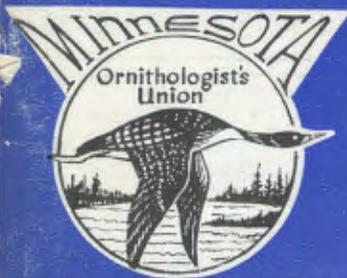


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THE LOON

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FRONT COVER

Varied Thrush at Morris, Minnesota on December 18, 1965.
Photo by E. H. Strubbe

THE PRESIDENT'S PAGE

Your new president began watching birds seriously and keeping field notes in 1953. Armed with 20/10 vision and boyish curiosity, he began to visit the Mississippi River bluffs of Clinton County, Iowa every Saturday almost without fail. The farmers were indulgent of the boy who spent hours in the woods without a gun, and who explained he was simply looking for birds.

His early finds were a Bald Eagle, a Pileated Woodpecker, and a Carolina Wren. These were enough to hook him on birds for life. He had no idea Bald Eagles were found in the Mississippi valley during winter until the damp, chilly afternoon of February 21, 1954 when an unmistakable adult Bald Eagle glided by his bluffpost. Friends and farmers were incredulous, but still indulgent, and even his field notes contain a modest but unnecessarily cautious qualification, "not sure about the identification of the Bald Eagle."

On March 27, 1954, the writer was again at his bluffpost, but basking in 60° weather. That afternoon, a mysterious and insane staccato laughter was heard again and again in the distance, until a large black bird with white on the wings undulated by. Shortly, the call came again from where the bird had disappeared, and a quick investigation brought this writer to the bird, a Pileated Woodpecker.

But the finest discovery at the bluffpost was made on June 25, 1955. As with the Pileated Woodpecker he first heard a sound. This was no harsh, insane, wild yakking, but an eerie, ringing call of delicate quality. It sounded as if it came from within a large cathedral but was located within an uninviting tangle of underbrush at the foot of the bluff. The only way to find the singer was to crawl through the brush, carefully and even painfully until one could glimpse the bird among the dark green leaves of elm, wild grape, basswood, and ironwood. Eventually the writer found the bird, a small, long-tailed bird with a line over the eye, a Carolina Wren. The next day, he discovered the total cost of this discovery, a ring of chigger bites at belt height completely around the waist.

This writer, then, started out as a loner, and learned patience, perseverance and caution in the pursuit of his hobby. Most of all, he learned to see with his eyes, not with his hopes, and he learned to rely on his own judgment. At several times, though, he could have used advice from more experienced observers and detailed information about the birds of his area. In 1956 he heard about and joined the *Iowa Ornithologists' Union* and increased his understanding many times through reading its publication, *Iowa Bird Life*.

Now he finds himself an officer in the *Minnesota Ornithologists' Union* and a resident of Wisconsin. Well, this has been a long enough story without an explanation of exactly how this situation was reached, and this writer didn't intend a personal history, but to let many of you know something about him.

Perhaps the preceding paragraphs will help you understand why I hope to encourage the exchange of information among state bird groups of the upper Mississippi valley, and why I think we should make an effort to encourage birding by young people. How to implement the first of these hopes remains uncertain. No doubt some of our members know persons in Iowa, Wisconsin or the Dakotas who could contribute an article on a particular species to *The Loon*. Ron Huber in his investigation of the Say's Phoebe and Blue Grosbeak has done some work in this area.

Certainly the encouragement of birding by the young is in the province of the education chairman. Young people have the energy to pursue birds, the time to do so and sharp senses with which to observe. Their native talents plus the

direction of a high school science teacher could produce a paper for the winter meeting.

I will appoint a field trip chairman to help plan the spring field trip and perhaps seasonal camp outs throughout the state. Field trips and camp outs have proved popular in Wisconsin, so I see no reason why they should not succeed in Minnesota.

Such field trips will reach a wide public. What better publicity could there be than for campers to see a dozen M O U members thoroughly enjoying their hobby in a state park?

Ben Thoma, our new vice president, is responsible for publicizing our activities, especially the spring and winter meetings. To get a release out to newspapers and radio stations he should have the needed information at least two weeks in advance. Please notify him of news for the general public as you would notify Eleanor Tyler of news for our *Newsletter*.

Boyd Lien is doing us real service this year as vice president in charge of the winter meeting and as an active member in the *Minneapolis Bird Club* which is host for the spring meeting. Let him know *now* if you have suggestions for the winter meeting. As vice president last year I know the difficulties of his job.

I hope Pershing Hofslund's list of unfulfilled goals can become a list of accomplishments. Only then could I regard my tenure anywhere near as successful as his. Yet I can't do the job unless some of you accept the chairmanship of the various committees. It is fine to send in a record of an observation to *The Loon* and get your name in print, but the *Minnesota Ornithologists' Union* cannot exist without people willing to do the many thankless jobs of planning.

Hopefully,
Fred Leshner

M.O.U. SPRING FIELD TRIP

SATURDAY AND SUNDAY, MAY 7 AND 8, 1966

Host Club — The Minneapolis Bird Club	
Headquarters — Methodist Campus, Frontenac, Minnesota	
Saturday — Birding on your own. Program in the evening.	
Sunday — Organized field trips.	
Cost — Saturday evening dinner	\$2.30
Sunday breakfast	\$.85
Sunday noon dinner	\$2.00
Saturday night lodging (on campus)	\$3.00
Total	\$8.15

NO MEALS OR LODGING WILL BE AVAILABLE WITHOUT ADVANCE RESERVATIONS. Make reservations by May 1 stating meals or lodging required and the names of the persons for whom you are making reservations. Send a check made out to the Minneapolis Bird Club for the full amount to the Minneapolis Bird Club, 5148 - 29th Ave. S., Minneapolis, Minn. 55417. Meal tickets and room assignments will be given out at 4:00 p.m. Saturday.

OUR CEDAR WAXWING INVASION

Maurey and Isabel Goldberg

For 7½ years we have been working on the back yard of our home to develop it into what we like to call the "World's Smallest Bird Sanctuary." We live in a closely built-up neighborhood with even more than the usual number of handicaps normal to a crowded city location such as — barking dogs, banging garage doors, clothes drying and flapping in the breeze, 14 children playing within 100 feet of the yard, and cars and trucks driving up and down the two-block long alley which has a dead end, thus making for double traffic movement. The actual space available for the "Sanctuary" is in the shape of an "L", one side being only 17 x 40 feet and the other side about 20 feet square. Yet by furnishing the birds with food and water the year around we have managed to attract to the yard, or have seen from it, 105 species of birds. In the warm months the birds use a small artificial creek, which runs the length of the yard, for drinking and bathing. In the cold weather we have a small "water hole" supplied with water from a heated pipe, the overflow being carried back into the house by another pipe to a laundry tub in the basement.

We use a variety of inducements to encourage the birds to lengthen their stay after they once find our place. For example, by scattering seeds, ground corn and peanut hearts at various places around the yard, especially under the bushes, we have been successful in getting White-throated Sparrows to remain for over three consecutive months, and we have banded over 200 of them in the last year and a half. By designing special, though simple, feeders to separate our battling Purple Finches we have kept them around for over five months, feeding them Sunflower seeds which they seem to prefer to anything else. We have banded over 300 of these birds since April 1964.

Waxwings are notorious for remaining only briefly in one area, so when we had a small influx of about 25

Bohemian Waxwings in March 1962 we felt we had really accomplished something by keeping them coming daily for two weeks by feeding them crabapples, grapes and cranberry sauce. However, though we had seen Cedar Waxwings in the neighborhood on rare occasions, only a half dozen or so had ever come into the yard and then only for a few seconds, probably because there was nothing on the feeders to attract them. This year, however, it was very different!

Throughout the winter we had strings of crabapples draped through the bare branches of the Dolgo apple tree and through several of the bushes. We had saved these during the summer and had put them in the freezer to use the following winter and spring, because Dolgo crabs do not remain on the tree as some of the ornamental crabs do. We hoped by this means to attract any Cedar Waxwings, which might visit the area, to come into the yard. On March 11, 1962, a snowy day, a single bird appeared. He ate some of the Matrimony Vine berries which we had planted near the fence to attract thrushes and Cardinals. Then he left. The next day again only one bird appeared. He ate some of the Matrimony Vine berries but also found the apples, which he sampled. The third day there were six birds, then 10, and by the 18th there were 18 birds eating berries and apples. For the next few days the number of birds in the yard fluctuated between 3 and 29 and on the 24th there were 44 of them gobbling apples as fast as they could since by now all the berries had been consumed. Two days later the number had gone up to 132 birds in the yard and on March 28th, using a 15 foot net most of the time, though occasionally a 20 footer was in use, 81 birds were banded. This was on a Sunday and banding was started at 6:00 a.m. and continued up to 6:00 p.m. Between grinding up frozen apples and banding birds it was indeed a busy day with hardly any time out for a hurried

lunch. On weekdays banding was carried on for about an hour before leaving for work in the morning.

We tried tossing out some of the crabapples on the snow but too many of them sank out of sight so this procedure was discontinued after the first day. At the beginning of the influx we had about 4000 crabapples in the freezer but the birds were consuming them at a rate of over 300 per day so in order to make them last out the season the apples were ground up, as mentioned above, and peanut hearts were added. In addition to the strings of apples on aluminum wires several other types of feeders were in use to accommodate the many birds in the yard that came and went incessantly. One feeder would have as many as 24 birds on it at one time. Reminiscent of the man who kept adding more sawdust to his horse's feed we added ground-up corn, dried bread and even suet. Each nightfall the feeders were literally licked clean.

We awoke at daybreak on March 29th to find 7 birds fighting for position on our peanut butter feeder which had been devised as a squirrel-proof, chickadee feeder. Not only did the waxwings continue to eat peanut butter but the next day they took over the Purple Finch feeder which contained only Sunflower Seeds. They picked out all the shelled seeds which happened to be plentiful in that batch. Many of the birds were quite tame and would sit in the bushes at arm's length while others were being taken out of the net and banded. One morning, after finding 7 birds in the net, and removing them, they were taken into the garage for banding. During the few minutes this operation was taking place dozens of birds flew into the yard to feed. When the garage door was opened to release the banded birds a cloud of feeding waxwings took off and 16 of them ploughed into the net at once!

On April 1st the peak number of 155 birds was reached, many of the birds eating peanut butter which had been spread on the tree and bush

branches. They also ate bananas, oranges, grapefruit, raisins and all kinds of jam. When in desperation we put out some left-over cooked sweet potatoes they literally fought over them. Between April 1st and 5th the number of birds varied from 95 to 150 daily; the yard seemed to be swarming with them. All this activity was bound to attract a predator. For several days we had noticed a Sharp-shinned Hawk flying 75 to 100 feet above the yard and on April 22 he swooped down and made off with one of the waxwings.

About this time we began to run out of all kinds of fruit but we were fortunate in being able to secure four boxes of large Delicious apples from a produce company which was going to take them to the dump because of some minor defects. It was necessary to cut away part of the peeling on these apples so that the birds could get at the inner part of the fruit as their bills did not seem strong enough to pierce the tough skin. We found, also, that freezing and thawing the fruit made it easier for the birds to eat them. The bird activity occurred during a period of 10 weeks. During this time 492 birds were banded, but it was obvious that at least several times this number had come through the yard because at no time could we see bands on more than one bird in six on the feeders. Only 43 birds were netted more than once. Only three were caught more than twice. There appeared to be a continual turnover, few birds staying more than four or five days and bands on only three or four birds showed us that they had been around as long as two weeks. Only about one bird in three showed red appendages. One bird even had a second tail, completely separate from, and below, the regular tail. It was only half as long but with a fully formed yellow band across the end. Estimating conservatively from the aforementioned date we figured that between 1500 and 2000 Cedar Waxwings went through our yard in those 10 weeks, in addition to large numbers of Purple Finches and American Goldfinches.—1915 *Palace Avenue, St. Paul, Minnesota.*

CORMORANT NESTING IN NORTHWESTERN MINNESOTA

Daniel W. Anderson and John W. Ellis

This paper reports an unusual Double-crested Cormorant colony at Agassiz National Wildlife Refuge in Marshall County, Minnesota, observed by us during the spring of 1965. The observations were incidental to a study supported by the Bureau of Sport Fisheries and Wildlife, U. S. Fish and Wildlife Service, with respect to insecticidal residues in interior North American White Pelicans and Double-crested Cormorants.

The colony at Agassiz was composed of 25 Double-crested Cormorant nests in association with 75-100 Black-crowned Night Heron nests and a much larger number of Franklin's Gull nests.

The association of cormorants with a wide variety of water birds is not unusual. It is probably dependent on the other species that happen to be found in a similar type of habitat. The most important factors for nest location are probably a ready food supply and freedom from molestation (Palmer, 1962), and a nesting substrate (the physical characteristics of cattail appear to offer a wide variety of possible substrates for a large variety of birds; Beecher, 1952). A wide variety of inter-specific associations with cormorants that could be applicable to Agassiz have been presented in the literature: Great Blue Herons (Match, 1892; Bent, 1922; Mendall, 1936), gulls and terns (Bent, 1922 and Mendall, 1936), Black-crowned Night Herons (Mendall, 1936), and even Common Crows in the Dakotas were reported (Mendall, 1936).

