 — Aug. 31, 1967)

This summer was noteworthy in two respects; it was noticeably cooler than usual and there was certainly less precipitation than normal. Perhaps this is best demonstrated bionomically. One of my favorite tiger beetles, *Cicindela splendida* Hentz, which penetrates Minnesota only in the extreme southeastern counties, normally is active from early to mid-May, with a late date of May 28. No June records are known. This summer, because of the cool, "May-like" weather, we found several *splendida* still active on JULY 3!! Another proponent of cool weather is *Erynnis icelus*, a small, dark butterfly which usually has a flight period of four or five weeks, throughout May. This summer, it enjoyed a protracted flight of some eight or nine weeks because the cooler weather restricted the total hours of flight per day, thus spreading the total expenditure of energy over a longer period of time. The pleasantly cool weather notwithstanding, very few observers submitted summer reports.

**Common Loon:** nested in Lake, Cook, Wright (HFH) Anoka (ELC) Co's.; also reported from Crow Wing, Hubbard, Clearwater, Aitkin, St. Louis, SWIFT (HSH on 6-17), POPE (WH on 6-13) and LYON (PE till late June) Co's.

Al Grewe and a student assistant (this brought the total nestlings banded to 10). Three and possibly four adult mortalities were reported. Two by shooting, the others by unknown causes.

### Osprey Nests

Twenty of the fifty-nine Osprey nests were observed for occupancy. Seventeen, or 85% were considered active. Nine of the active nests were checked for success, and all but two contained advanced young. This indicates that Ospreys on the Chippewa are not suffering from reproductive failure. More effort should be placed on evaluating osprey nesting activity. 2317 Park Ave., Bemidji, Minnesota.

**Red-necked Grebe:** nested at Assumption Lake, Carver Co. FN/MAS, Sugar Lake, Wright Co., GES.

**Horned Grebe:** 6-9 St. Louis Co., 2, JCG, probably late migrants.

**Western Grebe:** June, Graham Lake, Nobles Co., HSH; 6-18 Herman, Grant Co., 40+, BC, LC, RLH; 6-10 Cottonwood, Lyon Co., PE.

**Pied-billed Grebe:** nested in Ramsey, Hennepin, Beltrami Co's; also reported from Stevens, Big Stone, Traverse, Lac Qui Parle, Morrison, Nobles, Hubbard, Washington, Cass, Crow Wing Co's.

**White Pelican:** 6-18 Lake Traverse, Traverse Co., 14, BC, LC, RLH; 6-24 Big Pelican Lake, Crow Wing Co., 4, Peter Cullen; 6-28 near Reno, Houston Co., 35, FL; 7-20 Lake Ocheda, Nobles Co., 1, HSH.

**Double-crested Cormorant:** reported from Lac Qui Parle, Ottertail, Big Stone, Stevens, Traverse Co's.

**Great Blue Heron:** nested Anoka Co.; also reported from Morrison, Swift, Jackson, Nobles, Cottonwood, Hennepin, Houston, Aitkin, Hubbard, Clearwater, McLeod, Goodhue, Carver, Stevens, Big

Stone, Pope, Traverse, Lac Qui Parle, Washington, Wabasha, Beltrami, Crow Wing, Ramsey Co's.

**Green Heron:** reported from Hennepin, Goodhue, Wright, Carver, MORRISON (LSR). Washington, POPE (WH), CROW WING (NR, MSB), Wabasha, Ramsey Co's.; nest, 3 young Cottonwood, Lyon Co., PE.

**Common Egret:** reported from Grant, Douglas, Hennepin, Stevens, Pope, Wabasha, Houston, Ramsey Co's.

**Black-crowned Night Heron:** nested in Jackson Co.; also reported from Cottonwood, Stevens, Pope, Washington, Ramsey Co's.

**Yellow-crowned Night Heron:** 6-6 Hennepin Co., Martha Stebleton *vide* VL; 6-10 La Crescent, Houston Co., 5, FL.

**Least Bittern:** reported from Nobles, Houston, Wright, Beltrami (JAM), Washington Co's.

**American Bittern:** reported from Morrison, Nobles, Hubbard, Wright, Clearwater, Hennepin, Pope, St. Louis, Crow Wing, Ramsey Co's.

**Canada Goose:** reported from Olmsted, Cottonwood, Carver, Pope, Anoka Co's.

**Mallard:** nested in Hennepin, Ramsey, St. Louis, Cook, Mahnomen, Sherburne Co's; also reported from Morrison, Nobles, Hubbard, Clearwater, Carver, Stevens, Big Stone, Traverse, Pope, Lac Qui Parle, Washington, Wabasha, Cass, Crow Wing Co's.

**Black Duck:** nested Cook, Lake Co's.; also reported from Ramsey, Aitkin, St. Louis, Lyon Co's.

**Gadwall:** reported from Nobles, Big Stone Co's.

**Pintail:** Stevens, Traverse, Nobles, Clay, Lyon Co's.

**Green-winged Teal:** 6-3 Nobles Co., HSH; 6-10 Lyon Co., PE; 6-22 Clay Co., 20, LWJ; 7-17 NOBLES Co., ad with y, HSH.

**Blue-winged Teal:** nested Ramsey Co.; also reported from Stevens, Lyon, Big Stone, Traverse, Pope, Lac Qui Parle, Washington, Morrison, Hennepin, Nobles, Clay, Hubbard, Carver, Wabasha, St. Louis, Cass Co's.

**Shoveler:** reported from Roseau, Becker, Stevens, Traverse, Pope Co's.

**Wood Duck:** nested Lyon (PE), Jackson, Clearwater (LWJ), Crow Wing (NR), Ramsey, McLeod, Carver Co's. and Fargo-Moorhead (*vide* EGA); also reported from Wabasha, Hennepin, Clay, Martin, Nobles, Morrison, Washington, Stevens, Houston Co's.; appears to be extending range northward and westward.

**Redhead:** nested Hennepin, Lyon, McLeod Co's.; also reported Nobles, Stevens, Traverse, Pope, Big Stone, Lac Qui Parle Co's.

**Ring-necked Duck:** reported from Hennepin, Lake, Wright, Beltrami Co's.

**Canvasback:** reported from Anoka, Mahnomen, Lyon (6-24, PE) Stevens Co's.

**Lesser Scaup:** 6-6 Ramsey Co., ELC; 6-12 Anoka Co., ELC; 6-14, St. Louis Co., JCG; 6-16 Hennepin Co., VL; all late migrants?

**White-winged Scoter:** 6-3 Two Harbors, Lake Co., 1, DB.

**Ruddy Duck:** nested in Ramsey, Lyon Co's; also reported from McLeod, Grant, Traverse, Hennepin, Swift, Stevens Co's.

**Common Merganser:** reported from Lake, Cook Co's; one unusual record, 6-18 OTTERTAIL Co., 1 mi N. Luce, 4 females or immatures seen, BC, LC, RLH; chestnut head sharply separated from white breast, large size noted next to Mallards; nearest possible nesting area would be Tamarac National Wildlife Refuge, about 15 mi. due N. where Common Goldeneye is also known to spend the summer (and breed?).

**Red-breasted Merganser:** reported from Lake Co.

**Turkey Vulture:** reported from Beltrami, Winona, Houston, Itasca Co's.

**Goshawk:** nested very early at Camp Wilder, Washington Co., *vide* ELC but nest abandoned, probably due to excessive human activity in immediate area; 6-23 St. Louis Co., near Duluth, DS.

**Cooper's Hawk:** nested in Washington Co.; also reported from Cook Co.

**Red-tailed Hawk:** nested in Jackson, Swift, Pope, Stevens Co's; also reported Anoka, Carver, Nobles, Hubbard, Beck-

er, Cook, Wabasha, Hennepin, Morrison, Washington, Winona, Itasca, Beltrami, Houston Co's.

**Red-shouldered Hawk:** reported from Wabasha, Winona, CROW WING (NR) Co's.

**Broad-winged Hawk:** reported from Hennepin, Clearwater, Becker, Cook, Morrison, Lake, Washington, St. Louis, Beltrami, Crow Wing Co's.

**Swainson's Hawk:** 6-14 Goodhue Co., 2 mi. E. Etter, ELC; seen again in same area on 7-9, HFH; 6-10 and 7-3 Cottonwood, Lyon Co., PE.

**Bald Eagle:** reported from Beltrami, Cook, St. Louis Co's.

**Marsh Hawk:** nested in Anoka Co.; also reported Nobles, Wabasha, Pope, Washington, Stevens, Crow Wing, Cook, Aitkin, St. Louis Co's.

**Osprey:** nested in Hubbard, Crow Wing Co's.; also reported 6-10 Grand Lake, St. Louis Co., Dale Olsen *vide* JCG and 7-1 STEARNS Co., Lake Caroline, 1, HFH, probably southernmost summer record in 40 years?

**Sparrow Hawk:** nested Beltrami Co.; also reported Anoka, Ramsey, Nobles, Washington, McLeod, Carver, Pope, Wabasha, Hennepin, Morrison, Big Stone, Stevens, Lyon, Lac Qui Parle, Crow Wing, Cook, St. Louis Co's.

**Spruce Grouse:** 6-23 Sea Gull Lake, Cook Co., 1, DS.

**Ruffed Grouse:** nested in Washington, Cook, Lake Co's; also reported from Morrison, St. Louis, Aitkin Co's.

**Sharp-tailed Grouse:** 6-5 St. Louis Co., nr Floodwood, DGF.

**Bobwhite:** 6-13, 6-30 Wabasha Co., heard, DGM.

**Ring-necked Pheasant:** nested in Cottonwood Co.; also reported from Pope, Nobles, Ramsey, Washington, Hennepin, Stevens, La Qui Parle, Traverse, Big Stone, Wabasha Co's.

**Ruby-throated Hummingbird:** nested Washington Co.; also reported from Cottonwood, Washington, Beltrami, Hennepin, Aitkin, Cook, Crow Wing, Morrison, Hubbard, Houston Co's.

**Gray Partridge:** nested in Jackson Co.; also reported from Nobles Co.

**Sandhill Crane:** 7-30 Salt Lake, LAC QUI PARLE Co., 1, JAH.

**King Rail:** 6-20 Rosendale Twp., Watonwan Co., 1 ad, Roger Johnson *vide* EDK.

**Virginia Rail:** nested in Hennepin, Carver Co's; also reported from Crow Wing, Wright, Houston, Swift Co's.

**Sora:** reported from Washington, Beltrami, Hubbard, Winona, Crow Wing, Stevens, Wabasha, Hennepin, McLeod, Carver, Anoka, Ramsey Co's.

**Yellow Rail:** 6-18 Becker-Mahnomen Co. line, 4 mi. S. of Waubun, 4 heard calling at usual spot, BC, LC, RLH.

**PURPLE GALLINULE:** One adult found dead in upland field, Sheldon Twp., Houston Co., on June 11 or 12, brought to RO; now in Univ. of Minn. collection; second Minnesota record.

**Common Gallinule:** 6-7 Bloomington, Hennepin Co., 1, VL; 6-10 Dorer Pools, Wabasha Co., 1, HFH; 6-10 La Crescent, Houston Co., 2, FL; 6-12 Wacouta, Goodhue Co., 3, EHH; 8-15 Carver Co., 6, DB.

**American Coot:** nested in Ramsey, Lyon Co's.; also reported from Washington, Pope, Stevens, Traverse, Lac Qui Parle, Big Stone, Hennepin, Clay, Nobles Co's.

**Semipalmated Plover:** 7-30 Stevens Co., 6, JAH; 8-9 Clay Co., 15, LWJ.

**Killdeer:** nested in Ramsey, Cook, Itasca Co's; also reported from Pope, Stevens, Traverse, Big Stone, Lac Qui Parle, Cottonwood, Washington, Beltrami, Hubbard, Aitkin, St. Louis, Hennepin, Crow Wing, Morrison, Wabasha, Clearwater, Carver, Nobles Co's.

**American Woodcock:** 6-4 nr Gowan (Co. ?), 5, DGF.

**Common Snipe:** reported from Washington, Aitkin, Crow Wing, Clay, Morrison, Nobles, Ramsey Co's.

**Upland Plover:** reported from Stevens, Rock, Pope, McLeod, Anoka, Clay Co's.

**Spotted Sandpiper:** nested in Ramsey Co.; also reported from Lake, Anoka, Crow Wing, Stevens, Washington, Koochiching, Morrison, Hennepin, Wabasha, St. Louis,

Clearwater, Nobles Co's. and Fargo-Moorhead.

**Solitary Sandpiper:** 7-26 Carver Co., 2, FN/MAS; 8-8 Clay Co., 4, LWJ.

**Greater Yellowlegs:** 7-31 Lac Qui Parle Co., 1, JAH; 8-9(30), 8-16(20) Clay Co., LWJ.

**Lesser Yellowlegs:** 7-26 Hennepin Co., 2, FN/MAS; 7-31 Lac Qui Parle Co., 35, JAH; 8-9, 8-16(15) Fargo-Moorhead *vide* EGA; 8-26 Lac Qui Parle Co., 10, RLH.

**Pectoral Sandpiper:** 7-17 Nobles Co., many, HSH; 7-30 Stevens Co., 10, JAH; 8-9, 8-16 Clay Co., 20-30, LWJ.

**Baird's Sandpiper:** 8-9, 8-16 Clay Co., 20, LWJ.

**Least Sandpiper:** 7-30 Stevens Co., 10, JAH; 8-9, 8-16 Clay Co., 20, LWJ.

**Short-billed Dowitcher:** 8-26 Salt Lake, Lac Qui Parle Co., 2, call notes heard, RLH.

**Dowitcher, species ?:** 8-9, 8-16 Clay Co., 10-15, LWJ.

**Semipalmated Sandpiper:** 7-26 Carver Co., 1, FN/MAS; 7-30 Stevens Co., 15, JAH; 8-9, 8-16 Clay Co., 20, LWJ.

**Marbled Godwit:** 6-18 Clay Co., nr Ulen, many, BC, LC, RLH.

**Wilson's Phalarope:** 6-18 Becker - Mah-nomen Co. line, 4 mi. S. of Waubun, pair on territory at usual spot, BC, LC, RLH; 7-31 Lac Qui Parle Co., many, JAH; 8-9, 8-16 Clay Co., 10, LWJ.

**Herring Gull:** nested in Cook Co.; also reported from Lake, Washington, St. Louis, Crow Wing, Wabasha, Nobles, Cottonwood Co's.

**Ring-billed Gull:** no evidence of breeding, but reported from Hennepin, Carver, Pope, Big Stone, Lake Co's.

**Franklin's Gull:** reported from Stevens, Traverse, McLeod, Big Stone, Lac Qui Parle, Cottonwood, Pope, Nobles Co's.

**Bonaparte's Gull:** 6-18 Lake Mary (W. of Alexandria), Douglas Co., 3, BC, LC, RLH.

**Forster's Tern:** nested Hennepin Co.; also reported from Pope, Lac Qui Parle, Big Stone, Nobles Co's.

**Caspian Tern:** 6-6 Excelsior, Hennepin Co., FN/MAS.

**Common Tern:** reported from Crow Wing, Morrison, Pope, Lake, Hubbard, Becker Co's.

**Black Tern:** nesting Hennepin, Ramsey Co's; also reported from Pope, Lyon, Stevens, Traverse, Lac Qui Parle, Big Stone, Washington, Hubbard, Crow Wing, Morrison, St. Louis, Beltrami, Becker, Nobles, Clay Co's.

**Mourning Dove:** nested Stevens Co.; also reported from Pope, Traverse, Lyon, Lac Qui Parle, Big Stone, Cottonwood, Washington, Hennepin, St. Louis, Hubbard, Aitkin, Crow Wing, Morrison, Wabasha, Beltrami, Ramsey, Nobles, Lake Co's.

**Yellow-billed Cuckoo:** reported from Washington, Hennepin, Houston, Wright, Winona Co's.

**Black-billed Cuckoo:** reported from Stevens, Beltrami, Clearwater, Houston, Crow Wing, Morrison, Pope, St. Louis, Carver, Jackson, Ramsey, Washington, Anoka Co's and Fargo-Moorhead.

**Screech Owl:** reported from Washington, Ramsey Co's and Fargo-Moorhead.

**Great Horned Owl:** nested Traverse, Big Stone Co's; also reported from Washington, Beltrami, Wabasha, Carver Co's.

**Barred Owl:** reported from Cook, Washington, Wabasha Co's.

**Short-eared Owl:** 6-2 Villard, Pope Co., 1, JAH; 7-29 Osakis, Douglas Co., 15, DB; 7-31 Starbuck, Pope Co., 1, JAH.

**Saw-whet Owl:** 6-2 Shotley, Beltrami Co., DGF.

**Whip-poor-will:** 6-29, 7-16 Wabasha Co., heard, DGM; also reported from Crow Wing Co.

**Common Nighthawk:** reported from Stevens, Lac Qui Parle, Washington, Hennepin, Beltrami, St. Louis, Crow Wing, Morrison, Pope, Wabasha, Lake, Hubbard, Nobles, Ramsey Co's.

**Chimney Swift:** reported from Stevens, Cottonwood, Washington, Hennepin, Beltrami, Hubbard, Cook, Crow Wing, Morrison, Wabasha, St. Louis, Goodhue, Nobles, Martin, Ramsey Co's.

**Belted Kingfisher:** reported from Stevens,

Traverse, Lyon, Washington, Beltrami, Itasca, Aitkin, Cook, Crow Wing, Morrison, Pope, Wabasha, Cass, Hubbard, Carver, Goodhue, Jackson, Ramsey Co's.

**Yellow-shafted Flicker:** nested Ramsey, Lyon, Cook, Hubbard Co's. and Fargo-Moorhead; also reported from Lake, Stevens, Traverse, Pope, Big Stone, Lac Qui Parle, Cottonwood, Washington, Hennepin, Beltrami, Crow Wing, Morrison, Wabasha, Clearwater, Goodhue, Carver, Nobles Co's.

**Pileated Woodpecker:** nested Cook Co.; also reported from Washington, Hennepin, Goodhue, St. Louis Co's.

**Red-bellied Woodpecker:** nested Hennepin Co.; also reported from Carver, Wabasha, Washington Co's.

**Red-headed Woodpecker:** nested Ramsey, Hennepin, Lyon, Nobles Co's. and Fargo-Moorhead; also reported from Pope, Lac Qui Parle, Big Stone, Cottonwood, Washington, Beltrami, Hubbard, Aitkin, Crow Wing, Morrison, Wabasha, Goodhue, Carver Co's.

**Yellow-bellied Sapsucker:** reported from Clearwater, Cook, Crow Wing, Dakota, Wabasha, Hubbard Co's. and Fargo-Moorhead.

**Hairy Woodpecker:** nested Hennepin, Ramsey, Hubbard, Cook Co's. and Fargo-Moorhead; also reported from Washington, Stevens, Beltrami, Crow Wing, Morrison, Wabasha, St. Louis, Clearwater Co's.

**Downy Woodpecker:** nested Ramsey, Hennepin, Washington, Crow Wing Co's; also reported from Stevens, Clearwater, Cook, Morrison, Pope, Wabasha, Hubbard, Carver, Nobles Co's.

**Black-backed Three-toed Woodpecker:** 6-23 Sea Gull Lake, Cook Co., 1, DS.

**Eastern Kingbird:** nested Ramsey, Hubbard Co's; also reported from Washington, Hennepin, Stevens, Traverse, Pope, Big Stone, Lac Qui Parle, Cottonwood, Beltrami, Clearwater, Aitkin, Cook, Crow Wing, Morrison, Wabasha, Goodhue, Dakota, Carver, Nobles Co's.

**Western Kingbird:** nested Morrison Co., 18 mi. E. Little Falls, pair with 2 y, ELC; also reported from Lac Qui Parle, Big Stone, Rock, Wabasha, Hubbard (LWJ) Co's.

**SCISSOR-TAILED FLYCATCHER:** 6-10 Winona Co., 1 mi. N. Elba, 1 adult seen, good details, HFH.

**Great Crested Flycatcher:** reported from Hennepin, Washington, Pope, Wright, Beltrami, Hubbard, Crow Wing, Morrison, Wabasha, St. Louis, Clearwater, Nobles, Jackson, Martin, Ramsey Co's.

**Eastern Phoebe:** nested Washington, Hubbard, Crow Wing Co's; also reported from Beltrami, Houston, Morrison, Wabasha, Cook, Clearwater, Carver, Jackson Co's.

**Yellow-bellied Flycatcher:** 6-5 Cyrus, POPE Co., 1, WH (late migrant?); 6-10 Sawbill Trail, Cook Co., 2, JCG.

**ACADIAN FLYCATCHER:** nesting pair found, Beaver Creek Valley State Park, Houston Co., on 7-3 by FL; seen by many observers for the next few weeks; feeding 4 y on 7-29 (BT); nest empty, adults gone, 8-13 (RLH); this is the first verified Minnesota Record.

**Trail's Flycatcher:** reported from Stevens, Kandiyohi, Clearwater, Mahnomen, Morrison, Anoka, Aitkin Co's.

**Least Flycatcher:** nested Hubbard, Crow Wing Co's; also reported from Cottonwood, Beltrami, Clearwater, Houston, Aitkin, Morrison, Cook, Hubbard, Goodhue, Nobles Co's.