Black-crowned Night Herons and Franklin's Gulls are reported to nest in cattail and bulrush marshes in prairie regions (Bent, 1921; Palmer, 1962), and this information perhaps gives a clue to the cormorant situation described below.

The cormorant nests at Agassiz were built from cattails and bulrush scraps

(not an unusual circumstance) on floating cattail and bulrush mats surrounding a 6- to 7-foot stump protruding from the water (Figures 1 and 2). One nest was located on top of the stump, 23 on mats surrounding stump, and one (apparently taken over from a night heron) was separated from the general cormorant colony by about 25-30 yards. The cormorant colony was located in an open bay of the growing vegetation. The bay opened to the main lake (Agassiz Pool).

As far as we can determine, a nesting situation such as this for cormorants has not been described. Bent (1922) describes two general situations, islands and trees, as most common for cormorants. Palmer (1962) mentions remote swamps as a recorded location but fails to state whether trees or some other situation are the exact locations. Hatch (1898) also mentions impenetrable marshes but states that nests there are built in trees. An unusual situation described by Lewis (1929) in Quebec comes nearest to the Agassiz colony in description: cormorant nest were built on a small grassy island on the ground among small trees.

The single stump in the center of the colony and the single cormorant nest found away from the main colony seem to be significant clues to the behavior of these birds. The stump appears to be the principle factor in attracting the recent nesters. Apparently this stump (enough room for one nest only) represents a previous nesting area with adequate trees now gone. The cormorants are known to have nested at this location for at least 25 years. Previously they nested in trees that were killed when the area was flooded in 1937. In the mid-1950's deterioration of the nesting habitat (dead trees) was recorded by refuge personnel. Today, only one stump of the original nesting habitat remains.



Figure 1—Lone stump in the center of the cormorant colony, showing the single tree nest and part of the surrounding nests on cattails and bulrush mats.



Figure 2—Closeup of west portion of the cormorant colony showing nests and eggs on the floating mats.



Figure 3 — Closeup of a Black-crowned Night Heron nest near the cormorant colony showing details of construction.



Figure 4—Closeup of lone cormorant nest indicating the probable take-over from a night heron. Note the similarities and differences with Figure 3.

Table 1—Mean Arrival Dates for Three Species at Agassiz National Wildlife Refuge (data taken from refuge records).

Time Period	Franklin's Gull	Night Heron	Cormorant
Mean 1954-59	April 18	April 28	April 22
Mean 1960-65	April 13	April 21	April 21
Mean 1954-65	April 16	April 24	April 21

Presumably this stump in the spring initially attracted the cormorants to the area where other species were nesting. Table 1 indicates that at least Franklin's Gulls arrive at Agassiz earlier than cormorants and could possibly nest earlier, although this type of data does not prove such a statement. The night herons are shown to arrive on the same mean dates as cormorants for the last six years and could feasibly begin nesting on about the same dates. Although this type of data only infers that onset of nesting is related to arrival dates, it at least indicates the possibility that one species may have a "head start" in nesting.

Suitable substrate was provided by either the nests of other species or the utilization of floating debris that hap-

pened to be in the near vicinity of the stump. The former is more likely. We do not believe that the building of floating nests by cormorants is likely. Since the number of suitable nesting trees has been steadily declining on the refuge, the cormorants probably first took over and built up their nests and mats from either night heron or Franklin's Gull nests in the near vicinity of this stump. They do it now infrequently (Figures 3 and 4).

The situation at Agassiz probably reflects some adaptability of the cormorant to resist normal habitat deterioration in the loss of dead trees for suitable nesting sites, although the cormorant population seem to be declining in some areas—*Department of Wildlife Management, University of Wisconsin, Madison, and Agassiz Na-*

tional Wildlife Refuge, Middle River, Minnesota.

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THE SUMMER SEASON

1965

Ronald L. Huber

In spite of the spring inundations and severe cold snap during the last part of May, the nesting season progressed rather normally. Although very few actual nests were located, we again had very good coverage from most parts of the state.

Under each of the species listed below, actual breeding evidence will be listed first (if any), and then will be listed the counties from which the species was reported. Breeding in these counties is inferred for our usual summer resident species, but not confirmed. Transients (especially shorebirds) from June 1 to August 31, 1965, are included in this report.

Common Loon: 7-6 Lake Vermilion, St. Louis Co., 2 half-grown y with ad, DGM; 8-4 Fall Lake, Lake Co, 2y with ad, JNG; 8-8 Farm Lake, Lake Co., 2y with ad, JCG; 8-9 Burntside Lake, St. Louis Co, 1y with ad, JNG; 8-14 Sherburne Co, 1y with ad, NH; 7-15 Stearns Co, 1y with ad, NH also reported from Cass, Cook, Ramsey, Washington, Aitkin, Anoka, Wright, Douglas, Beltrami and Crow Wing Co's.

Red-necked Grebe: 6-12 Pennington, Beltrami Co, nest with 5e, JAM; one pair on Olsen Lake, Stevens Co, RAG; 7-27 Upper Cullan Lake, Crow Wing Co, pair observed in courtship, JRR; 8-27 Little Marais, Lake Co, 1, JCG.

Horned Grebe: 6-1 Knife River, Lake Co, 2 ad, DP; 8-9 Burntside Lake, St. Louis Co, 5 migrants, JCG; 8-29 Little Marais, Lake Co, 3 migrants, JCG.

Eared Grebe: 6-6 Alberta, Stevens Co, 2, ES, RAG; 7-16 Frog Lake, Stevens Co, 1, ES; 7-31 Salt Lake, Lac Qui Parle Co, DP.

Western Grebe: many y hatched from 40 pairs, Frog Lake, Stevens Co, RAG, ES; 10 pairs on Olsen Lake, Stevens Co, new colony, RAG; Jackson Co Wildlife area, HSH.

Pied-billed Grebe: 7-11 Kandiyohi Co, nest with 4e, NH; 7-26 Excelsior, Hennepin Co, large y, RDT; 7-27 McLeod Co, 6y, also 2y being fed by Coot, FN; 8-23 Stearns Co, many y in striped plumage, NH; also reported from Nobles, Stevens, Ramsey, Aitkin, Anoka, Dakota, Polk, Jackson, Rice Co's.

White Pelican: 6-17 Big Stone Co, 10, NH; 6-27 Shield's Lake, Rice Co, 4, VL; 7-10 Heron Lake, Jackson Co, 18, RG, RLH; 7-31 Lac Qui Parle Co, 70, DP, WRP; 7-31 Lake Traverse, Traverse Co, 100, DP, WRP; 8-12 Loon Lake, Jackson Co, 4, HSH.

Double-crested Cormorant: 6-17 Big Stone Lake, Big Stone Co, 1, NH; 7-14 Stearns Co, 1 in heron colony, NH; 7-31 Lake Traverse, Traverse Co, 30, DP, WRP; 7-31 Lac Qui Parle Co, 40, DP, WRP.

Great Blue Heron: 7-5 Lake Vermilion, St. Louis Co, colony of several hundred nests, 2-3 y per nest, DGM; 7-15 Stearns Co, many nests with large y, NH; 6-17 Kandiyohi Co, 25 nests with large y, NH; 6-25 Rice Co, many nests with y, OAR; also reported from Cass, Cook, Anoka, Wright, Blue Earth, Dakota, Wabasha, Crow Wing, Douglas, Beltrami, Pope, Olmsted, Winona, Morrison, Ramsey, Stevens, Polk, Aitkin, Hennepin, McLeod and Jackson Co's.

Green Heron: 6-16 Kellogg, Wabasha Co, nest with 4 downy y, DGM; also reported from Nicollet, Stearns, Dakota, Morrison, Washington, Ramsey, Wright, Pope, Winona, Anoka, Rice and Hennepin Co's.

SNOWY EGRET: 7-7 Agassiz Refuge, Marshall Co, 1 adult, good details, R. R. Grow, John Ellis. Fifth Minnesota record.

Common Egret: 6-25 Rice Co, ad and y, OAR; 7-15 Stearns Co, nest with small y, NH; also reported from Stevens, Douglas, Wabasha, Ottertail, Wright, Pope, Houston, Dakota, McLeod and Winona Co's; several large aggregates reported: 6-6 Lake Pepin, Goodhue Co, 30, DS; 7-25 (MHM) and 8-15 (JNG) Hennepin Co, 50.

Black-crowned Night Heron: 6-17 Traverse Co, carrying nest material, NH; 7-15 Stearns Co, 24 nests with e, 1 nest with y, NH; Nicollet Co, nesting, Dale Chelberg; Rice Co, nests, OAR; 7-29 Hennepin Co, ad with 2y, VL; 7-10 Heron Lake, Jackson Co, ad and flying y, about 50 birds, RG, RLH; also reported from Stevens, Nobles, Washington, Anoka, Ramsey, Hennepin, Douglas, and Pope Co's.

Yellow-crowned Night Heron: 7-14 Dakota Co, South St. Paul, 1 downy y in nest at the usual Pig's Eye site, BL, ACR; 7-10 La Crescent, Houston Co, several adults around usual nest trees, FGD, BT; 7-10 Heron Lake; Jackson Co, 1 strongly flying immature seen with many immature Black-crowns for comparison, RG, RLH.

Least Bittern: 7-10 to 7-24 Beltrami Co, nest with 3e, JAM; Shield's Lake, Rice Co, nest, OAR; also reported from Kandiyohi, Stearns, Nicollet, Dakota, McLeod and Washington Co's.

American Bittern: Rice Co, nesting, OAR; also reported from Beltrami, Stearns,

Lake, Wright, Stevens, Cook, Crow Wing, Aitkin, Polk, Hennepin, McLeod, Douglas, Pope, Nobles, Ramsey, Anoka and Dakota Co's.

WHISTLING SWAN: 6-9 Duluth, RN; 7-11 onward, Virginia, St. Louis Co, VFB, NJH, others. See Notes of Interest in last September **Loon** plus very interesting article on Trumpeter Swan in December issue.

Canada Goose: Rice Lake Refuge, Aitkin Co, CEP; Carlos Avery Refuge, Anoka Co, MIG; 6-1 Rochester, Olmsted Co, MS; 6-10 Stearns Co, 1, NH.

Mallard: 5-26 Cook Co, nest with 9e, hatched 6-5, Dean C. Ash; 7-7 Lake Vermilion, St. Louis Co, 10 large y, DGM; 5-24, 1e, 6-5, 12e, Gunflint Lake, Cook Co, HH; 5-22 Washington Co, 12e, 13e, DS; Anoka Co, nested, WHL; Rice Co, several broods, OAR; Stearns Co, 3 families, NH; 6-17 Swift Co, nest with 11e, NH; 8-22 Duluth, ad with 3 small y, JCG; 4-30 (7e), 5-15 (20e), 6-10 (empty) Ramsey Co, ACR; also reported from Cass, Lake, Wabasha, Kandiyohi, Olmsted, Aitkin, Nobles, Pope, Douglas, Hennepin, Polk, Crow Wing, Stevens, Wright, Morrison, Houston, Winona, Dakota, Beltrami Co's.

Black Duck: 7-18 Alpine Lake, Cook Co, ad with 7y, DS; 6-1 Hennepin Co, 2, MHM; 6-19 Goose Lake, Ramsey Co, 5, ACR; Rice Lake Refuge, Aitkin Co, CEP.

Gadwall: 6-16 Stevens Co, nest with 11e, NH; 7-11 Kandiyohi Co, 1 pair, NH; 8-12 Beltrami Co, 3 females, MED.

Pintail: reported from Aitkin, Polk, Stevens, Big Stone, Traverse, Kandiyohi and Stearns Co's. No actual breeding evidence reported.

Green-winged Teal: reported from Stevens Co, NH, ES, RAG and Aitkin Co, CEP.

Blue-winged Teal: 6-15 Itasca Co, nest with 11e, JAM; 6-16 Stevens Co, nest with 9e, NH; Rice Co, several broods, OAR; also reported from Aitkin, Stearns, Polk, Anoka, Washington, Wabasha, Cottonwood, Ramsey, Beltrami, Dakota, Hennepin, Winona, Morrison, Wright, Crow Wing, Douglas, Pope, Nobles and St. Louis Co's.

American Widgeon: no breeding evidence, reported from Morrison, Beltrami, Aitkin, St. Louis and Stearns Co's.

Shoveler: no breeding evidence; only reports were from Polk (GSM) and Stevens (NH, ES, RAG) Co's.

Wood Duck: Fargo-Moorhead, ad with 11y and ad with 15y, EGA; 7-10 Winona, ad and 6y, FGD; 7-17 Mille Lacs Lake, ad with 10y, TEM; 7-3 Shakopee, 3 ad with 6y, ACR; 7-3 Beltrami Co, ad with 3y, JAM; also reported from Wabasha, Kandiyohi, Stearns, Lake, Hennepin, Douglas, Stevens, Wright, Anoka, Ramsey, Aitkin Co's. Number of reports is encouraging.

Redhead: 7-12 Minneapolis, 2 ad with 7y, VL; 7-25 Stearns Co, pair with 8y, NH; also reported from Nobles, Polk, St. Louis, Stevens, Anoka and Kandiyohi Co's.

Ring-necked Duck: 7-4 Stearns Co, ad with 9 downy y, NH; also reported from Stevens, Beltrami, Aitkin, Jackson, Polk Co's.

Canvasback: Polk Co, GSM; Stevens Co, RAG, ES; Meeker Co, FN.