**Eastern Wood Pewee:** nested Ramsey, Houston Co's.; also reported from Washington, Hennepin, Beltrami, Aitkin, Mahnomen, Crow Wing, Morrison, Wabasha, Cook, Hubbard, Clearwater, Goodhue, Carver, Jackson Co's.

**Olive-sided Flycatcher:** June, MARTIN Co., 2, HSH, late migrants; also reported from Cook, Lake, Aitkin, Crow Wing Co's.

**Horned Lark:** nested Nobles, St. Louis, Clay Co's.; also reported from Washington, Stevens, Traverse, Pope, Lac Qui Parle, Cottonwood, Hennepin, Morrison, Wabasha, Hubbard, McLeod, Anoka Co's.

**Tree Swallow:** nested Ramsey, Beltrami, Hubbard, Lyon, Rice, Stearns, Cook Co's; also reported from Nobles, McLeod, Lake, Wabasha, Pope, Hennepin, Crow Wing, Morrison, St. Louis, Aitkin, Stevens, Traverse, Washington, Big Stone Co's.

**Bank Swallow:** nested Anoka, Lyon, Hubbard Co's; also reported from Wabasha, Hennepin, Morrison, Crow Wing, Beltrami, Pope, Washington Co's.

**Rough-winged Swallow:** reported from Ramsey, Carver, Hennepin, Crow Wing, Washington Co's.

**Barn Swallow:** nested Ramsey, Lyon, Hennepin, Washington Co's.; also reported from St. Louis, Beltrami, Clearwater, Nobles, Goodhue, Dakota, Carver, McLeod, Hubbard, Wabasha, Pope, Morrison, Crow Wing, Cook, Cottonwood, Stevens, Big Stone, Traverse, Lac Qui Parle, Washington Co's.

**Cliff Swallow:** nested Hubbard, Cook Co's.; also reported from St. Louis, Todd, Martin, Clearwater, Cass, Wabasha, Aitkin, Washington Co's.

**Purple Martin:** nested Hubbard, Lyon, Ramsey, Aitkin Co's. and Fargo-Moorhead; also reported from St. Louis, Hennepin, Nobles, Goodhue, Beltrami, Wabasha, Pope, Morrison, Crow Wing, Cottonwood, Stevens, Big Stone, Traverse, Lac Qui Parle, Washington Co's.

**Gray Jay:** nested Lake, Cook Co's., also reported from St. Louis and AITKIN (RLH) Co's.

**Blue Jay:** nested Ramsey, Cook, Hennepin, Benton, Hubbard Co's. and Fargo-Moorhead; also reported from Stevens, Pope, St. Louis, Nobles, Clearwater, Beltrami, Lake, Wabasha, Morrison, Crow Wing, Aitkin, Washington, Cottonwood Co's.

**BLACK-BILLED MAGPIE:** 6-4 Roseau Co., near Pine Creek, 2, GES.

**Common Raven:** reported from Cook, Lake, St. Louis Co's.

**Common Crow:** nested Ramsey, Cook Co's.; also reported from Goodhue, Stevens, Traverse, Lac Qui Parle, Big Stone, Pope, St. Louis, Hubbard, Hennepin, Nobles, Clearwater, Wabasha, Morrison, Crow Wing, Aitkin, Beltrami, Washington, Cottonwood Co's.

**Black-capped Chickadee:** nested Cook, Lyon, Hennepin, Ramsey Co's. and Fargo-Moorhead; also reported from Carver, Stevens, St. Louis, Hubbard, Nobles, Clearwater, Beltrami, Pope, Wabasha, Morrison, Crow Wing, Washington, Cottonwood Co's.

**Tufted Titmouse:** still scarce; reported from Hennepin, Houston Co's.

**White-breasted Nuthatch:** nested Ramsey Co. and Fargo-Moorhead; also reported from Goodhue, Carver, Stearns, Hubbard, Houston, Nobles, Clearwater, Wabasha, Hennepin, Morrison, Crow Wing, Cottonwood, Washington Co's.

**Red-breasted Nuthatch:** reported only from Cook Co.

**Brown Creeper:** reported from Clearwater, Washington Co's.

**House Wren:** nested Hennepin, Lyon, Ramsey, Cottonwood, Hubbard, Beltrami, Washington, Rice, Cook, Crow Wing Co's. and Fargo-Moorhead; also reported from Goodhue, Stevens, Nobles, Clearwater, St. Louis, Wabasha, Pope, Morrison, Aitkin Co's.

**Winter Wren:** 6-10 Cook Co. 6, JCG; 6-14 Lake Co., JCG.

**CAROLINA WREN:** one singing male found by Eve O'Leary on 7-15 at Ft. Snelling State Park, Hennepin Co.; seen by many observers until 8-12(BL).

**Long-billed Marsh Wren:** reported from Anoka, Lyon, Hennepin, Wright, Carver, Becker, Big Stone, Lac Qui Parle Co's.

**Short-billed Marsh Wren:** nested Ramsey Co.; also reported from Becker, Wright, Mahnomen, Carver, Beltrami, Jackson, Cook, Wabasha, Mille Lacs, Aitkin Co's.

**Catbird:** nested Washington, Anoka, Lyon, Aitkin, Hubbard Co's; also reported from Hennepin, Goodhue, Carver, Stevens, Beltrami, St. Louis, Nobles, Clearwater, Wabasha, Pope, Morrison, Crow Wing Co's.

**Brown Thrasher:** nested Hennepin, Lyon, Cook, Washington Co's and Fargo-Moorhead; also reported from Goodhue, Carver, Lac Qui Parle, Itasca, Hubbard, Beltrami, Nobles, St. Louis, Wabasha, Pope, Morrison, Crow Wing, Aitkin, Cottonwood Co's.

**Robin:** nested Nobles, Cook, Lyon, Washington, Hennepin, Hubbard, Ramsey, Beltrami, Itasca, Crow Wing Co's. and Fargo-Moorhead; also reported from Carver, Pope, Big Stone, Lac Qui Parle, Stevens, Traverse, Clearwater, Lake, Wabasha, Morrison, St. Louis, Aitkin, Cottonwood Co's.

**Wood Thrush:** reported from Washington, Anoka, Hennepin, Rice, CROW WING (MSB), COOK (JCG) Co's.

**Hermit Thrush:** reported from Lake, Cook Co's.

**Swainson's Thrush:** 6-8 Nobles Co., 1, HSH, late migrant; 6-9 Fargo-Moorhead, 1, *vide* EGA, late migrant; reported from Lake, Cook Co's.

**Gray-cheeked Thrush:** 6-5 Fargo-Moorhead, 1, late migrant, *vide* EGA.

**Veery:** nested in Crow Wing Co.; also reported from Cook, Lake, Pope, Rice, Beltrami, Ramsey, Anoka, Washington, Clearwater, Hubbard, Cass, Aitkin, St. Louis, Morrison Co's.

**Eastern Bluebird:** nested Ramsey, Jackson, Cottonwood, Hubbard, Cook, Kanabec, Rice, Dakota, Crow Wing Co's; also reported from Hennepin, Aitkin, Morrison, Wabasha, Beltrami, Carver, Washington, Pope, Itasca Co's.

**Blue-gray Gnatcatcher:** 7-3 Beaver Creek Valley State Park, Houston Co., 1 ad + 2 y, FL; 7-12 Whitewater State Park, Winona Co., 1, FL.

**Golden-crowned Kinglet:** reported from Lake, Cook Co's.

**Ruby-crowned Kinglet:** reported from Lake, Cook Co's.

**Sprague's Pipit:** 6-18 Clay Co., usual spot near Felton, 1 singing male, RLH.

**Cedar Waxwing:** nested Cook, Hubbard, Kanabec Co's; also reported from Hennepin, Aitkin, Morrison, Wabasha, Beltrami, Clearwater, Stevens, Martin, Washington, Crow Wing, Pope, Lake, Ramsey, St. Louis Co's.

**Loggerhead Shrike:** reported from Hennepin, Anoka, Morrison, Redwood, Big Stone Co's.

**Bell's Vireo:** 6-10 Dorer Pools, Wabasha Co., 2, HFH; 6-12 Winona Co., 1, EHH; 7-14 Hennepin Co., Cedar Ave. Bridge, 1 singing, RLH.

**Yellow-throated Vireo:** nested Hubbard Co.; also reported from Houston, Wabasha, Washington, Clearwater Co's.

**Solitary Vireo:** nested Hubbard, Beltrami Co's.

**Red-eyed Vireo:** nested Crow Wing,

Lyon, Chisago Co's.; also reported from Houston, Rock, Wright, Hennepin, Morrison, Wabasha, Hubbard, Lake, Carver, Goodhue, Cook, Nobles, Clearwater, Beltrami Co's.

**Warbling Vireo:** nested Fargo-Moorhead; also reported from Hennepin, Cottonwood, Morrison, Wabasha, Beltrami, Hubbard, Clearwater, Goodhue, Carver, Nobles, Washington, Crow Wing, Anoka Co's.

**Black-and-white warbler:** reported from Clearwater, Cook Co's.

**Prothonotary Warbler:** reported from Houston, Wabasha, Ramsey Co's.

**Golden-winged Warbler:** reported from Clearwater, Aitkin Co's.

**Blue-winged Warbler:** reported from Winona, Goodhue, Dakota Co's.

**Golden-winged x Blue-winged hybrid:** 7-14 Vasa, Goodhue Co., 1 ad, identified as the "Brewster's" phenotype, FN/MAS.

**Tennessee Warbler:** 6-11 Fargo-Moorhead, *vide* EGA, late spring migrant; reported from Lake and Cook Co's.; 7-25 Morrison Co., LSR, first fall migrants ?

**Nashville Warbler:** nested Clearwater and presumably Morrison Co's; also reported from Hubbard, Crow Wing, Lake, Cook Co's.

**Parula Warbler:** reported from Clearwater, Cook Co's.

**Yellow Warbler:** nested Anoka, Beltrami, Hubbard, Crow Wing Co's. and Fargo-Moorhead; also reported from St. Louis, Clearwater, Washington, Pope, Cook, Nobles, Rice, Morrison, Wabasha, Goodhue, Aitkin Co's.

**Magnolia Warbler:** reported from Lake, Cook Co's.

**Cape May Warbler:** reported only from Cook Co.

**Black-throated Blue Warbler:** 6-3 Tofte, Cook Co., along Sawbill Trail, 1, DB; also in same area on 6-10 (Heartbreak Ridge), JCG; 8-31 North St. Paul, Washington Co., 1 ad female banded, JO, early migrant.

**Myrtle Warbler:** reported from Lake, Cook, Clearwater Co's.

**Black-throated Green Warbler:** reported from Cook, Clearwater Co's.

**Cerulean Warbler:** reported from Houston, Goodhue, Mahnommen (see Notes of Interest in previous issue) Co's.

**Blackburnian Warbler:** reported from Cook, Clearwater Co's; 8-15 Fargo-Moorhead, *vide* EGA, early migrant.

**Chestnut-sided Warbler:** nested Crow Wing Co.; also reported from DAKOTA Co. (female banded 7-5 had brood patch, MRL), Cook, Lake, Clearwater, Aitkin Co's.

**Bay-breasted Warbler:** 6-2 Fargo-Moorhead, *vide* EGA, late migrant; reported only from Cook Co. during breeding season.

**Pine Warbler:** reported from Crow Wing, Clearwater, Lake Co's; 7-22 Isanti Co., near Grandy, RLH, early migrant ?

**Palm Warbler:** 8-30 Wabasha Co., DGM, early migrant.

**Ovenbird:** reported from Cook, Washington, Anoka, Houston, Aitkin, Rice, Lake, Morrison, Clearwater, Crow Wing, Itasca, Beltrami Co's.

**Northern Waterthrush:** reported only from Cook Co.; 8-10(1), 8-15(4) Fargo-Moorhead, *vide* EGA, early migrants.

**Connecticut Warbler:** 6-3 Beltrami Co., nr Shotley, DGF; 6-10 Cook Co., JCG; 6-14 Lake Co., JCG.

**Mourning Warbler:** 6-11 Fargo - Moorhead *vide* EGA and 6-12 Hennepin Co., GES, late migrants; reported from Cook, Lake, Crow Wing, Clearwater, Aitkin Co's.

**Yellowthroat:** nested Ramsey, Lyon, Crow Wing Co's; also reported from Washington, Anoka, Cottonwood, St. Louis, Aitkin, Becker, Mahnommen, Wabasha, Morrison, Hennepin, Nobles, Pope, Goodhue, Carver, Clearwater, Cook, Lake, Beltrami, Hubbard Co's.

**Canada Warbler:** 6-2 Meadowlands, St. Louis Co., DGF; 6-10 Cook Co., 16, JCG.

**American Redstart:** nested Goodhue, Hubbard, Crow Wing Co's; also reported from Cook, St. Louis Co's.

**Bobolink:** reported from Hennepin, Washington, Anoka, Beltrami, Carver, Aitkin, Wabasha, Morrison, Nobles, Jackson, Pope, McLeod, Clay, Crow Wing, St. Louis Co's.

**Eastern Meadowlark:** reported from COTTONWOOD (LAF), Hennepin, Wabasha, Washington, Crow Wing, Beltrami Co's and FARGO-MOORHEAD (*vide* EGA).

**Western Meadowlark:** nested Hubbard; also reported from Hennepin, Ramsey, Anoka, Washington, Wabasha, Morrison, Nobles, Pope, Crow Wing, Lac Qui Parle, Big Stone, Traverse, Stevens, St. Louis Co's.

**Yellow-headed Blackbird:** nested Ramsey Co.; also reported from Cottonwood, Wright, Hennepin, Houston, Nobles, Morrison (LSR), Pope, Washington (DS), Becker, Stevens, Lac Qui Parle, Big Stone, Cass (JAM), Crow Wing (MSB), Traverse Co's.

**Red-winged Blackbird:** nested Washington, Beltrami, Cass, Hennepin, Crow Wing Co's. and Fargo-Moorhead; also reported from Cottonwood, Aitkin, Wabasha, Morrison, Nobles, Pope, Hubbard, Lake, Clearwater, Stevens, Traverse, Big Stone, Lac Qui Parle, St. Louis Co's.

**Orchard Oriole:** nested Rock, Lyon Co's.; also reported from Houston, Wabasha, Goodhue Co's.

**Baltimore Oriole:** nested Hennepin Washington, Lyon, Wabasha, Hubbard, Crow Wing Co's. and Fargo-Moorhead; also reported from Beltrami, Cottonwood, Morrison, Nobles, Pope, St. Louis, Clearwater Co's.

**Brewer's Blackbird:** nested St. Louis, Cook Co's; also reported from Aitkin, Nobles, Martin, Washington, Stevens, Crow Wing, Lac Qui Parle, Hubbard Co's.

**Common Grackle:** nested Washington, Hubbard, Stevens, Cook Co's; also reported from Hennepin, Wabasha, Beltrami, Cottonwood, Aitkin, Morrison, Nobles, Pope, Lake, Clearwater, Lac Qui Parle, Big Stone, Traverse, Crow Wing Co's.

**Brown-headed Cowbird:** parasitized Rose-breasted Grosbeak in Hennepin, Ramsey Co's; Robin in Hennepin Co.; Chipping Sparrow and Yellow Warbler at Fargo-Moorhead; "warbler nest" in Cottonwood Co.; also reported from Wabasha, Beltrami, Morrison, Nobles, Martin, Cook, Pope, Clearwater, Washington, Hubbard,

Stevens, Traverse, Lac Qui Parle, Big Stone, Crow Wing, St. Louis Co's.

**Scarlet Tanager:** reported from Isanti, Cottonwood, Washington, Anoka, Carver, Houston, Morrison, Clearwater, Cook (JCG), Crow Wing, Beltrami (DGF) Co's.

**Cardinal:** nested Hennepin, Ramsey, Washington Co's and FARGO-MOORHEAD (*vide* ECA); also reported from Cottonwood, Wabasha, Goodhue, Stevens Co's.

**Rose-breasted Grosbeak:** nested in Hennepin, Ramsey Co's. and Fargo-Moorhead; also reported from Jackson, Morrison, St. Louis, Washington, Clearwater, Lake, Cook, Hubbard, Crow Wing, Beltrami, Goodhue Co's.

**BLACK-HEADED GROSBEAK:** mid-July to Aug. 9, Mendota Heights, Dakota Co., one adult male came regularly to feeder of Bernard Friel; seen feeding a young grosbeak on 8-6 by HFH; photographed in color; first verified state record.

**BLUE GROSBEAK:** 7-10 Rock Co., 1 singing male just E. of Beaver Creek and another at usual spot just S. of Manley, BC, ELC, RLH; this species is now expected to occur yearly.

**Indigo Bunting:** nested Ramsey, Crow Wing Co's.; also reported from Goodhue, Carver, Washington, Anoka, Cottonwood, Hennepin, Winona, Wabasha, Morrison, Martin, Nobles, Pope, Hubbard, Clearwater, Beltrami Co's.

**Dickcissel:** reported from Anoka, Isanti, Lyon, Washington, McLeod, Wright, Carver, Hennepin, Wabasha, Rock, Nobles, Martin, Pope, Clay, Stevens, Lac Qui Parle, Olmsted, Pipestone, Lincoln, Redwood Co's.

**Evening Grosbeak:** nested in Cook, Clearwater, Crow Wing Co's.; also reported from Lake, St. Louis, Hubbard Co's.

**Purple Finch:** nested Cook, Crow Wing Co's; also reported from Hubbard, Clearwater, Aitkin Co's.

**Pine Siskin:** 6-1 Hennepin Co., VL; 6-10 Cook Co., JCG; 6-23 Hennepin Co., VL; 7-21 Hubbard Co., LWJ; June/July St. Louis Co., JCG.

**American Goldfinch:** nested Cook Co.; also reported from Crow Wing, Hubbard,

Clearwater, St. Louis, Ramsey, Anoka, Goodhue, Carver, Beltrami, Cottonwood, Wabasha, Hennepin, Aitkin, Morrison, Nobles, Pope, Washington, Lac Qui Parle Co's.

**Red Crossbill:** nested at Moorhead, Clay Co., 3-31 to 4-20, LWJ (see Notes of Interest in previous issue), first documented nesting for state; still in general area until 6-9 *vide* EGA; other reports 6-17 Bemidji, Beltrami Co., JAM; 6-22 Grand Marais, Cook Co., LAC.

**Rufous - sided Towhee:** nested Jackson Co.; also reported from Crow Wing, Clearwater, Washington, Beltrami, Aitkin, Sherburne Co's.

**Savannah Sparrow:** reported from Clay, St. Louis, Anoka, Washington, Ramsey, McLeod, Houston, Nobles, Roseau Co's.

**Grasshopper Sparrow:** nested Hubbard Co.; also reported from Washington, Lyon, Pope, Houston, Cottonwood, Hennepin, Jackson, Nobles, Washington, Clay Co's.

**BAIRD'S SPARROW:** 6-4 Roseau Co., near Pine Creek, 4+, (details ?), GES.

**LeConte's Sparrow:** reported from Clay, Becker, Mahnommen Co's.

**Henslow's Sparrow:** 6-12 (EHH), 7-12 (FL) Winona Co.

**Sharp-tailed Sparrow:** 7-29 Becker-Mahnommen Co. line, 2, DB.

**Vesper Sparrow:** nested Anoka, Ramsey, Jackson, Hubbard, Washington Co's; also reported from McLeod, Carver, Wabasha, Hennepin, Morrison, Nobles, Pope, Stevens, Traverse, Lac Qui Parle Co's.

**Lark Sparrow:** 6-27 Anoka Co., nest with 5y, ELC; small colony found in Richland Co., North Dakota (adjacent to Wilkin Co., Minn.) by JAH; also reported from Houston, Sherburne, McLeod, Wabasha, Jackson, Fillmore, FARGO-MOORHEAD (*vide* EGA); may be extending range northward.

**Slate-colored Junco:** reported from Aitkin, Lake Co's.

**Chipping Sparrow:** nested Cook, Anoka, Kanabec, St. Louis, Hubbard Co's and Fargo - Moorhead; also reported from Clearwater, Crow Wing, Lake, Carver, Beltrami, Cottonwood, Wabasha, Hen-

nepin, Aitkin, Morrison, Nobles, Washington, Pope, Stevens Co's.

**Clay-colored Sparrow:** nested Pope, Ramsey, Hubbard, Washington Co's.; also reported from Clearwater, Crow Wing, Beltrami, Mahnomen, Clay, Norman, Roseau Co's.

**Field Sparrow:** small nesting colony found near Starbuck, POPE Co., JAH; may represent significant range extension northwestward; other reports from Houston, Fillmore, Winona, Wabasha, Anoka, Ramsey, Sherburne, Jackson, Washington Co's.

**White-crowned Sparrow:** late migrants 6-3 Grand Marais, Cook Co., LAC; 6-6, 6-9, Clifton, St. Louis Co., JCG.

**White-throated Sparrow:** nested Cook Co.; also reported from Lake, Aitkin, Clearwater Co's.

**Swamp Sparrow:** nested Ramsey Co.; also reported from Aitkin, Anoka, Clearwater, Crow Wing, Cook, Lake, Carver, Hennepin, Morrison, Washington, Jackson Co's.