Lesser Scaup: 6-7 Duluth, 20 migrants, JCG; 6-9 Stearns Co, 5, NH; 6-13 Stearns Co, 13, NH; 6-18 Lac Qui Parle Co, 1, NH; 7-4 Stearns Co, 1, NH; 7-10 Stearns Co, 2, NH; 7-25 Cook Co, 1, AEA; 7-27 McLeod Co, 1, FN; 7-29 Duluth, 1, JCG; 8-17 Duluth, 1, PBH; 8-22 Duluth, 2, JCG; all reports probably summer wanderers?

Common Goldeneye: 8-4 Fall Lake, Lake Co, ad with 6y, JNG; 8-11 Shagawa Lake, St. Louis Co, ad with 3y, JCG; also reported from Beltrami and Morrison Co's.

Ruddy Duck: 6-19 Ramsey Co, ad with 4y, ACR; 7-31 Minneapolis, ad with 7y, FN; also reported from Douglas, Anoka, Jackson, Polk, Stevens, Stearns and Sherburne Co's.

Hooded Merganser: no actual breeding evidence; reported from Aitkin, Stevens, Lake, Cook and St. Louis Co's.

Common Merganser: 6-5 Cook Co, nest with 13e, Dean C. Ash; 7-22 Alpine Lake, Cook Co, ad with 5y, DS; 8-5 Farm Lake, Lake Co, ad with 7y, JCG; 8-9 Burntside Lake, St. Louis Co, ad with 7y, JNG.

Turkey Vulture: 6-6 Plainview, Wabasha Co, 2, DGM; 6-15 Carlton Peak, Cook Co, 1, JCG; 6-19 Washington Co, 2, ACR; 6-25 Crane Lake, St. Louis Co, 10, DS; 7-14 Winona Co, between Elba and Beaver

Creek, 21 birds soaring, FGD, MS; Morrison Co, CW; no actual breeding evidence.

Goshawk: Morrison Co, CW; 6-24 Crane Lake, St. Louis Co, 2, DS; 8-28 Caribou River, Cook Co, 1 imm, JCG.

Sharp-shinned Hawk: Morrison Co, CW; Ramsey Co, ACR; Lake Co, DP; St. Louis Co, PBH; 8-24 to 8-31, Lake Co, migrants, JCG.

Cooper's Hawk: no actual breeding evidence; reported from Dakota Co, ACR; Nobles Co, HSH; Aitkin Co, CEP; Morrison Co, CW; Anoka Co, WHL and St. Louis Co, VFB.

Red-tailed Hawk: nested in Morrison Co, LSR; also reported from Wabasha, Sherburne, Stearns, Beltrami, Aitkin, Rock, Nobles, Anoka, Ramsey, Washington, Olmsted, Winona, Stevens, McLeod, Hennepin, Polk, Crow Wing, Rice, Wright, Lake and Dakota Co's.

Red-shouldered Hawk: reported from Anoka Co, WHL; Ramsey Co, ACR; Houston Co, FGD; Wabasha Co, FGD and Hennepin Co, RDT.

Broad-winged Hawk: 5-10 Anoka Co, female incubating, WHL; also reported from Lake, St. Louis, Hennepin, Beltrami, Aitkin, Rock, Crow Wing, Washington Co's.

Swainson's Hawk: 7-7 Winona Co, between St. Charles and Utica, good detail, MS.

FERRUGINOUS HAWK: 8-1 near Felton, Clay Co, 1 typical adult, good details, DP, WRP; not yet known to nest in Minnesota, and very few summer records.

Bald Eagle: 5-1 nest photographed at confluence of Tamarack and St. Croix Rivers by Thomas Rungert; 6-15 Lake Kabetogama, St. Louis Co, pair at nest, VFB, NJH; also reported from Beltrami, Cook, Morrison and Aitkin Co's.

Marsh Hawk: no breeding evidence reported; Lake, Sherburne, Big Stone, Traverse, Hennepin, Beltrami, Pope, Stevens, Dakota, Anoka, Polk, Crow Wing, Rice, Wright, Morrison, Nobles, Aitkin and St. Louis Co's.

Osprey: 6-9 North Twin Lake, Beltrami Co, JAM; 7-5 to 7-31 Bay Lake, Crow Wing Co, TEM; 7-14 to 7-26 Longville, Cass Co, WJH; 7-22 Grace Lake, Bel-

trami Co, MED; Lake Co, Aug, JCG; Orr, St. Louis Co, NJH; Lake Shamineau, Morrison Co, CW.

Pigeon Hawk: 7-5 Murphy City, Lake Co, pair in and near cavity in dead birch tree, DP; 6-25 Crane Lake, St. Louis Co, DS; Morrison Co, CW; 8-12 to 8-19 Duluth, 1, AKA; 8-28 Lake Co, JCG.

Sparrow Hawk: 6-15 Itasca Co, occupying Wood Duck house, JAM; also reported from Hennepin, Pope, Stevens, Rock, Ramsey, Polk, Winona, Lake, Washington, Wabasha, Stearns, Dakota, Douglas, Cook, Aitkin, Anoka, Nobles, Morrison, Wright, Rice, Crow Wing, Beltrami Co's.

Spruce Grouse: 7-11 St. Louis Co, about 14 mi N Ely, ad with y, AFR; 7-27 Lake-of-the-Woods Co, brood seen, JAM; 7-11 White Pine picnic ground, N of Two Harbors, 1 female, and another female about 40 mi N of Two Harbors, DP.

Ruffed Grouse: 5-22 Orr, St. Louis Co, nest with 14e, hatched 6-12, NJH; 6-28 Jordan, Lake Co, 4 non-flying y, RK; Morrison Co, ad with 6y, LSR; 6-16 Beltrami Co, nest with 9e, MG; also reported from Cook, Aitkin, Anoka, Crow Wing Co's.

Greater Prairie Chicken: 6-12 Clay Co, RG, ELC, RLH; 6-26 Clay Co, DB, EHH; Crookston, Polk Co, GSM.

Sharp-tailed Grouse: Crookston, Polk Co, GSM; Rice Lake Refuge, Aitkin Co, CEP.

Bobwhite: Rice Co, uncommon, OAR; Wabasha Co, DGM; 7-15 Winona, 1 calling, FV; Wyattville, Winona Co, covey, Robert Hall fide GD.

Ring-necked Pheasant: 7-11 Kandiyohi Co, ad with small y, NH; 7-11 Winona Co, ad and 7y, BT; 8-29 Morrison Co, ad with 2 small y, NH; also reported from Cottonwood, Wabasha, Big Stone, Polk, Hennepin, Rock, Anoka, Stevens, Pope, Dakota, Olmsted, Ramsey, Nobles, Wright, Washington, Aitkin, Rice Co's.

Gray Partridge: 7-21 Crookston, Polk Co, ad on nest, GSM; 7-23 Indian Lake Twp, Nobles Co, ad with 10y, HSH; 7-27 Eyota, Olmsted Co, 2 ad with 16y, FGD; 7-14 Kings Lake, Stearns Co, 2, NH; also reported from Wabasha Co, DGM.

Sandhill Crane: the well-publicized pair at Carlos Avery Refuge, Anoka Co, nest-

ed again this year, seen by various observers.

Virginia Rail: Aitkin Co, CEP; Anoka Co, WHL; Hennepin Co, VL, CKS; scarce?

Sora: no actual breeding evidence; reported from Stearns, Washington, Meeker, Dakota, Stevens, Crow Wing, Beltrami, Aitkin, Anoka, Ramsey, Hennepin Co's.

Yellow Rail: 6-12, G. Stuart Keith of the American Museum of Natural History accompanied RG, ELC, and RLH to the usual spot on the Becker-Mahnomen county line south of Waubun. We found the rails to be more numerous than at any time since we found them first in 1959. Probably at the peak of their cycle after several years of pronounced paucity. Mr. Keith secured several excellent tape-recordings of sustained call-note performances. Still abundant on 8-1, DP, WRP.

Common Gallinule: Anoka Co, fide WHL; 7-5 Jackson County Wildlife Area, HSH.

American Coot: 6-16 Swift Co, ad with 3y, AEA; 7-4 Stearns Co, nest with 2e and 1y, NH; also reported from Nicollet, Wabasha, McLeod, Hennepin, Anoka, Ramsey, Rock, Polk, Washington, Stevens, Pope, Olmsted, Dakota, Aitkin and Nobles Co's.

Semipalmated Plover: 7-25 Hennepin Co, 2, MHM; 8-1 Anoka Co, 1, TKS; 8-22 Duluth, 2, JCG.

Piping Plover: 7-11 Duluth, 1, DP; 8-5 and 8-17 Duluth, 1, PBH.

Killdeer: 5-4 Washington Co, 4 eggs, WWL; 6-12 Pope Co, incubating, WH; reported from Cottonwood, Blue Earth, Lake, Goodhue, Meeker, McLeod, Hennepin, Jackson, Aitkin, Dakota, Polk, Olmsted, Stevens, Ramsey, Rock, Anoka, Cass, Beltrami, Crow Wing, Wright, Wabasha, Winona, Rice, Morrison, St. Louis, Douglas and Cook Co's.

American Golden Plover: 6-8 Nobles Co, DB.

Black-bellied Plover: 6-7 Duluth, 4, JCG; 8-22 Duluth, 1, JCG.

Ruddy Turnstone: 6-7 Duluth, 50, JCG; 7-11 Duluth, 1, DP, earliest fall date on record; 8-5 (9) and 8-17 (2) Duluth, PBH; 8-22 Duluth, 1, JCG.

American Woodcock: 4-29 Tofte, Cook Co, 4 eggs, MOP; 6-1 Grand Marais, Cook Co, 3 eggs, MCJ; also reported from Aitkin, Anoka, Beltrami and Pine Co's.

Common Snipe: 7-27 McLeod Co, 3y, FN; also reported from Jackson, Polk, Ramsey, Hennepin, Wright, Morrison, Aitkin, Anoka and Stevens Co's.

Whimbrel: 5-20 Rochester, Olmsted Co, 2, JPF.

Upland Plover. 7-18 Fargo-Moorhead, ad with 1 y, EGA; present in Nobles Co until 7-20 and Jackson Co until 8-1, HSH; Stevens Co, RAG; 7-7 Minneapolis, 1, FN; 6-17 Swift Co, 15, NH; 6-12 and 6-23 Clover Valley, north of Duluth, Anthony Rekas, first Duluth record.

Spotted Sandpiper: 6-15 Finland, Lake Co, 4 eggs, JGH; 7-2 Lac la Croix, St. Louis Co, ad with 4y, MWM; also reported from Morrison, Aitkin, Anoka, Dakota, Olmsted, Winona, Crow Wing, Rice, Hennepin, Ramsey, Stevens and McLeod Co's.

Solitary Sandpiper: 6-27 Crane Lake, St. Louis Co, 3, DS; 7-5 Alberta, Stevens Co, 1, RAG; 7-13 Hennepin Co, 4, VL; 7-18 Dakota Co, 3, FN; 7-25 Hutchinson, McLeod Co, 1, FN; 8-1 Jackson Co, HSH; 8-21 Stearns Co, 5, NH; 8-1 (4) to 8-15 (1) Anoka Co, TKS.

Greater Yellowlegs: 7-5 Alberta, Stevens Co, 7, RAG; 7-13 Bloomington, 2, VL; 7-25 McLeod Co, FN; 7-26 to 7-30 Hennepin Co, RDT; 8-1 Anoka Co, TKS.

Lesser Yellowlegs: 7-3 Stevens Co, 10, RAG; 7-11 Kandiyohi Co, 2, NH; 7-13 Bloomington, 2, VL; 7-25 McLeod Co, FN; 7-26 to 7-30 Hennepin Co, RDT; 8-1(12) to 8-15(5) Anoka Co, TKS; 8-24 Little Marais, Lake Co, 1, JCG; 8-26 Stearns Co, 1, NH.

Knot: 8-22 Duluth, 1, JCG.

Pectoral Sandpiper: 7-5 Alberta, Stevens Co, 1, RAG; 7-25 Hennepin Co, 12, MHM; 7-25 McLeod Co, FN; 7-30 Hennepin Co, RDT; 8-1(10) to 8-15(6) Anoka Co, TKS; 8-15, 8-21, 8-26, Stearns Co, NH.

White-rumped Sandpiper: 6-7 Duluth, 2, JCG.

Baird's Sandpiper: 8-17 Duluth, 1, PHB; 8-22 Duluth, 6, JCG.

Least Sandpiper. 7-25 Grand Marais, Cook

Co, 4, AEA; 7-26 Hennepin Co, 1, RDT; 7-27 McLeod Co, many, FN.

Dunlin: 6-7 Duluth, 2, JCG.

Dowitcher, species?: 7-25(8) and 7-27(36) McLeod Co, FN; 7-26 to 7-30 Hennepin Co, 1, RDT; 7-28 Hennepin Co, 3, VL.

Stilt Sandpiper: 8-9 Anoka Co, 2, TKS.

Semipalmated Sandpiper: 6-7 (100) and 6-11 (1) Duluth, JCG; 7-5 Alberta, Stevens Co, 3, RAG; 7-27 McLeod Co, 20, FN; 7-28 McLeod Co, 12, RDT; 8-1 to 8-9 Anoka Co, 2, TKS; 8-21 Anoka Co, 3, FN; 8-21 Stearns Co, 10, NH; 8-22 Duluth, 25, JCG; 8-27 Little Marais, Lake Co, 8, JCG.