**Song Sparrow:** nested Cook, Ramsey Co's; also reported from Clearwater, Crow Wing, Hubbard, Lake, Goodhue, Carver, Beltrami, Hennepin, Cottonwood, Aitkin, Wabasha, Morrison, Nobles, Pope, Washington, Stevens, Traverse, Lac Qui Parle, Big Stone, Mahnomen Co's.

**Chestnut-collared Longspur:** 6-10(EHH), 6-18(BC, LC, RLH) Clay Co., usual spot near Felton; numbers reduced from last year; a few still in area on 8-7, but on this date we noted that the area had been mown for hay — it will be interesting to see how this affects the wildlife population there in the next few years.

**SUMMARY:** Although only 54 observers submitted reports, some 222 species were covered. On the other hand, breeding evidence was accrued for only 97 species. Unusual distribution records were obtained for certain species, such as the Common Merganser, Wood Duck, Green-winged Teal, Wood Thrush, etc. perhaps indicating range extensions (permanent or temporary?). In some cases these records may just mean that we still have much to learn about breeding distributions. Such learning will be indeed slow, when we scan this report and see that

breeding evidence was listed for only five species of warblers out of some 28 species that breed here. Unexpected visitors were the Purple Gallinule, Scissor-tailed Flycatcher and Black-headed Grosbeak. The Black-throated Blue Warbler and Blue Grosbeak are proving that they can be found here yearly; The Carolina Wren and Acadian Flycatcher are long overdue in their summer appearances here, although the wren did suffer a setback several years ago and is just now making its comeback.

**CORRIGENDA:** Winter Season 1966: Screech Owl 12-4, 1-1, 2-26 Knife River, RK should read Snowy Owl; Spring Season 1967: Evening Grosbeak and Boreal Chickadee 3-2 Clay Co., LWJ should read Cass Co.

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The sunniest September since records were kept was the report of Dick Bridgman of the Lakehead Weather Office. There were 250.3 hours of bright sunshine — nearly double the amount for September, 1965. The highest previously was only 179 hours in 1963. Rainfall was less than 50 per cent of average with only a total of 1.55 inches. It is interesting to note that the 5-month period May to September inclusive was the driest season since 1940 with a total precipitation of 11.10 inches. The official frost free season this year was 98 days, ending September 15th. However, little damage was experienced by flowers until well into October. October was cool but little snow fell until October 25 and a few warm days made most of this disappear. Another light fall came November 13 and this remained on roadsides out of town but our garden was not covered until November 21. Farmers are worried about the possibility their wells will run dry.

The dry autumn proved a disappointment to those who look forward to the bright yellows and reds of the season; this year the parched leaves withered away in duller shades. Compensating for this loss was a gorgeous crop of berries and our photographers were busy recording the abundance. The botanical find of the year was a stand of Common Hog-Peanut on the shore of the Kaministiquia River. The nearest station known is on the banks of Prairie Lake, Lake County, recorded by Olga Lakela in "A Flora of Northeastern Minnesota," a volume we find of considerable value in this area. Another first was the result of our fall field trip on September 16 when Ellen Bocking spotted a group of Earth-stars at Sturgeon Bay. J. Walton Groves, Principal Mycologist, Plant Research Institute, Ottawa, identified this puffball as *Geastrum coronatum* Persoon. Earlier in the year I had found another, somewhat similar Earth-star at Agawa Bay on the northeast shore of Lake Superior which he identified as *As-*

*traeus hygrometricus* (Persoon) Morg. These have to be seen to be appreciated.

Moths were still active October 4 and the occasional Mourning Cloak and Cabbage butterflies were seen until the mid-month. A Beaver was swimming in the open water at the Keefer Seaway Terminal November 24. Two days later Tom Dyke saw a Short-tailed Weasel in the white winter coat at the Quackenbush homestead. Foxes are plentiful and have been seen crossing the main thoroughfare between Port Arthur and Fort William. Most of those seen are the common Red Fox but on September 8 Walter Hartley saw a beautiful specimen of the black phase. William Pawluk, a commercial fisherman of Dorion, caught a Gizzard Shad in one of his nets near the end of July; the first record for this area. Further east, north of White River, on Joe Lake, Norman Denis found both Blue-spotted and Red-backed Salamanders on September 15. A Monarch butterfly was collected at Dorion September 18 by C. E. Garton.

The Ontario Department of Lands and Forests has requested the cooperation of the Federation of Ontario Naturalists and its affiliated clubs in a capability inventory which will involve the classifying of land for forestry, wildlife and recreation. In addition to a shoreline survey by the Department, our club has been asked to submit information on special features; for example, waterfalls, historic sites, rock formations as caves and canyons, and areas with unique natural vegetation. This plan is feasible as the means for preserving many areas of special interest to field naturalists because the major portion of the land in Thunder Bay Districts belongs to the Crown. Therefore, the Legislative Assembly in Toronto can designate these lands for the use that will give the greatest benefit to the people of the Province of Ontario. It is hoped that some interesting nesting areas will be saved as a result of the inventory.

Warblers drifted through the Lakehead area the latter part of August and there were major movements on September 16 and 21st. The usual great flocks of "black-birds" roamed the countryside. Slate-colored Juncos were numerous after September 27 but the migration of many finches went almost unnoticed. Possibly the October weather was responsible for in addition to being dull it was the windiest October since 1952 with the average wind blowing at 11.6 m.p.h. Only 1.3 inches of measurable snow fell at the Lakehead, though vastly different conditions prevailed in outlying parts of the district. East 200 miles at Nakina 30 inches of snow fell; at Armstrong, 100 miles north, 21.7 inches covered the ground; and westerly at Atikokan, 12.5 inches whitened the roadsides.

*Loons to Herons:* Common Loons were seen at Sibley Park on September 24 and the last Pied-billed Grebe was reported on September 10 in Fort William. Two Horned Grebes were seen at Sibley the last week of September but no late records of Great Blue Herons were received.

*Geese to Mergansers:* Canada Geese flew over in the usual numbers, with the first flock being spotted at Kakabeka Falls by Jean Leiterman on September 10 and the last being heard on November 8. Over a thousand Snow and Blue Geese were seen by Claude Garton at Dorion October 6. The wild rice crop at Whitefish Lake was poor for the third year in a row and hunters had a poor shoot. Fewer ducks than usual were seen at the local waterfront. Early in the fall Blue-winged Teal and Black Ducks appeared in more than usual numbers. A female Mallard with five half-grown young were observed at Lake Marie Louise on September 24 by David Denis. The next day four White-winged Scoters were seen. Mergansers were scarce by October.

*Vultures to Cranes:* Two Turkey Vultures seen at Atikokan September 5 by Murray Kyle and an immature at Shebandowan by David Denis September 25 were of special interest as this species was not reported in customary locales earlier in the year. Mrs. R. Walker saw a Goshawk near Centennial Park October 12. Red-tailed Hawks were noted throughout October by Tom Perrons. The nearest approach to a "hawk flight" was a flight

of 14 Rough-legged Hawks that D. H. Elder saw in Fort William near the airport on October 9th. Several other observers saw a few of this species nearby the same day. Tom Perrons watched two Bald Eagles, one an immature, at English River September 8. Exactly a month later Mrs. Morton saw one at Sibley Park. A Marsh Hawk was seen taking a small "peep" at a pool in a gravel pit on September 2. Tom Dyke saw a female Marsh Hawk at the Keefer Seaway Terminal September 30. The last Sparrow Hawk reported was in Sibley Park September 24.

Ruffed Grouse were abundant throughout the district. The real surprise was the increase in the numbers of Sharp-tailed Grouse. Murray Kyle saw three at English River October 15 and Tom Perrons noticed them several times in the vicinity of Raith. D. H. Elder reported they were common on the Auden road the second week of November and appeared to be moving southwards. They were very numerous in Geraldton by November 27; 25 being seen at one time, and many were being fed around homes in the area. On November 29 I saw five at Port Coldwell, near the shore of Lake Superior. A few Gray Partridge are still to be found just west of Fort William. Sandhill Cranes were reported at Ignace about September 25.

*Killdeer to Owls:* Killdeer were numerous on plowed fields until mid-October. American Golden Plover were seen in Dorion by C. E. Garton October 3 and Black-bellied Plover were on Chapples Golf Course October 12. Seven Golden and two Black-bellied Plovers were reported at Red Rock October 19 by Mr. and Mrs. J. E. Freeman. Tom Perrons and I saw a Common Snipe in Paipoonge Township October 15, accompanied by both Yellowlegs. Spotted, Solitary, Pectoral, Baird's, Least, and Semipalmated Sandpipers and Dunlins were seen throughout September. Northern Phalaropes were reported on Lake Nipigon August 22 by Lauri Manuel and John Hebden saw one in Paipoonge September 9. A Snowy Owl appeared in Fort William November 14 where it was seen by Tom Dyke.

*Hummingbirds to Crows:* Several Ruby-throated Hummingbirds were recorded in

September and like the Belted Kingfishers and Yellow-shafted Flickers vanished the first weeks of October. One wonders what happened to the young of the Eastern Kingbird seen being fed while they sat on telephone wires at Red Lake August 31. A Traill's Flycatcher noted in Neebing Township by Peter Boyle on October 15 was a late record for this species. Lauri Manuel remarked that flycatchers were scarce in the Nipigon area this year but they seemed to be in the usual numbers near the Lakehead. Marion Smith had a Least Flycatcher in her yard September 24. Gray Jays were common between Dryden and Port Arthur October 6 and have been noted on every trip throughout Northwestern Ontario. Blue Jays, Common Crows and Common Ravens are numerous. On September 13 a flock of over a hundred Common Crows stripped C. E. Garton's corn patch at Dorion. A Black-billed Magpie was seen at Shebandowan September 25 by the Denis.

*Chickadees to Warblers:* White-breasted Nuthatches evidently intend to winter again near the Cryer feeder in Paipooonge. A Mockingbird seen by C. E. Garton at Dorion was attacked by Gray Jays. A Gray-cheeked Thrush was seen in Fort William September 27. Twelve Eastern Bluebirds noted in Paipooonge September 23 were more than reported previously in 1967. Two were seen by the Boyles in Neebing Township October 6. Water Pipits were on the shore at Dorion September 18. Golden-crowned Kinglets were present in Fort William until October 9. Myrtle, Palm and Magnolia Warblers were plentiful during the migration. Winter Wrens were plentiful, and singing (!) at the Black Sturgeon Ranger Station September 3. A Northern Shrike came to the Walkers' feeding station in Port

Arthur November 3, unsuccessfully chasing House Sparrows.