Buff-breasted Sandpiper: 7-31 Wilkin Co, 3 mi E Breckenridge, 16 birds in a pasture, DP, WRP.

Marbled Godwit: 6-12 Felton, Clay Co, many, RG, ELC, RLH; 7-5 Alberta, Stevens Co, 5, RAG.

Sanderling: 6-6(100), 6-7(300) and 6-11(1) Duluth, JCG; 7-31 Mille Lacs Lake, 2, TEM; 8-5(10) and 8-17(4) Duluth, PHB; 8-22 Duluth, 15, JCG.

American Avocet: 7-31 Luverne, Rock Co, 2, DP, WRP, latest date on record?

Wilson's Phalarope: 6-12 Becker Co, pair on territory, RG, ELC, RLH; 7-3 Stevens Co, RAG.

Northern Phalarope: 7-31 Salt Lake, Lac Qui Parle Co, 3, DP, WRP; earliest known fall date on record?

Herring Gull: 5-11 Tofte, Cook Co, nest with 3 eggs, MOP; 6-5 Cook Co, 9 nests, Dean C. Ash; also reported from Beltrami, Lake, Wright, Jackson, Douglas, Pope, Stearns, and St. Louis Co's.

Ring-billed Gull: 7-22 Hennepin Island, Mille Lacs Lake, 5 small y, DB; widely reported from Stearns, Big Stone, McLeod, Hennepin, Pope, Stevens, Beltrami and St. Louis Co's.

Franklin's Gull: 6-6 Duluth, 6, JCG; no actual breeding evidence, reported from Cottonwood, Polk, Pope, Carver, Stevens, Wright, Nobles, McLeod, Kandiyohi and Nicollet Co's.

Bonaparte's Gull: 6-6 Duluth, 250 imm, JCG; 6-12(2), 7-4, 7-31 (35) Mille Lacs Lake, TEM; 8-10 Duluth, 1, PBH.

Forster's Tern: 6-16 Stevens Co, ad carrying food, NH; 7-4 Stearns Co, 6 ad and 2y, NH; also reported from Hennepin, Rock, Pope, Carver, and Nobles Co's.

Common Tern: 7-22 Mille Lacs Lake, 100 nests, most with eggs, a few with y, NH; 8-5 Duluth, downy y to flying y, PBH; also reported from Stearns, Pope, Rock (Forster's?), Wright (Forster's?), Nicollet (Forster's?), Blue Earth (Forster's?), also reported from Morrison Co on 7-4, 3 with Black Terns, LSR (may have been imm Black Terns?). Confusion between this and the Forster's Tern renders our present knowledge of the two species quite inadequate.

Caspian Tern: 6-6(6), 6-7(2) and 6-11(1) Duluth, JCG; 7-11 Lake Koronis, Stearns Co, 2, NH; 7-15, 7-17 Cass Lake, Beltrami Co, several, JAM; 7-22 Mille Lacs Lake, 3, NH.

Black Tern: 7-10 Winona Co, 2y, FGD; 7-4 Stearns Co, 2 nests, 2 eggs each, NH; 7-10 Beltrami Co, 3 eggs., JAM; 7-11 Cass Co, 3 eggs, JAM; also reported from Blue Earth, Nicollet, Rock, Ramsey, Anoka, Morrison, Wright, Nobles, Crow Wing, Pope, Stevens, Polk, Rice, Dakota, Douglas, Aitkin Co's; 7-22 Mille Lacs Lake, most in fall plumage, NH; two northeasterly records, 6-26 Embarass, St. Louis Co, NJH and 7-1 Virginia, St. Louis Co, NJH.

Mourning Dove: 5-2 Washington Co, 2 eggs, WHL; Olmsted Co, 5y seen, FGD; 5-11 Wabasha Co, ad incubating, DGM; 6-10 Stearns Co, 2y left nest, NH; 5-1 Rice Co, on nest, OAR; reported nesting from Polk, Blue Earth, Ramsey Co's; also reported from Cottonwood, Morrison, Hennepin, Douglas, Aitkin, Anoka, Dakota, Winona, Pope, Stevens, Nobles, Wright, Beltrami Co's; two northerly records of special interest: 6-15 Cook Co, 1, AEA; 6-24 Crane Lake, St. Louis Co, 2, DS.

Yellow-billed Cuckoo: 7-26 Rock Co, 1 ad and 1 short-tailed y, HSH; 7-28 Hennepin Co, 1 ad and 1 y, VL; also reported from Cottonwood, Rice, Ramsey, Wright, Anoka, Winona, Washington, Stearns Co's; two northerly records: 6-13 Fargo-Moorhead area, EGA; Douglas Co, MVS (heard, not seen; could have been black-billed?).

Black-billed Cuckoo: 7-18 Sherburne Co, nest with 2 fresh eggs, NH; also reported from Hennepin, Rock, Anoka, Winona,

Olmsted, Wright, Rice, Aitkin, Crow Wing, Polk, Dakota, Stevens, Morrison, Beltrami, St. Louis and Stearns Co's.

Screech Owl: 6-12 Faribault, Rice Co, y banded, OAR; 7-12 Winona, 4 imm in tree, GD; also reported from Stevens, Isanti, Nobles, Anoka, Aitkin, Cottonwood and Blue Earth Co's.

Great Horned Owl: reported from Rice, Aitkin, Anoka, Wright, Washington and Wabasha Co's.

Burrowing Owl: 7-31 Wheaton, Traverse Co, 1 at usual spot, DP, WRP.

Barred Owl: reported from Rice, Aitkin, Anoka, Rock, Morrison, Washington and Crow Wing Co's.

GREAT GRAY OWL: 6-27 Honeymoon Lookout area, Cook Co, 1 bird, RG, RLH (see Notes of Interest in December Loon).

Whip-poor-will: reported from Wabasha, Beltrami, Winona Co's. Undoubtedly nests throughout all wooded portions of our state, but few summer reports are ever received.

Common Nighthawk: 7-2 Winona Co, ad with 2 imm, GD; 7-9 Ramsey Co, y out of "nest", ACR; 8-16 Stearns Co, y just out of "nest" NH; also reported from Cottonwood, Blue Earth, Wabasha, Swift, Olmsted, Washington, Crow Wing, Wright, Morrison, Nobles, Anoka, Aitkin, Rice, Stevens, Beltrami, McLeod, Polk, Hennepin, Douglas, Cass, St. Louis and Cook Co's.

Chimney Swift: nested in Nobles, Ramsey Co's; also reported from Cottonwood, Blue Earth, Lake, Stearns, Winona, Olmsted, Hennepin, Jackson, Morrison, St. Louis, Crow Wing, Dakota, McLeod, Beltrami, Stevens, Rice, Aitkin, Anoka, Wright, Washington Co's.

Ruby-throated Hummingbird: 6 - 10 Stearns Co, nest, NH; Winona Co, 2 ad and 2 imm, fide GD; also reported from Lake, Nobles, Crow Wing, Washington, Wright, Morrison, Anoka, Aitkin, Rice, Cass, Beltrami, Dakota, Ramsey, Douglas, Hennepin, Cook, St. Louis, Pope and Houston Co's.

Belted Kingfisher: 6-27 Hennepin Co, pair nesting, FN; 8-12 Duluth, 2 y out of nest, PBH; also reported from Lake, Stearns, Olmsted, Wabasha, Winona,

Pope, Dakota, Hennepin, Morrison, Cass, Beltrami, Douglas, Ramsey, Crow Wing, Stevens, Rice, Aitkin, Anoka, Wright, Washington, Nobles Co's.

Yellow-shafted Flicker; nesting in Cottonwood, Cook, Blue Earth, Winona, Rice, Wright, Polk, Morrison, St. Louis, Washington, Crow Wing Co's; also reported from Lake, Wabasha, Stearns, Hennepin, Nobles, Anoka, Aitkin, Stevens, Beltrami, Ramsey, Olmsted, Cass, Dakota, Jackson, Pope Co's.

Pileated Woodpecker: reported from Stearns, Crow Wing, Washington, Rice, Hennepin, Brown, Cook, Beltrami, Douglas, Winona, Aitkin, Anoka, Morrison, St. Louis Co's.

Red-bellied Woodpecker: Rice Co, nest OAR; 6-28 Washington Co, ad with y, WWL; also reported from Dakota, Anoka, Ramsey, Olmsted, Hennepin, Houston and Wabasha Co's.

Red-headed Woodpecker: 7-16 Wabasha Co, 2y, FGD; 6-9 Stearns Co, nest, NH; Anoka Co, nest, WHL; 7-18 Crow Wing Co, 2 ad and 1 y, TEM; 6-21 Washington Co, y, WWL; also reported from Cottonwood, Blue Earth, Dakota, Wabasha, Rice, Wright, Pope, Hennepin, Morrison, Cass Beltrami, Douglas, Polk, Stevens, Aitkin, Nobles Co's.

Yellow-bellied Sapsucker: 6-27 Jordan, Lake Co, y heard in nest, RK; 6-25 Dakota Co, 4 y out of nest, FN; 7-3 Beltrami Co, nesting in aspen, JAM; 7-17 Crow Wing Co, ad with 2 y, TEM; Rice Co, nest, OAR; also reported from Nicollet, Anoka, Aitkin, Washington, Douglas, Cass, St. Louis, Morrison Co's.

Hairy Woodpecker: 6-27 Two Harbors, ad with 2 y, RK; Wright Co, nest, EC; Anoka Co, nest, WHL; 6-10, 7-11 Stearns Co, nests, NH; also reported from Wabasha, Dakota, Rice, Crow Wing, Morrison, St. Louis, Cass, Douglas, Ramsey, Aitkin, Hennepin, Washington, Nobles, Olmsted, Beltrami, Cook, Pope, Houston Co's.

Downy Woodpecker: 7-8 Cass Co, 3 y, Gary Larson; 7-17 Crow Wing Co, ad with 2y, TEM; Wright Co, nest, EC; Anoka Co, nest, WHL; also reported from Cottonwood, Lake, Wabasha, Stearns, Dakota, Houston, Pope, Hennepin, Ramsey, Cook, St. Louis, Beltrami, Olmsted, Stev-

ens, Morrison, Nobles, Washington, Aitkin, Douglas, Cass and Rice Co's.

Black-backed Three-toed Woodpecker: 6-27 Lake Co, 3.5 mi E Jordan, y heard in nest, ad carrying food, RK.

Eastern Kingbird: nesting in St. Louis, Crow Wing, Nobles, Wabasha, Cass Co's; reported from Cottonwood, Blue Earth, Lake, Sherburne, Anoka, Wright, Rice, Beltrami, Morrison, Douglas, Ramsey, Aitkin, Hennepin, Washington, Stevens, Polk, Olmsted, Dakota, Rock, Jackson, Pope, Winona Co's.

Western Kingbird: 7-15 Eden Prairie, Hennepin Co, 2y out of nest, FN, VL, TEM; 7-18 Mounds Park, Rock Co, 3y out of nest, HSH; 7-30 Minneapolis, 1 y in nest, VL; 7-20 Nobles Co, ad with y, HSH; Crookston, Polk Co, nest, GSM; also reported from Beltrami, Anoka, Morrison, Stevens, Sherburne Co's; one interesting northerly record: 6-6 Toffe, Cook Co, MOP.

Great Crested Flycatcher: 6-22 Washington Co, ad with y, WWL; also reported from Beltrami, Lake, Stearns, Jackson, Rock, Hennepin, Stevens, Morrison, Dakota, Anoka, Ramsey, Rice, St. Louis, Cook, Cass, Crow Wing, Aitkin, Olmsted, Murray, Winona, Wabasha and Pope Co's.

Eastern Phoebe: 7-3 Beltrami Co, on nest, JAM; 7-8 Douglas Co, 1 y out of nest, MVS; also reported from Lake, Sherburne, Washington, Hennepin, Crow Wing, Winona, Wabasha, Dakota, Olmsted, Aitkin, Cass, Cook, St. Louis, Rice, Wright, Anoka, Ramsey, Goodhue, Morrison, Jackson Co's.

Yellow-bellied Flycatcher: 6-3 Minneapolis, TKS; 6-6(15), 6-7(3) Duluth, JCG; 6-10 Sherburne Co, NH; 7-3 St. Paul, 1 ad banded, JO; 7-5 Cook Co, DP; 7-5 Crow Wing Co, TEM.

Traill's Flycatcher: reported from Lake, Stevens, Morrison, Goodhue, Ramsey, Anoka, Wright, Rice, Houston, St. Louis, Stearns and Dakota Co's.

Least Flycatcher: 6-10 Stearns Co, nest, NH; 7-31 Crow Wing Co, ad carrying food to nest and another ad feeding 2y in bushes, TEM; also reported from Lake, Dakota, Wright, St. Louis, Cass, Aitkin, Winona, Olmsted, Houston, Wabasha, Beltrami, Nobles, Hennepin, Polk, Stevens, Morrison, Ramsey, Anoka, Rice Co's.

Eastern Wood Pewee: 7-4 Crow Wing Co, building nest, TEM; also reported from Blue Earth, Lake, Stearns, Dakota, Goodhue, Meeker, Anoka, Murray, Washington, Winona, Wabasha, St. Louis, Hennepin, Olmsted, Cass, Rice, Wright, Ramsey, Morrison, Stevens, Cook, Nobles and Beltrami Co's.

Olive-sided Flycatcher: 6-4 Hennepin Co, RDT; 6-6 Lake Co, RK; 6-6 Cook Co, MOP; 6-10 Stearns Co, NH; 6-26 Pope Co, WH; Anoka Co, WHL; Crow Wing Co, MSB.

Horned Lark: 6-10 Dakota Co, nest with 6e, R. Christman fide ACR; also reported from Cottonwood, Nobles, Hennepin, Stevens, Morrison, Winona, Ramsey, Anoka, Rice, Crow Wing, Olmsted, Wabasha, Pope, Stearns Co's.

Tree Swallow: Kanabec Co, nested, RHJ; Motley, Morrison Co, 6 nests, CW; Wabasha Co, nested, DGM, FGD; Hennepin Co, nested, KKS; Cook Co, nested MCJ, MOP; St. Louis Co, nested, SM, MWM; Washington Co, nested, WWL; Anoka Co, nested, WHL; Nobles Co, nested, HSH; Crow Wing Co, nested, TEM; Hennepin Co, nested, FN; Stearns Co, nested, NH; Beltrami Co, nested, JAM; also reported from Nicollet, Lake, Dakota, Ramsey, St. Louis, Cass, Aitkin, Wright, Jackson, Stevens, Morrison, Olmsted, Winona, Pope Co's.

Bank Swallow: nested in Stearns, St. Louis Co's; also reported from Hennepin, Rice, Crow Wing, Rock, Anoka, Washington, Beltrami, Douglas, Dakota, Olmsted, Winona, Wabasha, Morrison, Stevens, Pope, Wright Co's.

Rough-winged Swallow: reported from Hennepin, Olmsted, Winona, Wabasha, Ramsey, Rice, Stearns Co's; one northerly record: 6-8 Lester River, St. Louis Co, 4, JCG.

Barn Swallow: nesting in Blue Earth, Mahnomen, Wright, Anoka, Hennepin, Stearns Co's; also reported from Cottonwood, Lake, St. Louis, Ramsey, Rice, Olmsted, Winona, Crow Wing, Nobles, Washington, Beltrami, Douglas, Cook, Dakota, Pope, Morrison, Stevens, Polk and Aitkin Co's.

Cliff Swallow: nesting in St. Louis, Winona (41 nests), Pennington, Beltrami, Crow Wing and Stevens Co's; also reported from Lake, Wabasha, Swift,

Stearns, Ramsey, Rice, Olmsted, Houston, Rock, Nobles, Morrison, Lac Qui Parle, Cook, Aitkin Co's.

Purple Martin: nesting in Anoka, Wabasha, Winona, Cottonwood, Douglas, Stearns Co's.... also reported from Dakota, Lake, Crow Wing, Hennepin, Stevens, Beltrami, St. Louis, Ramsey, Rice, Olmsted, Nobles, Morrison, Aitkin, Washington, Anoka, Wright, Pope Co's.

Gray Jay: 3-17 Gunflint Lake, Cook Co, gathering nest material, HH; also reported from Lake and St. Louis Co's.

Blue Jay: nested in Washington Co; also reported from Cottonwood, Blue Earth, Lake, Stearns, St. Louis, Cook, Douglas, Hennepin, Pope, Morrison, Wright, Anoka, Ramsey, Aitkin, Stevens, Crow Wing, Nobles, Olmsted, Winona, Rice, Beltrami, Dakota and Wabasha Co's.

BLACK-BILLED MAGPIE: 6-15 Polk Co, 4 mi WSW Fertile, 1 seen GSM; very few summer records.

Common Raven: reported from Grand Marais, Tofte and Alpine Lake, Cook Co; also from Crane Lake, St. Louis Co; also reported from Motley, Morrison Co, but this would be very unusual in view of the general scarcity of Ravens this summer.

Common Crow: nested in Anoka Co; also reported from Cottonwood, Blue Earth, Lake, Stearns, Washington, St. Louis, Cook, Polk, Douglas, Hennepin, Pope, Morrison, Wright, Ramsey, Aitkin, Stevens, Nobles, Olmsted, Winona, Rice, Beltrami, Crow Wing, Dakota, Wabasha and Cass Co's.

Black-capped Chickadee: nesting in Cottonwood, Ramsey, Wabasha, Washington, Cook and Hennepin Co's; also reported from Lake, Stearns, Dakota, Cass, Crow Wing, Stevens, Beltrami, Rice, Olmsted, Houston, Nobles, Aitkin, Wright, Morrison, Pope, Douglas, St. Louis Co's.

Boreal Chickadee: 7-11 Lake Co, near McNair, 6, DP (family group?)

Tufted Titmouse: 7-7 Anoka Co, Coon Rapids, ad with 4y out of nest, DP; also reported from Hennepin, Rice, Washington, Ramsey Co's.

White-breasted Nuthatch: nested in Cass and Kanabec Co's; also reported from Lake, Beltrami, Stearns, Dakota, Wash-

ington, Hennepin, Rice, Ramsey, Crow Wing, Olmsted, Winona, Nobles, Aitkin, Anoka, Goodhue, Wright, Morrison, Douglas, Wabasha and St. Louis Co's.

Red-breasted Nuthatch: reported only from Cook, Lake and St. Louis Co's.

Brown Creeper: only report, Hennepin Co, CKS?

House Wren: nested in Wabasha, Washington, Hennepin, Beltrami, Douglas, St. Louis, Dakota, Rice, Crow Wing, Ramsey, Cottonwood, Blue Earth, Anoka and Polk Co's; also reported from Lake, Murray, Stearns, Cass, Stevens, Olmsted, Winona, Nobles, Aitkin, Wright, Morrison, Pope, Cook Co's.

Winter Wren: 7-15 Pelican Lake, St. Louis Co, VFB; Orr, St. Louis Co, NJH.

Long-billed Marsh Wren: nested in Kandiyohi and Rice Co's; also reported from Anoka, Stearns, Ramsey, McLeod, Meeker, Hennepin, Wright, Stevens Co's; also 6-6 Duluth, 1, JCG.

Short-billed Marsh Wren: nested in Wabasha and Rice Co's; also reported from Beltrami, Hennepin, Stevens, Aitkin, Wright, Anoka, Washington, Meeker, Stearns, Sherburne and St. Louis Co's.

MOCKINGBIRD: 6-6 West Duluth, fide RN; 6-7 Meadowlands, fide RN; 6-9 Two Harbors, 1 specimen taken, Vince Heig; 6-13 Fargo, 1 seen, good details, Mrs. F. B. Scheel; 7-16 Cyrus, Pope Co, WH; these reports are very interesting in that there are very few previous summer records for the state.

Catbird: nesting in Scott, Lake, St. Louis, Anoka, Winona, Stearns and Douglas Co's; also reported from Cottonwood, Pope, Ramsey, Rice, Hennepin, Goodhue, Washington, Wright, Aitkin, Olmsted, Wabasha, Stevens, Cass, Dakota, Beltrami, Nobles, Morrison, Polk and Crow Wing Co's.

Brown Thrasher: nesting in Pope, Nobles, Jackson, Cottonwood, Beltrami, Cook, Hennepin, St. Louis, Wright and Sherburne Co's; also reported from Blue Earth, Lake, Washington, Polk, Morrison, Douglas, Crow Wing, Olmsted, Dakota, Cass, Rice, Ramsey, Stevens, Winona, Wabasha, Aitkin, Anoka, Goodhue Co's.

Robin: nesting in Cook, Ramsey, Wash-

ington, Beltrami, Cottonwood, Blue Earth, St. Louis, Winona, Douglas, Polk, Crow Wing, Anoka, Stearns, Rice Co's; also reported from Lake, Wabasha, Nobles, Wright, Pope, Hennepin, Aitkin, Stevens, Olmsted, Dakota, Morrison Co's.

Wood Thrush: 7-2 Hennepin Co, ad with 1y, RDT; 6-1 Lake Vadnais, Ramsey Co, ACR; 6-25 Vasa, Goodhue Co, FN; 7-3 Hennepin Co, ACR; 7-8 Faribault, Rice Co, 1 banded, OAR; 7-8 Winona, Winona Co, FGD; Olmsted Co, MS; 7-18 Nerstrand Woods, Rice Co, FN; two very northerly records (details?): Crosby, Crow Wing Co, MSB and Saum, Beltrami Co, MK.

Hermit Thrush: Rice Lake Refuge, Aitkin Co, CEP; Orr (NJH), Pfeiffer Lake (VFB) and Lake Vermilion (VFB) all in St. Louis Co.

Swainson's Thrush: 7-21 St. Louis Co, nest with 3e, AFR; 6-1 Minneapolis, MHM and 6-6 Duluth, JCG, late migrants; 7-8 Lake Vermilion, St. Louis Co, 1 banded, MJW, REN; Cook Co, JCG.

Veery: 6-11 Crow Wing Co, nest with 4e and 1 Cowbird e, MSB; Belle Prairie, Morrison Co, nested, LSR; 7-22 Nerstrand Woods, Rice Co, nested, OAR; Duluth, St. Louis Co, must have nested, HEP; also reported from Beltrami, Lake, Aitkin, Anoka, Cass, Cook, Stearns and Douglas Co's.

Eastern Bluebird: nested in Wabasha (13 nests, DGM), Winona (32 nests, GD), Scott, Morrison, Douglas, Stearns, Dakota, Pope and Kanabec Co's; also reported from Cottonwood, Traverse, Lake, Beltrami, Olmsted, Hennepin, Wright, Cook, Ramsey, Washington, Stevens, St. Louis, Aitkin, Crow Wing, Anoka, Cass, Rice and Douglas Co's; numbers increasing at an encouraging rate.

Blue-gray Gnatcatcher: 5-15 Vasa, Goodhue Co, male on nest with female inches away, photographed by HFH (male perhaps shaping nest-cup?); 6-10 Sherburne Co, nest with 5e but on 6-13 nest empty, being dismantled by adults, NH; 6-20 Whitewater Park, Winona Co, nesting, GG.

Golden-crowned Kinglet: 6-15 Sawbill Trail, Cook Co, JCG; 7-4 Bemidji Beltrami Co, MED; 7-5 Sawbill Trail, Cook Co, 30, DP; 7-11 Lake Co, N of Two Harbors, 12, DP.

Ruby-crowned Kinglet: 6-27 Jordan, Lake Co, 1, RK; 7-5 Sawbill Trail, Cook Co, 1 male, DP; 7-11 Langley River, Lake Co, 1, DP.

Sprague's Pipit: 7-31 (RLH) and 8-1 (DP, WPR), 3 mi SE Felton, Clay Co, 1 singing male at usual spot.

Cedar Waxwing: 6-15 Anoka Co, nest with 3e, WHL; 7-7 Duluth area, nest with 5e, SNE; 7-25 Washington Co, ad feeding 4y out of nest, WHL; 8-17 Kanabec Co, ad feeding 1y out of nest, RHJ; Winona Co, nesting, GD; 7-18 Crow Wing Co, ad feeding nestlings, TEM; 8-12 Stearns Co, ad feeding 4y out of nest, NH; also reported from Nicollet, Lake, Cottonwood, Dakota, Douglas, Rice, St. Louis, Morrison, Cook, Beltrami, Cass, Pope, Ramsey, Aitkin, Olmsted, Wabasha, Houston Co's; a few groups of 10-60 birds were reported, apparently non-breeding flocks?

Loggerhead Shrike: 6-6 Kellogg, Wabasha Co, 2 nestlings, DGM; also reported from Nobles, Wadena, Morrison, Washington, Aitkin, Olmsted, Stearns, and Hennepin Co's.

Bell's Vireo: 7-10 Winona, Co, FGD; 7-16 Dorer Pools, SW of Weaver, Winona Co, FGD, BT, MS.

Yellow-throated Vireo: reported from Beltrami, Olmsted, Houston, Wabasha, Crow Wing, Pope, Hennepin, Ramsey, Morrison, Goodhue, Stearns, St. Louis Co's; also all summer at Fargo-Moorhead.

Solitary Vireo: 5-20 St. Paul, ACR, late migrant; 6-20 Crane Lake, St. Louis Co, DS; 7-18 St. Louis Co, y out of nest, AFR; 8-23 Duluth, AKA, (early fall migrant?)

Red-eyed Vireo: Rice Co, nest, OAR; 6-30 Parkville, St. Louis Co, nest with 2e, SNE; 6-15 Pelican Lake, St. Louis Co, incubating, NJH; 7-31 Crow Wing Co, ad feeding y out of nest, TEM; 7-2 Fargo-Moorhead, 2 nestlings, EGA; also reported from Lake, Wabasha, Stearns, Ramsey, Hennepin, Aitkin, Morrison, Jackson, Meeker, Pope, Dakota, Cass, Washington, Beltrami, Anoka, Olmsted, Winona Co's.

Philadelphia Vireo: 8-30 Duluth, AKA, early fall migrant.

Warbling Vireo: 6-7 Stearns Co, building nest, NH; 7-11 Douglas Co, 2y left nest, MVS; also reported from Dakota, Crow

Wing, Houston, Wabasha, Olmsted, Anoka, St. Louis, Pope, Stevens, Hennepin, Washington, Beltrami, Polk, Nobles, Ramsey Co's.