*Blackbirds to Buntings:* Great flocks of Red-winged Blackbirds, Common Grackles, Starlings and Rusty Blackbirds were common along the highway from Dryden to Port Arthur on October 6th, but the real thrill was the observation of four Yellow-headed Blackbirds in Paipooonge Township. One week later Walter Rosser saw two Yellow-headed Blackbirds near Loon Lake, MacGregor Township. This species is scarce in our region and many years is not recorded. A Western Meadowlark was seen in Blake Township by Tom Perrons on September 16. Harris' Sparrows came September 21 and Lapland Longspurs arrived five days later. Red Crossbills were seen by Mrs. R. Walker September 16 and have been reported throughout the area since that time. A surprise was a White-winged Crossbill's nest with four young found September 1, north of White River by Norman Denis. The young left the nest the next day. Snow Buntings were in flocks along the road to Geraldton September 19, and Slate-colored Juncos were common on the way to Kenora October 3. Unusual numbers of Common Redpolls were seen on the highway from Marathon to Port Arthur the last day of November. Pine Grosbeaks, first seen on November 7 between Red Lake and the Lakehead, are now eating the bountiful crop of Mountain Ash berries.

An albino Blue-winged Teal was captured September 7 at the Ontario Department of Lands and Forests duck trap at the Lakehead. Tim Timmerman, the district biologist, banded the rarity and released it. 48 Oak Ave., Port Arthur, Ontario.

## M.O.U. FEBRUARY FIELD TRIP TO GRAND MARAIS

The annual field trip on the North Shore of Lake Superior will be held February 3-4, 1968. There will be a buffet dinner on February 3rd at the East Bay Hotel, Grand Marais, followed by a program in the Cook County High School. Please make reservations for the dinner directly to the East Bay Hotel. It is also necessary for all those participating to take care of their own accommodations in Grand Marais.

# Notes of Interest

**The First Green-tailed Towhee Record for Minnesota** — Sometime during the first week of December, 1966 a strange bird appeared at the feeder of Mr. and Mrs. James D. MacKay in the Lakeside area of Duluth. Although they got a very good look at it since the feeder was right outside a window and the bird would sit in the feeder or on the porch nearby for long periods of time daily, they were not able to identify it. News of this strange bird spread and I finally heard about it during the middle of December. On the 15th I went to see it and was able to identify it as a Green-tailed Towhee, a western species that had never been reported before from Minnesota although it had turned up in neighboring states. The bird came regularly to the feeder for about a month longer (the last date that Mrs. MacKay reported it was January 12, 1967 although it may have stayed after that) and was seen by many, many people. On December 17th I took John C. Green, Frederick Z. Leshner, Jerry Rosso, Robert B. Janssen, Harding Huber, Brother Theodore Voelker, and Raymond Glassel to see it. That same day Elizabeth Campbell and Mr. and Mrs. Ronald L. Huber were also able to watch it. It was present during the Christmas Count when it was observed by P. B. Hofslund and J. K. Bronoel on December 26th. Many other Duluth and out-of-town birders also had an opportunity to see it. Although several people took pictures of it, none of them are good enough to be published since the porch where it rested was quite dark and the pictures were consequently dark. However, the bird is identifiable in some of the colored slides taken by Elizabeth Campbell and myself and these slides are in the files of the Museum of Natural History of the University of Minnesota.

I took notes on the plumage of the bird as follows: A medium-sized bird (about Catbird size) with a long tail and a sparrow-shaped beak. The face, breast, belly and flanks were a dull dark grey. Back, wings and tail were a dark olive green brightest on the tail, especially the outer retrices which were orangish green; retrices very frayed at the tip. Wings were brownish green with no wing bars. Top of head was rufous with a slight orange cast. The throat and whisker mark on the side of the face were dull white or light grey and did not stand out from the grey face very conspicuously. The lores were very slightly lighter than the rest of the face but this was only noticeable at very close range. Under tail coverts and the part of the belly posterior to the legs were buffy white with a blackish line separating under tail from grey flanks. Bill and feet were dark slate grey with a slight metallic cast. *Janet C. Green, 9773 North Shore Drive, Duluth, Minnesota.*

**Rock Wren in Cook County, Minnesota** — On October 29, 1966 Manse Brackney, Ray Glassel, Bill Litkey and I were birding up the North Shore from Duluth to Grand Marais. The day was sunny and quite mild.

We were having a very successful day of birding but as we entered Grand Marais the real highlight of the trip occurred. As we drove past the Harbor Light Bar on Hwy. 61 a small bird flew across the road in front of the car and into the side yard of the above mentioned Bar. The bird was too small and colorful to be a House Sparrow and another first thought was of Palm Warbler.

However, after turning around and pulling into the driveway we spotted the bird in a small woodpile and recognized it as a wren. After a few puzzling minutes, Ray recognized it as a Rock Wren (he had seen them before in the Black Hills). We all had plenty of time to study the bird through binoculars (especially noting the buffy outer tail corners) and comparing it to the new bird book by Robbins, et.al.

After having made positive identification, I took my Pentax camera with a Bushnell monocular telephoto and followed the bird around the yard getting several identifiable shots. *Harding Huber, 6739 Golden Valley Road, Golden Valley, Minnesota.*

**Scissor-tailed Flycatcher near Elba, Minnesota** — On June 10, 1967 while birding in the Whitewater State Park-Refuge Area I spotted a Scissor-tailed Flycatcher. About one mile north of Elba, Minn., I stopped to check over a hillside covered with Cedar trees. I then walked down toward an open area where there was a small cornfield (not much bigger than a football field). As I neared the Southwest corner of the field a bird with very long tail feathers came flying in from the south. As the bird flew past me, it turned eastward, flew over to the east side of the field and landed in a tree. While it was flying away from me I could see its light gray back and unmarked brownish wings. As it flew up into the tree, it spread its long, swallow-like tail exposing black inner feathers and white feathers on the outer edges.

The bird sat with its back to me for nearly a minute before flying to another tree about twenty feet away. This time, as it landed, it turned toward me. I was able to see the pink wing lining for an instant. After sitting here for about a minute, the bird then flew low over the field to a tree in the northwest corner. I went back to the car and drove up to the north end of the field but was unable to find the bird again. *Harding Huber, 6739 Golden Valley Road, Golden Valley, Minnesota.*

**Scissor-tailed Flycatcher in Wright County** — On June 19, 1967, at 8 a.m., I observed a grayish-white bird with pinkish sides and two long tail feathers sitting on a telephone wire three miles north of Buffalo, Minnesota. The bird was observed for two minutes with a 7 x 50 binoculars until it flew off into a distant woods. As it flew, its scissor-like tail feathers became very evident. After checking with Peterson's *Field Guide to Eastern Birds*, I was positive that this was a Scissor-tailed Flycatcher. *Bruce Hitman, Buffalo, Minnesota.*

**Dickcissel Record for Duluth** — Last spring we were able to attract (with cracked corn) a large flock of migrating juncos and white-throats to our yard in Clifton, Duluth Township, St. Louis County. On May 2, 1967, a cold, blustery day with snow flurries, a spot of yellow in the sparrow flock made me immediately investigate with my binoculars. The bright color turned out to be the yellow breast of a male Dickcissel, a species I had never before seen in Duluth. It fed in the yard with the other migrants for several days and I observed it often, sometimes as close as 10 feet when it was under a window. My husband, John C. Green, also saw it as did Richard Kuchta. On May 3rd I brought my University extension class in bird identification out to see it and although it was snowing very heavily, most of the class (including Anne K. Arndt and Koni Sundquist) were able to spot it. It was last seen in the yard on May 5th.

My notes on the appearance of the bird include the following: A sparrow between white-throat and junco in size with a tail shorter than either species. Back, tail and wings brownish with a very noticeable rufous shoulder mark on the wing (brightest on the middle coverts). The throat was white and there was a black breast band separating it from the bright yellow breast. Belly white and flanks light tan. The nape and auricular area were grey and the top of the head was finely streaked greyish tan; forehead yellowish. The black breast band ended at a yellow mark on the side of the face (malar region) which separated the white throat from a white triangular mark on the side of the neck. A yellow line over the eye ended in a white spot by the bill; white eye-ring below eye; eye dark. *Janet C. Green, 9773 N. Shore Drive, Duluth, Minnesota.*

**Description of Bird Thought to be a Barrow's Goldeneye** — I first saw this bird in the northeast corner of Longyear Lake, Chisholm, St. Louis County, Minnesota on Wednesday, April 12, 1967 about 3:00 P.M. The sun was shining brightly in the western sky and I was looking to the southeast from the road back of the hospital. I noticed that this bird was different from the Common Goldeneye which was in the same vicinity. There was also a Hooded Merganser in the area. This bird had a yellow eye and the white mark was long and different instead of the

round spot between the eye and bill. The white mark on the side of the duck was different. The impression I had was that there were fine black marks on the white wing patches. The head had a purple sheen.

I left the area after about five minutes observation and went and got George and Janet Pospichal. George has hunted ducks for many years. I asked them to note the black marks on the wing patch and the color of the head and the white mark on the head. After observing these distinguishing marks I showed them the picture in Robbins book. Both felt that this was the Barrow's Goldeneye. *Forest V. Strnad, Wyoming, Minnesota.*

**Red-shafted Flicker Observation** — While birding near Pomme de Terre Lake, eight miles north of Morris, Stevens County, on March 24, 1967, I flushed a flicker from the grass bordering a county road. Immediately, I noticed that this flicker had salmon-red wing and tail linings and that it was decidedly larger than a Yellow-shafted Flicker.

The flicker landed on a willow tree, about 50 yards from where I was standing. I approached, but the flicker flew off, again showing its reddish wing and tail linings. It landed on the ground, about 30 feet away. From this distance and with 7x35 power field glasses, I got a good look at the flicker's head. I could easily see that both whiskers were red without any noticeable black in them and that the nape and crown of the head were brownish, while the face was gray.

I have had the opportunity to examine Red-shafted and Yellow-shafted hybrid flicker skins (which were collected in the Dakotas), and I have seen hybrid flickers myself, but all showed at least one, if not many Yellow-shafted traits. However, I was unable to find any Yellow-shafted traits on the flicker I observed at Pomme de Terre Lake. *John A. Hart, Morris, Minnesota.*

**Red-shouldered Hawk Observed in Stevens County** — On March 28, 1967, I observed an adult Red-shouldered Hawk circling over a small lake at Scandia, Stevens County. Scandia is one of the largest, if not the largest area of deciduous woods in Stevens County.

A description of the hawk is as follows. A medium sized Buteo with a dark tail banded with about four narrow white bands. The underparts and wing linings were barred with reddish orange. I also observed the translucent white "windows" on any Red-shouldered Hawk. When the hawk wheeled in flight, I got a good glimpse of the rusty shoulder patch. *John A. Hart, 309 East Second Street, Morris, Minnesota.*

**Black-billed Magpies in Roseau County** — June 4, 1967 was very cool and windy (about 45°), we were driving north of Badger on County No. 10 about 10:30 A.M. to observe spring migrants. Near the ditch on the edge of a grain field two Black-billed Magpies flew up and into the neighboring scrub brush both flying into the same place from different positions. This area of scrub oak and bush entwines into a larger than usual thicket patch, and is fenced from the grain fields with four or more acres enclosed. I have checked several bird guides and all describe nesting areas similar to this scrubby woodland area. (Last fall I had the opportunity to observe Yellow-billed Magpies in Sacramento, California. That area was also full of scrubby thicket and drainage ditches, similar to northern Minnesota—the Roseau Wildlife area is a dredged marsh with dike roads along the sides.)

September 30, 1967 we drove north toward Badger on No. 59 and observed three Black-billed Magpies near some turkey farms along the road. There were many Red-tailed Hawks migrating through this marsh-peat bog area. As magpies eat carrion as well as insects and vegetable matter—they may have been feeding on road and hawk kills. This is my earliest fall date as yet on magpies, they were near the area where we observed two this spring. We have observed magpies along No. 59 during winter trips in swamps south of Greenbush. *Mrs. George A. Stanley, 4317 Toledo Ave. N., Minneapolis, Minnesota.*

**Early Shorebird Records: Baird's Sandpiper** — On April 4, 1967, I observed 13 small sandpipers feeding in a flooded, plowed field seven miles northeast of Morris. Since the birds were about 100 yards distant from the car, and since I had only 7 power binoculars, I was unable to identify them except that they were Peep-like sandpipers, smaller than Killdeer (which were on the pond also). When I tried to approach closer to the pond, I bogged down in the mire which started less than 50 feet from the car. I then went home, got my 15x60 zoom scope, and came back. With the scope, I saw that the sandpipers had black legs, medium sized straight bills, brownish buff breasts, with no extremely sharp division between the breast and the white belly, brown back with a definitely scaly appearance to them, dark rump (visible when one of the birds flew a short distance), and wings which extend slightly beyond the end of the tail. This made the sandpipers seem less chunky than the other Peeps. My total time of observation was about 15 minutes, the time was about 6 P.M. and the sun was directly at my back.

I came to the conclusion that these birds were Baird's Sandpipers.

When I returned to the pond on April 5, I found no trace of the birds.

When R. A. Grant and I visited a small slough in the extreme northwestern edge of Lac Qui Parle County, on April 8, 1967, we observed at a distance of about 50 feet a flock of about 40 sandpipers which had descriptions identical to the Baird's Sandpipers which I observed on April 4. Dick and I then concluded that these Sandpipers were Baird's.

**Stilt Sandpiper** — On April 8, 1967, R. A. Grant and I noted a flock of shorebirds in a small flooded field, several miles south of Beardsley, Big Stone County. The flock consisted of a number of Lesser Yellowlegs, several Greater Yellowlegs, three Pectoral Sandpipers, Killdeer, and a shorebird which we identified as a Stilt Sandpiper. It had the following characteristics: Dowitcher size, a rather long, straight bill, long yellow-green legs, white underparts, heavily barred with brown, a dark crown, and a rusty cheek patch. The cheek patch is not as readily visible as many bird books suggest.

We were at a distance from the slough of about 50 feet, and could easily observe all the shorebirds with 7x35 and 7x50 binoculars. *John A. Hart, 309 East Second Street, Morris, Minnesota.*

**Observations of the American Woodcock** — Sunset Point, Sugar Lake, Wright County August 1967. Saturday evening August 5 about 7:30 P.M. I was walking my basset hound along the lake road; at the wye where traffic is always heavy we hesitated while the dog stared into the willow thicket. Suddenly an American Woodcock exploded up and across the road. I had a quick sight of the beautiful brown bird with rounded body and V-line down his back. The sound accompanying this flight was similar to the Sharp-tailed Grouse. The next night and during the next two weeks Mr. Stanley and I were fortunate to see the woodcock several times in flight—a fascinating view, the beak pointing downward as he flushed near our feet. Saturday night August 19 we walked down to check the time and spot, after a slightly longer pause one woodcock rose from about a yard off the road. We stopped again about eight feet further along and a second woodcock came up about six feet in from the road, he followed the first into the marsh grass. This was our last sighting. I have checked Bent's *Life Histories of North American Shore Birds* and Robert's *Birds of Minnesota*, they and other books suggest early nesting. The area where we saw the woodcock was willow, birch, and dogwood thicket; the humus deep, the jewelweed growing profusely about a foot high. We did not see the woodcock on the ground, the light below the jewelweed was dim. I checked for boorings but did not find any. *Mrs. George A. Stanley, 4317 Toledo Ave. N., Minneapolis, Minnesota.*

**Summer Sandhill Crane at Salt Lake** — On July 31, 1967, I observed a very rusty

Sandhill Crane foraging along the northern edge of Salt Lake, Lac Qui Parle County. The bird had a bare red patch on its head, indicating it was not an immature.

It is interesting to speculate where the crane came from. It seems doubtful that it nested in the area, since the last (to my knowledge) nesting record for that area was 1883 in Jackson County (Roberts 1932), (Bent gives a record for Herman, but no date), and almost all the proper habitat for cranes has been depleted. If the crane had nested in the area, by this date it probably would have been in a family group of adults and immatures foraging together. It seems likely therefore that the bird was unmated. Whether it spent the summer in western Lac Qui Parle County, or whether it was moving south well ahead of the usual crane migration, is however, hard to tell, unless of course other observers recorded Sandhill Cranes in the Salt Lake area this summer. *John A. Hart, Morris, Minnesota.*

**Ring-billed Gulls Summer in Western Minnesota** — Around 75 Ring-billed Gulls spent the summer near Lake Minnewaska, Pope County. Many of the birds were immatures.

On July 31, 1967, I saw a Ring-billed Gull on a small pond near Correll, Big Stone County. This single bird was in company with Franklin's Gulls, while the Minnewaska birds did not associate closely with other species. It is interesting to note the differences in the sizes of the bodies of water where the gulls were seen. Lake Minnewaska, about 10 miles long, is the largest lake in Pope County, while the pond was hardly 400 yards wide, at the widest point. *John A. Hart, Morris, Minnesota.*

**A Field Sparrow Colony in Pope County** — On June 17, 1967, I discovered a small colony (10 to 15 pairs) of Field Sparrows at Glacial State Park, five miles south of Starbuck, Pope County. Pink bills, rusty caps and white eye rings were seen on all the birds. July 30, was the next chance I had to visit the colony. On this date, quite a few of the birds were singing (a descending tee-tee-tee, growing faster toward the end). I had heard no singing on June 17.

I plan to check carefully Glacial State Park (see description in "breeding evidence" sheets) and other areas similar to it, the remaining part of the summer, as well as the early fall for other colonies. *John A. Hart, Morris, Minnesota.*

**Blue-winged Teal Observed Diving** — Several volumes on waterfowl suggest that the Blue-winged Teal is a very poor diver, in fact one of the poorest divers in the puddle duck family. Bent, in his *Life Histories of North American Waterfowl*, Volume 1, 1962 (reprint edition), says, "The Blue-winged Teal is decidedly a surface feeder; its food is usually obtained on the surface or within reach of its submerged head and neck, but occasionally its tail is tipped up and its body half immersed."

In view of the above, it seems strange that on April 18, 1967, near Louisberg, Lac Qui Parle County, I observed a flock of eight Blue-winged Teal, both male and female, diving expertly, in water which I estimated to be two feet deep. The birds would throw themselves forward, and use their wings as propellents to get themselves under water. They stayed under water for a very short time (three to five seconds), and I assumed that they were eating small bits of plant life which would be found on the bottom of the pond.

On October 21 and 22, 1964, (*The Loon*, Volume 36, Number 4, page 141) Mr. Robert B. Janssen observed Green-winged Teal diving in much the same manner as the Blue-winged Teal I observed diving. Forbush and May in *Natural History of the Birds of Eastern and Central North America*, 1939, consider the Green-winged

Teal to be "an excellent diver, but (it) does not ordinarily dive except to escape some enemy."

Forbush and May, however, mention nothing about the diving abilities of the Blue-winged Teal. *John A. Hart, Morris, Minnesota.*

**Western Sandpiper in Lyon County** — The Western Sandpiper was seen on August 26, 1967, one mile west and one mile north of Cottonwood in Lyon County. The area is about 80 acres of shallow water and mud flats. The Western was seen at a distance of five to ten yards in good light with 7x50 binoculars. The following are notes taken before looking in Peterson's, "*A Field Guide to the Birds.*" Bill — at least ½ inch longer than any other "peep" in view, black legs, rusty brown streaks on back, rest of body gray, more coarsely marked than other "peeps." I checked Peterson's book and found the characteristics fit the bird amazingly well. I then flushed it to make sure it was not a White-rumped Sandpiper. *Paul Egeland, 5570 Second Street N.E., Minneapolis, Minnesota.*

## BOOK REVIEWS

*THE SHOREBIRDS OF NORTH AMERICA* edited by Gardner D. Stout, text by Peter Matthiessen, paintings by Robert Verity Clem, species accounts by Ralph S. Palmer, 32 color illustrations. 270 pp. The Viking Press, 625 Madison Avenue, New York, New York 10222. 1967. \$22.50.

Another "spectacular" has been added to the voluminous list of recent ornithological literature. This book is one which certainly deserves the title of spectacular. The 32 plates by Robert Verity Clem must rank with the best this reviewer has ever seen in any book on birds and especially shorebirds. The plates are beautifully reproduced in six color lithography on high quality paper which results in excellent clarity. Of special interest concerning the plates are the groupings of birds usually seen together rather than in strictly check-list order. Plates 20, 21, and 22 should especially please those who find it difficult to identify the "peeps." One comment I cannot help but make is the absence, in the illustrations of the White-rumped Sandpiper, of the light area at the base of the lower mandible which is evident in most plumages, especially the adult. During observations of many shorebirds in Minnesota I have found this field mark very helpful in separating the White-rump from other shorebirds. However, only a few of the field guides and other books mention this character.

The book is divided into three general categories, the plates, 11 chapters in the form of personal commentary on shorebirds by Mr. Matthiessen and the species accounts, covering the 75 species which occur in North America. The latter section will be especially helpful to those interested in identification. For collectors of outstanding books and more specifically shorebird enthusiasts, this book is a must.

— Editor

*THE BIRDS OF CANADA* by W. Earl Godfrey; 428 pp, 69 color pl, 71 textfigs; National Museum of Canada, Ottawa, 1966. \$12.50.

Here is another fine, large volume, full of color-plates, to perpetuate the bountiful book extravaganza of the past decade. American birders should be wealthy with good literature by now, and this book is no exception. Minnesota birders will find this book especially interesting because many of the 518 species listed are known to occur in our state.

Those who have enjoyed Taverner's two valuable (but somewhat outdated) classics on eastern and western Canada will certainly welcome this current and comprehensive work. With a few exceptions, the usual species treatment consists of Description, Measurements, Field Marks, Habitat, Nesting, Range, Range in

Canada, Subspecies, and Remarks. For each of the 380 species known to breed in Canada, a one-glance range map is also included.