Black-and-White Warbler: 6-3 Minneapolis, TKS; 6-5 Fargo-Moorhead, EGA and 6-6 Duluth, JCG, migrants; 7-3 Cambridge, Isanti Co, ad and 1y out of nest, unable to fly, ACR; 8-10 Duluth, ad feeding y, PBH; also reported from Cook, Lake Co's.

Golden-winged Warbler: 7-3 and 7-5 Bay Lake, Crow Wing Co, 1 each day, TEM.

Blue-winged Warbler: 6-18 Stockton, Winona Co, GD; 6-25 Vasa, Goodhue Co, FN.

Tennessee Warbler: 6-3 Minneapolis, TKS; 6-4 St. Paul, MIG and 6-10 Fargo-Moorhead, EGA, late migrants; Lake Co, RK.

Orange-crowned Warbler: 6-15 and 6-23 Hibbing, St. Louis Co, banded, SM.

Nashville Warbler: numerous reports from Lake and St. Louis Co's; one southerly record of special interest: 7-10 Forest Lake, Washington Co, 1 singing male, WHL.

Parula Warbler: 6-15 (JCG) and 7-5 (DP, RG) Sawbill Trail, Cook Co.

Yellow Warbler: nesting in Washington, Lake, Cass, Douglas, Goodhue, Crow Wing, and St. Louis Co's; also reported from Stearns, Anoka, Winona, Wabasha, Olmsted, Pope, Stevens, Hennepin, Beltrami, Morrison, Rice, Dakota, Nobles, Aitkin, and Ramsey Co's. 7-21 Duluth, 2 ad feeding Cowbird, PBH.

Magnolia Warbler: 6-6 Duluth, JCG; 7-11 Lake Co, N of Two Harbors, DP; 7-31 Crow Wing Co, TEM; 8-29 Lake Co, JCG; 8-30 Duluth AKA.

Black-throated Blue Warbler: 6-15 (JCG), 6-27 (RG, RLH) and 7-5 (RG) Honeymoon Lookout, Cook Co, 1 singing male.

Myrtle Warbler: Orr, St. Louis Co, NJH; Grand Marais, Cook Co, MCJ; 6-15 Lake Kabetogama, St. Louis Co, VFB; 6-23 Crane Lake, St. Louis Co, 10, DS; 7-9 Parkville, St. Louis Co, 1, SNE.

Black-throated Green Warbler: Orr, St. Louis Co, NJH; 6-1 to 6-6 Tofte, Cook Co, MOP; 6-15 Lake Kabetogama, St. Louis Co, VFB; 6-7 Duluth, JCG; 8-29 Lake Co, JCG.

Cerulean Warbler: 6-10 Grand Lake, Stearns Co, many singing males, NH; 6-22 Lake Mille Lacs, 1 singing, DB; 6-25 Vasa, Goodhue Co, 2 singing, FN.

Blackburnian Warbler: 5-22 Anoka Co, ACR and 6-6 Duluth, JCG, late migrants; 6-15 Lake Kabetogama, St. Louis Co, VFB; 6-27 Shotley, Beltrami Co, MG; Orr, St. Louis Co, NJH.

Chestnut-sided Warbler: 6-22 Crosby, Crow Wing Co, 1e, 2y in nest, MSB; 7-18 Crow Wing Co, ad feeding 2y out of nest, TEM; also reported from St. Louis, Lake and Cook Co's.

Bay-breasted Warbler: 6-9 Two Harbors, Lake Co, RK; 8-29 Lake Co, 20 migrants, JCG.

BLACKPOLL WARBLER: 7-11 Vasa, Goodhue Co, 1, MHM; details submitted do not preclude a Cerulean Warbler seen in poor light, and the Cerulean breeds commonly there; otherwise this record is a fantastic date for a Blackpoll; 8-29 Lake Co, 1 migrant, JCG.

Pine Warbler: Crow Wing Co, MSB; 6-26 Itasca Park, Clearwater Co, EHH; 8-13 Beltrami Co, MED.

Ovenbird: reported from Lake, St. Louis, Goodhue, Anoka, Cook, Aitkin, Rice and Crow Wing Co's.

Northern Waterthrush: 6-6 Duluth, 1 migrant, JCG; Orr, St. Louis Co, NJH; 7-8 Lake Vermilion; St. Louis Co, 1 banded, MJW, REN; 8-27 Duluth, fall migrant, AKA.

Louisiana Waterthrush: 6-13 Whitewater Park, Winona Co, both ad feeding y Cowbird, BL; 6-26 Indian Mounds Park, St. Paul, ACR.

KENTUCKY WARBLER: 5-19 to 6-30 same (?) aberrant singing male present at Coon Rapids, Anoka Co, that has lingered for past two summers, DP, WRP, RLH, LB, HFH, RG, etc, etc.; 6-18 Stockton Winona Co, GD.

Connecticut Warbler: 6-1 Minneapolis, MHM and 6-7 Duluth, JCG, late migrants; 7-5 Sawbill Trail, Cook Co, 1 male, DP.

Mourning Warbler: 7-21 Duluth, ad feeding y, PBH; also reported from Lake, Crow Wing and Cook Co's.

Yellowthroat: 7-13 Dorer Pools, Wabasha-

Winona Co line, ad feeding y Cowbird, BT; 7-18 Sherburne Co, y just out of nest, NH; Cottonwood Co, nest, HSH; also reported from St. Louis, Lake, Winona, Hennepin, Crow Wing, Ramsey, Anoka, Washington, Rice, Stevens, Olmsted, Pope, Beltrami, Dakota, Morrison, Nicolle, Blue Earth Co's.

Wilson's Warbler: 6-6 Duluth (JCG), 6-6 Lake Co (RK) late migrants; 8-29 Lake Co, fall migrant, JCG.

Canada Warbler: 7-4 Sand Lake, St. Louis Co, 1e and 1y Cowbird, SNE; 7-27 Duluth, pair feeding y, PBH; also reported from Cook, Lake, Beltrami Co's.

American Redstart: 7-6 Two Harbors, Lake Co, nest, RK; 6-10 Stearns Co, nest, NH; Rice Co, nest, OAR; 6-13 Tofte, Cook Co, nest, MOP; early July Brule River, Cook Co, nest, PBH; also reported from Winona, Beltrami, Goodhue, St. Louis, Crow Wing, Hennepin, Ramsey, Aitkin, Anoka, Pope, Winona, Olmsted, Stevens, Cass Co's.

Bobolink: 6-12 Becker Co, S of Waubun, 4 eggs, RLH, ELC; also reported from Lake, Cottonwood, Stevens, Winona, Wabasha, Stearns, Traverse, Olmsted, Crow Wing, Anoka, Rice, Aitkin, Washington, St. Louis, Dakota, Morrison, Nobles, Douglas, Pope, Polk, Wright and Pipestone Co's.

Eastern Meadowlark: Rice Co, nest, OAR; also reported from Lake, Wabasha, Hennepin, Olmsted, Anoka, Aitkin, Dakota, Crow Wing, Morrison, Washington, Wright, St. Louis, Polk and Pipestone Co's. Few records for western part of state.

Western Meadowlark: 6-12 Clay Co, 2 nests, 4e, 6e, ELC, RLH; 6-17 Lac Qui Parle Co, 3 eggs plus 3 Cowbird eggs, NH; 7-18 Sherburne Co, 4e, NH; also reported from Wabasha, St. Louis, Stearns, Hennepin, Wright, Washington, Rice, Anoka, Olmsted, Beltrami, Ramsey, Pope, Douglas, Dakota, Nobles, Morrison, Stevens, Winona, Wabasha, Cottonwood, Blue Earth, Rock and Pipestone Co's.

Yellow-headed Blackbird: 7-4 Stearns Co, many y out of nests, NH; 7-11 Kandiyohi Co, y just out of nest, NH; Rice Co, nest, OAR; also reported from Wabasha, Stevens, Crow Wing, Hennepin, McLeod, Morrison, Nobles, Dakota, Pope, Ramsey,

Winona, Anoka, Aitkin, Wright, Cottonwood, Nicollet, Blue Earth Co's.

Red-winged Blackbird: 6-12 Becker Co, 4 eggs, (ELC, RLH; 6-26 Mahnomen Co, 3 eggs, DB; 6-12 Beltrami Co, 2 nests, 4e each, JAM; 7-8 Parkville, St. Louis Co, ad feeding 2y, SNE; 6-13 Stearns Co, 1 egg, NH; 6-16 Stevens Co, 3e and 1 Cowbird egg, NH; Anoka Co, nest; also reported from Lake, Wabasha, Cook, Cass, Olmsted, Crow Wing, Hennepin, Morrison, Nobles, Dakota, Douglas, Pope, Ramsey, St. Louis, Washington, Rice, Aitkin, Polk, Cottonwood, Blue Earth and Wright Co's.

Orchard Oriole: 7-10 Winona, Winona Co, 2 ad and 3 imm, GG; 7-10 Houston Co, ad and 1 y, FGD; 7-25 Pipestone Co, ad and 2 y, HSH; 7-7 Nobles Co, more seen than usual, HSH; 7-18 Rock Co, HSH.

Baltimore Oriole: 7-16 Wabasha Co, 4y, FGD; 5-16 Washington Co, building nest, DS; 5-27 St. Paul, building nest, MIG; nested in Winona, Cottonwood, Blue Earth, Rice, Stearns, Anoka, Crow Wing and Dakota Co's also reported from Nobles, Olmsted, Cass, Stevens, Goodhue, Hennepin, Morrison, Douglas, Pope, Beltrami, Aitkin, Wright, Polk and St. Louis Co's; 7-10 Ramsey Co, ad feeding y Cowbird, MIG.

Brewer's Blackbird: reported from Beltrami, Lake, Nobles, Dakota, Morrison, Washington, Anoka, Kandiyohi, Stevens, Lac Qui Parle, Traverse, St. Louis Co's.

Common Grackle: nested in Wabasha, Anoka, Rice Sherburne, Co's; also reported from Cottonwood, Blue Earth, Pine, Lake, Morrison, Ramsey, Washington, St. Louis, Hennepin, Nobles, Wright, Cook, Beltrami, Pope, Douglas, Dakota, Stevens, Crow Wing, Olmsted Co's.

Brown-headed Cowbird: reported from Lake, Wabasha, Olmsted, Houston, Cass, Stevens, St. Louis, Crow Wing, Dakota, Douglas, Pope, Anoka, Ramsey, Hennepin, Cook, Rice, Beltrami, Polk, Wright, Nobles, Morrison, Anoka, Washington Co; see also Yellow Warbler, Yellowthroat, Louisiana Waterthrush, Canada Warbler, Western Meadowlark, Red-winged Blackbird, Baltimore Oriole, Rufous-sided Towhee, Chipping Sparrow.

Scarlet Tanager: Rice Co, nest, OAR; 6-10 Stearns Co, nest, NH; Parkville, St. Louis

Co, pair feeding y, SNE; 6-30 Pfeiffer Lake, St. Louis Co, VFB; 6-27 Jordan, Lake Co, 1 male, RK; 6-4 Fargo-Moorhead, 1 male, EGA; also reported from Anoka Morrison, Goodhue, Washington, Crow Wing, Aitkin, Hennepin, Olmsted, Dakota, Houston, Cottonwood and Watonwan Co's.

Cardinal: 6-1 Hennepin Co, ad feeding y, RDT; 8-7 Wabasha Co, ad incubating, DGM; Cottonwood Co, nest, HSH; Winona Co, nested, GD; Fargo-Moorhead, 2 nestings, fide EGA; also reported from Olmsted, Dakota, Ramsey, Rice Washington, Jackson, Anoka, Stearns Co's.

Rose-breasted Grosbeak: nested in Hennepin, Washington, Stearns Co's; also reported from Lake, Traverse, Wabasha, Ramsey, Morrison, Anoka, St. Louis, Goodhue, Nobles, Rice, Crow Wing, Aitkin, Cook, Beltrami, Cass, Itasca, Rock, Douglas, Dakota, Stevens, Olmsted and Houston Co's.

Indigo Bunting: reported from Olmsted, Pope, St. Louis, Crow Wing, Lake, Traverse, Stearns, Kandiyohi, Goodhue, Rice, Nobles, Dakota, Douglas, Anoka, Nicollet, Washington, Hennepin, Beltrami, Carver, Aitkin, Wright, Morrison, Ramsey Co's.

Dickcissel: truly abundant this summer; reported from Wabasha, Swift, Kandiyohi Olmsted, Washington, Hennepin, Rice, Dakota, Goodhue, Scott, Anoka, Brown, Nicollet, Stevens, Wright, Nobles, Rock, Pipestone, Jackson, Lyon, Redwood, Clay Co's.

Evening Grosbeak: July, Parkville, St. Louis Co, y being fed by ad, SNE; 8-10 Duluth, ad feeding y out of nest, PBH; numerous reports from Lake, St. Louis and Cook Co's; 8-9 Bemidji, Beltrami Co, MED.

Purple Finch: nested at Shotley, Beltrami Co, MG and Duluth, St. Louis Co, HEP; also reported from Lake, Crow Wing, Aitkin, Anoka, Morrison, Cass and Cook Co's.

PINE GROSBEAK: 7-9 Parkville (Duluth area), St. Louis Co, 4, SNE; good details; probably first summer record for Minnesota.

Pine Siskin: 6-1 Duluth, 2y, AKA; July, Bemidji, Beltrami Co, one heard, JAM; Grand Marais, Cook Co, MCJ; 8-21 Duluth, 50, AKA.