The black-and-white textfigures by S. D. MacDonald are especially valuable. Not only do they augment the color-plates by illustrating some of the species not shown in color, but these excellent line drawings also delineate essential taxonomic characters such as feather-edges, tarsal details, beak details, tracheal convolutions, etc.

The author is a native of Nova Scotia and, except for a short period when he was Assistant Curator of Birds at the Cleveland Museum of Natural History, he has spent his years studying the avifauna of Canada, including field-work in all provinces.

The birders' challenge for fresh, original color-plates is well-met by John A. Crosby, artist-naturalist for the National Museum of Canada. As with any bird artist, certain families or species are much better done than others; perhaps these are his "favorites?" In this volume, I can list many species that are exceptionally well-portrayed: White-faced Glossy Ibis, all woodpeckers, Black-billed Magpie, all warblers, the three sharp-tailed sparrow species, all longspurs — and the list goes on and on. In all, more than 480 species are shown in color.

Although I looked long and hard, I could find only two very minor faults in this book. First, although the inside back cover is a map of the major vegetation types of Canada, there is no corresponding text dealing with ecological associations of the dominion as a whole. Secondly, the author's extensive field knowledge notwithstanding, the reader is lured into the trap of trying to separate the two dowitcher species by plumage characters alone. This latter is the more serious fault of the two, but both are heavily outweighed by the other fine qualities of this book.

The subspecies analyses are especially valuable and greatly enhance the scientific import of this volume. In view of this, it is also commendable that the book is free of technical jargon. The serious bird student will delight in having this volume on his bookshelf.

— Ronald L. Huber

## 1966 CHRISTMAS COUNT IN MINNESOTA

*Raymond Glassel*

The nineteen groups submitting Christmas counts counted 51,900 individual birds representing 88 species. Total for the previous year was 34,839 individuals of 79 species. Two new areas were added this year: Lyon County and Bloomington.

This count had perhaps the greatest number of unusual and rare species. Three new birds were added to the all time list making the total species seen on Christmas counts 141 since 1950. The three new ones seen were Townsend's Solitaire, Baltimore Oriole and Green-tailed Towhee. Some other unusual species seen were: Pied-billed Grebe, Great Blue Heron (2 counts), Whistling Swan (2 counts), Barrow's Goldeneye (again found on the St. Paul count by Bill Litkey duplicating his feat of last year), Turkey Vulture, Bobwhite, Winter Wren (2 counts), Brown Thrasher, Varied Thrush (2 counts), Fox Sparrow and Swamp Sparrow.

Some interesting all time high numbers of individuals were 8,650 Canada Geese at Rochester, 5,500 Mallards at Bloomington (NSP Black Dog Plant) 600 Common Mergansers at Plainview (previous high was 75), 13 Bald Eagles at Plainview and Winona had 24 Red-bellied Woodpeckers, 194 Cardinals and 14 Common Grackles.

Blue Jays were down in numbers, 558 as compared with 1,226 last year. Only one Red-headed Woodpecker was reported — the average being ten. Northern finches were in general poorly represented in numbers. The Purple Finch was absent from many counts. Ten species of ducks were reported as compared to 7 last year.

	HIBBING	MOORHEAD	DULUTH	WILLMAR	ST.CLOUD	CEDAR CREEK	ANOKA	EXCELSIOR	MPLS. NORTH	NORTH EAST ST.PAUL	ST.PAUL	AFTON	BLOOM-INGTON	RED WING	PLAINVIEW	ROCHESTER	NORTH-FIELD	WINONA	LYON CO.	TOTAL
Pied-billed Grebe													1							1
Great Blue Heron													1					1		2
Whistling Swan					1										1					2
Canada Goose															1	8650				8651
Mallard		18	2				4	49	47	53	278	54	5500	397	100	350		5		6857
Black Duck								2	4		1	6	8	35	12	5		2		75
Pintail														1				1		2
Redhead														1						1
Canvasback														1		1		1		3
Lesser Scaup											1									1
Common Goldeneye		1	59		12		69		221		273	12	120	12	300	30				1109
Barrow's Goldeneye											1									1
Bufflehead			1										1							2
Hooded Merganser													1							1
Common Merganser			10																	612
Turkey Vulture															2					2
Sharp-shinned Hawk								1												1
Red-tailed Hawk								8	1	5	6	2	4	3		1	1	20		51
Rough-legged Hawk								5							2					7
Bald Eagle												2		11	13					26
Sparrow Hawk						3	1	8	3	1	3		4	1		2		1		27
Ruffed Grouse			1			5				9		2						1		18
Bobwhite																	6			6
Ring-necked Pheasant		3	9	3		11		83	35	46	148	29	49	9		11	34		3	473
American Coot																		5		5
Killdeer								1										1		2
Common Snipe								2			1		1					1		5
Glaucous Gull			4																	4
Herring Gull			709																	709
Mourning Dove				1					1	2	1	2	1			4		4		16
Screech Owl									1											1
Great Horned Owl						1		2		4	3	1	1				1		3	16
Snowy Owl		1	7															1		9
Barred Owl						1			1	5	1					1		4		13
Short-eared Owl		1																		1
Belted Kingfisher							1				1	1	1		3			1		8
Yellow-shafted Flicker												1						1	1	3
Pileated Woodpecker			1	3		2		4	2	3	1	1				1		3		21
Red-bellied Woodpecker				1		1		5	1	15	2	9	1	3	4	2	1	24	1	70
Red-headed Woodpecker																			1	1
Hairy Woodpecker	17	5	10	14	1	7	6	29	2	38	12	18	4	5	5	3	2	21	6	205
Downy Woodpecker	9	6	24	24	4	24	8	55	19	52	30	16	8	14	10	12	4	51	8	378

Horned Lark								5		22									17	27	71
Gray Jay	7					1															8
Blue Jay	63	8	15	14	12	23	18	113	29	65	34	59	11	30	14	2	5	36	7	558	
Common Raven	2		4																		6
Common Crow		2	6			15	5	136	30	116	52	146	45	58	34	4	13	78	30	770	
Black-capped Chickadee	145	48	190	73	34	96	65	317	74	395	241	106	19	59	30	6	19	97	34	2048	
Boreal Chickadee	5		3																		8
Tufted Titmouse				2				1		11	5	9	2				1	3	11		45
White-breasted Nuthatch	11	13	10	23	14	11	7	120	12	129	52	26	8	18	13	1	9	43	19	539	
Red-breasted Nuthatch	2		5			2	1	4	1	1	1								1		18
Brown Creeper		2		3		2	1	9	3	8	2	1	2	3			1	3	9	1	50
Winter Wren								1							1						2
Brown Thrasher																		1			1
Robin		8	2										1					1	1		13
Townsend's Solitaire							1														1
Varied Thrush					1													1			2
Golden-crowned Kinglet					2			2		5				1					2		12
Bohemian Waxwing		8	108	14			14		1	34	24										203
Cedar Waxwing								10		16		16							1		43
Northern Shrike	1		2			3		2	3	2	1		2				1		2		19
Starling	58	37	535	19	9	4	54	512	87	66	1139	222	271	31	75	3000	20	398	35	6572	
House Sparrow	197	390	793	450	280	315	133	2488	901	1961	766	913	699	408	250		70	1883	250	13147	
Red-winged Blackbird								421	1			1	1	1000	100			207	3	1734	
Baltimore Oriole																		1			1
Rusty Blackbird										16	2	2	1	9							30
Brewer's Blackbird								7													7
Common Grackle				1				8		1			2	10	14			14			50
Brown-headed Cowbird								9										2			11
Cardinal		3	1	9	3	3	2	109	2	61	26	98	36	19	28	4	9	194	9		616
Evening Grosbeak	160		28																		188
Purple Finch			8	40	1		31	37	16	1	7	13						8	13		175
Pine Grosbeak	59		4																		63
Common Redpoll	26		97	3		56	1			100	50		1								334
Pine Siskin				4				4				25									33
American Goldfinch			16	3		320	23	318	5	310	16	57	58	2	18	2	1	157	2		1308
Red Crossbill			31																		31
Green-tailed Towhee			1																		1
Slate-colored Junco				50	32	4	54	196	77	253	125	42	30	15	55	24	14	239	12		1222
Oregon Junco									1		2								2		5
Tree Sparrow				3		17	88	172	467	252	170	86	355	19	150	50	92	472	31		2424
White-throated Sparrow											2										2
Fox Sparrow													1								1
Swamp Sparrow																					1
Song Sparrow										1		1					1				9
Lapland Longspur																			3		3
Snow Bunting	25	47				3					10	2							25		112
TOTAL SPECIES	16	18	32	23	14	24	23	38	31	34	40	33	37	28	26	26	26	43	24		88
TOTAL INDIVIDUALS	787	601	2696	764	406	929	588	5255	2048	4058	3516	1956	7252	2175	1835	12169	314	4046	509		51,900

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## M.O.U. ENDOWMENT FUND

In a previous issue of *The Loon* you were asked to contribute to the Minnesota Ornithologists Union Endowment Fund. Our campaign was most successful with over \$600.00 being added to the fund. We, of course, can use further help from each and every one of you. At a recent board meeting of the M.O.U. Officers and Club representatives, many projects were discussed and steps were taken to implement several of them. The preservation of Salt Lake is still a very live project, education programs are needed concerning our Birds of Prey and scholarships are needed by worthy students. Many of these and other types of projects can be realized with your help.

## SUGGESTIONS TO AUTHORS

As you all know the editor's job is a voluntary one and to make this job a little easier and less time-consuming I would like to make a few suggestions to authors when they submit articles and notes for publication in *The Loon*.

As editor I would like to encourage people to send articles, notes and observations to me. If possible all articles and notes should be typewritten and double spaced on one side of the paper. This is the only way they can be submitted to the printer. The more material received the better the magazine will be. When submitting observations of birds, either rare, accidental, or difficult to identify please try and follow the suggestions made by Janet C. Green in her article "What Constitutes an Acceptable Bird Record," (*The Loon*, Vol. 36, No. 1, pages 4-6). If photos are submitted with articles they should be clear, *black and white prints*. If the author of an article would like reprints please let me know when the article is submitted. Reprints will be furnished at the author's expense. Cost of reprints depends on length of article and number wanted.

## CHECK-LIST OF MINNESOTA BIRDS

The newly revised check-list of Minnesota birds is still available. This list contains 292 regular species and 23 casual species found in Minnesota. It is designed for use in the field and can be easily contained in any of the latest "Field Guides." The cost is 5¢ each plus 5¢ postage, or 50 for \$1.25 plus 15¢ postage. All members of the M.O.U. and their bird-watching friends should be using this new list.

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