American Goldfinch: nesting in Stearns, Cook Co's; also reported from Lake, Hennepin, Ramsey, Anoka, Crow Wing, Washington, Stevens, Dakota, Douglas, Pope, Rice, Aitkin, Wright, Nobles, Rock, Morrison, Cass, Beltrami, St. Louis, Nicollet, Blue Earth Co's; most interesting record, was 10-2 Olmsted Co, y just out of nest, flying feebly, AFR.

RED CROSSBILL: 7-9, 7-10 Parkville, (Duluth area) St. Louis Co, male, female feeding imm in spruce tree, SNE; good details; few summer records. 8-24 Duluth, 1, AKA.

White-winged Crossbill: 7-15 Fargo, 1 seen, Richard Shook, fide EGA.

Rufous-sided Towhee: Rice Co, nest, OAR; 6-10 Sherburne Co, ad feeding 2y and also y Cowbird, NH; reported from Winona, Ramsey, Washington, Crow Wing, Beltrami and St. Louis Co's.

LARK BUNTING: 6-8 Rock Co, DB, EHH; 6-14 Shotley, Beltrami Co, 1 seen (details?), MG; 6-16 several between Benson and Morris, county not noted, AEA.

Savannah Sparrow: 7-27 Duluth, ad feeding y, PBH; also Lake, Houston, Anoka, Nobles Co's; surprisingly few county records considering that this is one of our most widespread breeding sparrows.

Grasshopper Sparrow: Rice Co, nest, OAR; Stevens Co, a few colonies, RAG; also from Winona, Hennepin, Washington, Rock and Nobles Co's.

LeConte's Sparrow: 6-12 (RG, ELC, RLH) and 6-26 (DB, EHH) Becker-Mahnomen Co line just S of Waubun at usual spot; 7-10 Parkville (Duluth area), St. Louis Co, 1 banded, (details?) SNE.

Henslow's Sparrow: 7-3 Dakota Co, ACR; 7-10 Dakota Co, ELC, RLH; 7-22 Winona, Winona Co, FV, BT.

Sharp-tailed Sparrow: 6-12 (RG, ELC, RLH) and 6-26 (DB, EHH) Becker-Manomen Co line just south of Waubun at usual spot; Saum, Beltrami Co (details?) MK.

Vesper Sparrow: 6-9 Cyrus, Pope Co, 4 eggs, WH; Rice Co, nest, OAR; Washington Co, carry food, ACR; also Olmsted, Anoka, Ramsey, Crow Wing, Stevens, Dakota, Aitkin, Wright, Nobles, Rock, Morrison, Cottonwood, Blue Earth, Wabasha and Stearns Co's.

Lark Sparrow: Fargo-Moorhead, occasionally, EGA; 6-27 Eden Prairie, Hennepin Co, FN; 7-2 Hennepin Co, MHM; 7-3 Scott Co, 4, ACR; 7-16 Wabasha Co, FGD.

Slate-colored Junco: several reports from St. Louis and Cook Co's.

Chipping Sparrow: nested in Hennepin, Cook, Stearns, Douglas, Anoka, St. Louis, Pope, Washington, Crow Wing, Rice Co's; 7-18 Ramsey Co, feeding Cowbird, MIG; 7-13 Swift Co, feeding Cowbird; 6-16 Stearns Co, y out of nest but fresh Cowbird egg remained, NH; 7-31 Duluth, feeding Cowbird, PBH; also reported from Lake, Wabasha, Cottonwood, Dakota, Stevens, Aitkin, Wright, Nobles, Morrison, Cass, Beltrami and Cook Co's.

Clay-colored Sparrow: 7-23 Duluth, ad feeding y, PBH; also from Lake, Sherburne, Hennepin, Anoka, Ramsey, Washington, Crow Wing, Stevens, Beltrami, St. Louis, Cook, Mahnomen Co's.

Field Sparrow: 7-17 Dakota Co, s of Nicols, 2 eggs, ELC, RLH; 5-17 Olmsted Co, 4 eggs, AFR; also Blue Earth, Sherburne, Stearns, Winona, Wabasha, Hennepin, Washington, Anoka, Rice, Jackson Co's; also listed for Douglas Co, MVS (details? quite northerly).

White-throated Sparrow: 7-1 Duluth, y out of nest, AKA; also reported from Lake, Cook and Beltrami Co's.

Swamp Sparrow: nesting at Shotley, Beltrami Co, MG; also reported from Lake, Sherburne, Hennepin, Ramsey, Anoka, Washington, Crow Wing, Dakota, Rice, Nobles, Blue Earth, St. Louis Co's.

Song Sparrow: nesting in Cass, Crow Wing, St. Louis, Polk and Blue Earth Co's, also reported from Lake, Olmsted, Hennepin, Ramsey, Washington, Anoka, Stevens, Dakota, Douglas, Pope, Rice, Aitkin, Wright, Nobles, Morrison, Beltrami, Nicollet, Cook, Cottonwood, Wabasha, Sherburne and Stearns Co's.

Chestnut-collared Longspur: 6-12 (RG, ELC, RLH), and 8-1 (DP, WRP) Clay Co, SE of Felton, at usual spot.

Blue Grosbeak: 6-8 (DB, EHH), 7-3 (HSH), 7-10 (RG, RLH), 8-13 (HSH), 7-25 (HSH) Rock Co, south of Manley, several pairs, presumed nesting at usual spots along border road.

Corrigenda to Spring Season:

Black Tern: ES date should be May rather than April

Tree Swallow: SM date should be April rather than March.

Lark Bunting: Nobles Co record by HSH, date was 5-18.

Contributors: In addition to the ten names spelled out in the text, the following 80 people made their regular contribution: ACR, A. C. Rosenwinkel; AEA, Dr. A. E. Allin; AFR, Alden F. Risser; AKA, A. K. Arndt; BL, Bill Litkey; BT, Brother Theodore; CEP, C. E. Pospichal; CKS, C. K. Sherck; CW, Carl Walther; DB, Don Bolduc; DGM, Dr. and Mrs. D. G. Mahle; DHG, Dr. Harry Goehring; DP, Dave Pearson; DS, Dave Sovereign; EC, Erma Christopher; EGA, Elizabeth G. Anderson; EHH, E. H. Hermanson; ELC, Elizabeth Campbell; EMB, E. Manson Brackney; ES, Ernest Strubbe; FGD, F. Gerald Daley; FL, Fred Leshner; FN, Fran Nubel; FV, Francis Voelker; GD, Grace Dahm; GG, Grace Gordon; GSM, Gerald and Shirlee Maertens; HEP, Harvey and Evelyn Putnam; HFH, Harding F. Huber; HH, Helen Hoover; HSH, Helen S. Hatlelid; JAM, John and Ann Mathisen;

JCG, Janet C. Green; JGH, John G. Hale; JNG, John Green; JO, Jane Olyphant; JPF, John P. Feehan; JRR, J. R. Rehbieh; JTP, John T. Pratt; KWE, Karen and Whitney Eastman; LSR, L. S. Ryan; MCJ, Mrs. Claire Judd; MED, Mardene Eide; MG, Mabel Goranson; MHM, M. H. Muehlhausen; MIG, Maury and Isabel Goldberg; MJW, Mary Jane Wolcott; MK, Maria Krogsgeng; MMM, Mrs. Milford Mattison; MOP, Mrs. Oliver Peterson; MRL, Mrs. Robert Leach; MS, Mike Siedel; MSB, Mrs. Steve Blanich; MVS, Mrs. Vernon Serenius; MWM, Miles W. Murphy; NH, Nestor Hiemenz; NJH, Nels J. Hervi; OAR, Orwin A. Rustad; PBH, P. B. Hofslund; RAG, Richard A. Grant; RAK, Ruth Ackley; RBJ, Robert B. Janssen; RDT, Rachel D. Tyron; REN, Ruth Erickson; RG, Ray Glassel; RHJ, Reverend and Mrs. R. H. Jackson; RK, Ruth Kuchta; RLH, Ronald L. Huber; RN, Ray Naddy; SM, Selena McCracken; SNE, Mrs. S. N. Erickson; TEM, Mrs. T. E. Murphy; TKS, T. K. Soulen; VFB, Vera F. Barrows; VL, Violet Lender; WH, Mr. and Mrs. Wayne Hawkinson; WHL, William H. Longley; WJH, W. J. Hansen; WRP, William R. Pieper; WWL, Mrs. W. W. Lundgren. **Ronald L. Huber, 480 State Office Bldg., St. Paul, Minnesota 55101.**

SUMMER BIRDS OF CLEARWATER COUNTY

Richard C. Davids

When I reported to my ornithology club associates here in Philadelphia that I had 88 species nesting on my place in northern Minnesota, there was a long silence. One of disbelief. I went on to explain that my county is part prairie, part forest, and includes tamarack swamps, lakes, and dry uplands. Still silence. Eventually, someone politely offered: "We'd like to hear more about it some day."

This is that explanation—unnecessary, perhaps, to those who know the diversity of habitat and the presence both of boreal species of the far north and more southern species.

My observations begin with 1962, when I began making written observations, and conclude with 1965. My farm is located on Lake Lamond across from Bagley in Clearwater County. To

call my place a farm is a gross overstatement for 120 acres mostly brush, but including 80 acres, formerly cropped, and now partly reforested with six-foot pine and spruce, the rest in unmowed clover, alfalfa and fescue. To call it a "country place" is an even greater exaggeration, although one edge includes a lake and a tamarack swamp. Mature Norway pines surround the house, and there is a small orchard. A nearby slope is covered with aspens. The diversity does, however, attract a fine number of species.

Here is a recap of the four years, with observations dated from June 1 to June 10 in 1962, mid-June for 1963 and 1964, and early July for 1965. I shall also list other species nesting or probably nesting in the county, along with location. Those with asterisks are

March, 1966

21

species observed during the breeding season and presumed resting on my own place.

*Common Loon—nesting 1964 and 1965.

Red-necked Grebe—abundant in Upper Rice Lake

Horned Grebe—observed on the lake in 1965, doesn't normally nest

*Pied-billed Grebe—always a nester

Great Blue Heron—formerly a common visitor, but uncommon with the advent of water skiing

Black-crowned Night Heron—observed in 1965 flying over the house. Previously never observed here.

*American Bittern—always a nester, but less frequent with power boats.

Canada Goose—a visitor, infrequent spring or fall.

*Mallard—they return despite power boats and marauding Common Crows.

*Blue-winged Teal—a regular nester.

Ruddy Duck—probably nesting, in 1964.

Gadwall, Pintail, American Widgeon, Shoveler, Wood Duck, Redhead, Ring-necked Duck, Canvasback, Lesser Scaup, Common Goldeneye—are common at both Upper and Lower Rice Lake, and appear sporadically at Lamond.

Turkey Vulture—nesting at LaSalle Lake, 1965, nest, 2 eggs.

Sharp-shinned Hawk.

Red-tailed Hawk—nesting regularly north of Gonvick.

Broad-winged Hawk.

Marsh Hawk.

Sparrow Hawk.

Pigeon Hawk.

Gyr Falcon—one bird seen at Christmas, 1963.

*Goshawk—a nest with two eggs was an exciting find in 1965. Nest was probably abandoned, but birds continued in the vicinity until late July.

*Ruffed Grouse—uncommon but fortunately still constant.

*Ring-necked Pheasant—winters are normally too much for them.

Sandhill Crane—probably nests in the prairies north of Gonvick.

Sharp-tailed Grouse—a few still boom on the Gonvick prairie.

*Virginia Rail—still a consistent nester.

Sora—observed only.

American Coot—a common nester, but not on Lake Lamond.

All these are regular in the prairie north of Gonvick and Gully except Wilson's Phalarope which is a regular spring migrant.

*Killdeer—uncommon but regular.

Common Snipe.

Upland Plover.

Spotted Sandpiper

Marbled Godwit

Wilson's Phalarope

The following gulls and terns are common visitors, but not known to nest, except for the Black Tern, which five years ago had a colony in our lake.

Ring-billed, Herring and Franklin's Gulls, Common and Black Tern.

*Mourning Dove—a constant nester in the spruce beside the house.

Rock Dove.

*Yellow-billed Cuckoo—1963 there was practically an invasion of both species of cuckoo in the county.

*Black-billed Cuckoo.

Great-horned Owl—common, comes up immediately to the electronic fox-caller.

*Barred Owl.

Whippoorwill—nests at LaSalle Lake.

*Common Nighthawk—increasing in numbers.

Chimney Swift—common.

*Ruby-throated Hummingbird—courtship displays and nest-guarding dive bombs nearly every year.

*Belted Kingfisher—always a pair.

*Yellow-shafted Flicker

*Pileated Woodpecker—Highlight of 1965 was the day the Pileated brought off their young and they lit on our log house and in the tree around which our patio is laid—barely out of arm's length. The parents dived at us as we breakfasted. The young seemed barely able to hold on to the bark.

*Red-headed Woodpecker—returned this year. Is common north of Gonvick.

*Yellow-bellied Sapsucker—brought off a brood that spent the day in the orchard squealing and begging for food.

*Downy and *Hairy Woodpecker—both frequent the feeder all summer.

Black-backed 3-toed Woodpecker—one observed at Upper Rice Lake.

*Eastern Kingbird—two days of almost unceasing snow in early June (1965) left dead on the highway. Picked up half a dozen in a mile. Number during the summer, surprisingly, seemed normal.

Western Kingbird—common in the northern edge of the county.

*Great Crested Flycatcher—seems to be increasing everywhere.

*Eastern Phoebe—in my memory, one has never failed to nest on the west side of the cabin.

Yellow-bellied Flycatcher, *Traill's Flycatcher, *Least Flycatcher, *Eastern Wood Pewee—generally present all summer.

*Olive-sided Flycatcher—a familiar friend on a stub near the lake.

*Horned Lark—never fails us in early spring.

*Tree Swallow—last year I had not returned to the house from putting up a box before a swallow was inside. This year, three pairs nested. Where have Tree Swallows been all these years? Have I missed the rare treat of having them in the yard just out of my own ignorance?

Bank Swallow—common

Barn Swallow—Bank and Barn Swallows died by the hundreds in the snow (1965).

Cliff Swallow—As many as a hundred were dead in my brother's yard.

*Purple Martin—nested the first year we put up a house.

*Blue Jay—increasingly abundant.

Black-billed Magpie—a winter visitor—coming furtively to the feeder.

Common Raven—an uncommon visitor, probably nesting in the northern swamps of the county.

*Common Crow

*Black-capped Chickadee.

Tufted Titmouse—heard but not seen for the first time, 1965.

March, 1966

*White-breasted and *Red-breasted Nuthatch,—both are common, and feed all summer at the feeder. Have been unable to get them to nest in boxes.

*Brown Creeper.

*House Wren.

*Long-billed Marsh Wren—present two years out of four.

*Short-billed Marsh Wren—sings all night.

*Catbird

*Brown Thrasher

*Robin

*Veery

*Hermit Thrush

Ruby-crowned Kinglet — probably nests at LaSalle Lake

Golden-crowned Kinglet—a common migrant.

*Cedar Waxwing—found a nest of six young ready to fly in a six-foot red pine in 1965.

Starling—not nesting yet on my place.

*Yellow-throated Vireo — presumed nesting.

*Red-eyed Vireo—common.

*Warbling Vireo—getting increasingly common.

These warblers presumably nest every year: *Black-and-White, *Golden-winged, *Tennessee, *Nashville (in both aspen and swamp habitats), *Parula, *Yellow, *Magnolia, *Myrtle, *Chestnut-sided, *Pine, *Ovenbird, *Mourning (abundant!), Yellowthroat, *Canada and *American Redstart. Migrant but probably not nesting here: Black-throated Green Warbler. Black-burian is abundant at LaSalle Lake.

*House Sparrow

Bobolink — abundant within two miles.

*Western Meadowlark

Yellow-headed Blackbird—common at Upper Rich Lake

*Red-winged Blackbird

*Baltimore Oriole

*Brewer's Blackbird—common.

..*Common Grackle

*Brown-headed Cowbird

*Scarlet Tanager — they suffered heavily in the 1965 June snow.

Cardinal—first seen in 1963, and

23

discontinued

said to be nesting two miles north. One killed itself against a picture window on an adjoining property.

*Rose-breasted Grosbeak—the same spot of aspens near the swamp always has a pair.

*Indigo Bunting — nest along the road beside my mailbox.

*Purple Finch—mating behavior for the last three years.

*American Goldfinch—common.

*Red Crossbill—probably nested one year.

*Rufous-sided Towhee—common.

Following sparrows are all common nesters here: *Vesper, *Chipping, *Field, *White-throated, *Swamp, *Song, and *Clay-colored (seems that there's no other bird in the young red pines!). Also common in northern part of the county are Savannah Sparrows.

Now then, counting the starred species as presumed nesters on my own place, I come up with 88.

Most exciting bird-watching place in the county—and one of the best I've

ever known in my life, is on the road beside Upper Rice Lake, which is just a few miles east of the Minerva store, south of Bagley. The road passes between two lakes and the flight of water birds is impressive. There's sure to be a show of some kind. Beats Itasca Park considerably, in my opinion.

Another excellent place during spring migration is on the road east of Pine Lake, west of Clearbrook. During early morning the trees along the road are alive during the spring migration.

For prairie birds like Upland Plover and Marbled Godwit, go north of Gonvick to the crossroads village of Berner, then west. Stop at the farm stock ponds along the way. Go north on the Gully road, too, and see the vast nesting populations of Cliff Swallows. Stop at the bridge that spans the Clearwater River and see the flights of swallows, of several species. Watch this area for Marbled Godwits, Sandhill Cranes and Wilson's Phalaropes.—*Richard C. Davids, Philadelphia, Pennsylvania.*

THE BREEDING POPULATION OF WATERFOWL ON THE CHIPPEWA NATIONAL FOREST

John Mathisen*

The purpose of this paper is to describe the characteristics of the breeding waterfowl population on the Chippewa National Forest in north central Minnesota.

Highest waterfowl breeding densities have occurred geographically in the prairie pothole regions of western Minnesota, the Dakotas and the Prairie Provinces of Canada. The wooded region has, in the past, been assigned a rather unimportant position from the standpoint of waterfowl production. Recently, however, the woodland habitat has been receiving a "second look." Drainage of prairie wetlands continues to remove production habitat from the waterfowl flyways. Periodic drouth, compounded by the effects of drainage in the prairie region, has had catastrophic effects on waterfowl populations.

Wetlands within the wooded region, however, have not been drained to the extent of agricultural areas, and water table and run-off do not fluctuate as in the prairie situation. J. H. Stoudt pointed out that, "During the drouth of the '30's there is no doubt but that a shift of prairie nesting waterfowl occurred into the lake region of Minnesota" (Williams, et al., 1951). Shifting of prairie nesting waterfowl to other regions during periods of drouth has also been reported by Hansen and McKnight (1964).

The Chippewa N.F. occupies an important position in the Mississippi Flyway. The Forest comprises a gross land area of almost 1½ million acres with about 642,000 acres under multiple use management by the Forest Service, U.S. Department of Agriculture. It lies immediately adjacent to the prairie pot-

* Paper presented at the 27th Midwest Fish and Wildlife Conference (1965), Lansing, Michigan.

hole region and is characterized by a great variety and abundance of lakes and wetlands. There are 1,217 lakes totaling 337,381 surface acres. In addition there are over 300,000 acres of wetlands, bringing the total aquatic habitat to 637,000 acres.

SOURCES OF DATA

Brood Surveys. J. H. Stoudt initiated a waterfowl brood survey in 1937, designed to determine trends in duck production on the Forest. The survey has been accomplished each year since 1937, with the exception of 1941-1946, in essentially the same manner. Thus we have a series of comparable data for a period of 28 years. The survey was reported by Stoudt (1938) and has been summarized periodically in Special Scientific Reports of the U. S. Fish and Wildlife Service. The brood survey has become a cooperative venture with participants from the Bureau of Sport Fisheries and Wildlife, Minnesota Conservation Department, and U. S. Forest Service. Briefly, the survey consists of traversing the shoreline of selected lakes by canoe and recording all broods and adults by age class, species and brood size. The same areas are censused each year at the same phenological period. Ten separate areas are censused, totaling 65 shoreline miles.

Breeding Pair Counts. An intensive effort was made in 1965 to evaluate breeding pair use on all types of aquatic habitat on the Forest Data recorded included wetland type, based on the classification system of the U. S. Fish and Wildlife Service (Shaw and Fredine, 1959), size, location and observed use by waterfowl. Data pertaining to breeding pairs are also available from studies of Johnson (1962) and unpublished surveys by the Minnesota Conservation Department on waterfowl management areas with the Chippewa N.F.

Wetland Inventory. A complete inventory and classification of wetlands on National Forest lands were accomplished in 1965 in cooperation with the Bureau of Sport Fisheries and Wildlife and the Minnesota Conservation Department. The technique and results were reported by Mathisen (1965). This inventory serves as a basis for projecting the breeding pair data. Wetland

acreages as given in this report are for all lands within the Forest boundary. It was necessary to estimate wetland acreages for non National Forest lands based on proportional land ownership. An inventory of these additional wetlands is planned.

Other Studies. Other studies, broadening the base of waterfowl population knowledge for this area, include the work of Wellein (1942), Goodwin (1958), Marshall (1959), and production studies on the Tamarac National Wildlife Refuge.

SPECIES COMPOSITION

General. The six major species encountered on the Chippewa are the Mallard, Blue-winged Teal, Common Goldeneye, American Widgeon, Ring-necked Duck and Wood Duck. These species comprise over 90 per cent of the breeding population.

Changes in Species Composition. Figure 1 shows the relative abundance of the six major species for the period 1937-1965, based on annual brood counts on selected lakeshore. It is evident that significant changes in species composition have occurred through the years.

The Mallard was consistently the most abundant, ranging from 32 per cent to 57 per cent of the total birds observed. The American Widgeon showed a steady increase from 1938 to 1950, bringing it from a species of minor importance to the second most abundant breeder on the Forest. It has shown a general downward trend since 1955.

The relative abundance of Common Goldeneyes remained fairly constant through the years, except for a peak in 1953 and 1958. The goldeneye is an important breeder on the Chippewa, averaging 16 per cent of the total observations for the 28 year period.

The Blue-winged Teal was extremely abundant during the early years of the survey (28 per cent in 1939). The relative abundance of this species dropped radically between 1939 and 1950, when it accounted for only 6 per cent of the total observations. This species has remained relatively constant since then.

Wood Ducks were scarce from 1937

to 1950 when the species was considered occasional, or rare, on the survey lakes. Wood Ducks, however, have accounted for a substantial number of observations in recent years (13 per cent in 1963 and 1964).

The Ring-necked Duck was most frequently observed during the period 1937-1948. The relative abundance of this species on the census lakes has remained low since then.

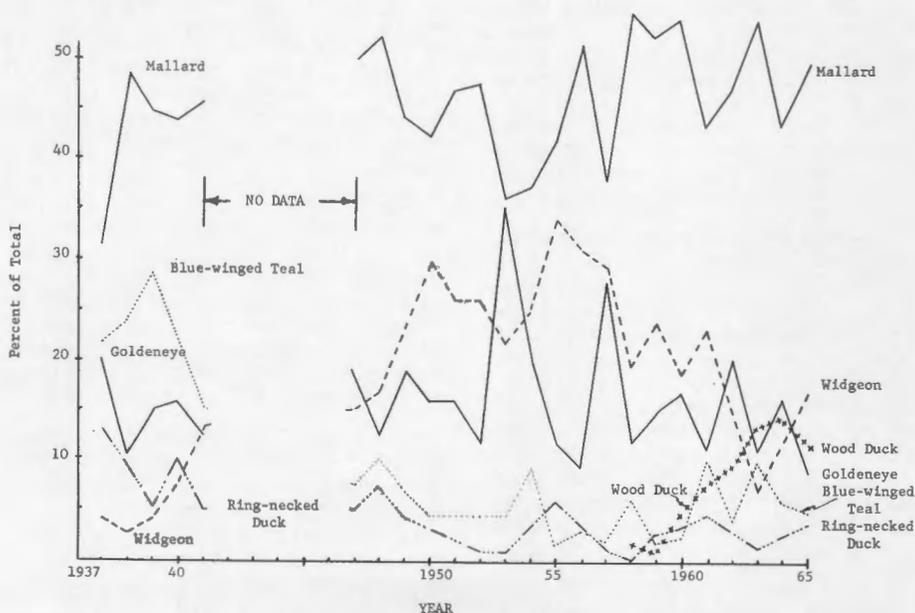
A number of factors influence the relative species composition on the study lakes. Changes in habitat resulting from water levels, natural succession and human activities have affected the species utilizing the census lakes. Habitat needs and the tolerance of various species to human disturbance varies. Range extension or contraction of

on species composition on a sample of all habitat types. The 1965 brood survey provides data on the past-hatch population on a sample of lakeshore. The results of the two surveys are compared graphically in Figure 2.

The major difference between the two sets of data is that the pair counts indicated a higher proportion of Blue-winged Teal and Ring-necked Ducks, and fewer Common Goldeneyes and Mallards.

This probably reflects the difference in habitat types surveyed. Teal seem to prefer river and streams, a type of habitat not censused in the brood survey. Over 50 per cent of the teal pair observations were on streams. Ring-necked Ducks are most often observed on smaller wetlands (Marshall, 1959), accounting for their scarcity in the

Figure 1. CHANGE IN WATERFOWL SPECIES COMPOSITION
CHIPPEWA NATIONAL FOREST
(Brood Surveys on Selected Lakes)



a species could also be reflected during this period of 28 years. Variation in the time of the hunting season may have influenced species mortality, thus affecting relative abundance the following year.

The 1965 Breeding Population. The 1965 breeding pair counts provide data

lake survey. Goldeneyes, on the other hand, prefer the larger, windswept lakes, and were not frequently recorded during the pair count survey.

The pair count data probably indicate more accurately the species composition on the Forest. However, there are certain qualifications that should

be emphasized when evaluating these data:

1. The breeding pair survey was not based on a statistical model, and all habitat types were not censused proportionately.
2. Error could accrue from the variation in phenology of breeding time for the different species in relation to the time of the survey. The majority of the pair counts were taken during May 17-22 and June 7-10, although some observations were recorded during the entire breeding period.
3. The species vary in their observability, both as breeding pairs and broods.
4. Species composition as determined by the brood survey would reflect differentials in nesting success and brood survival, so that the two surveys are not entirely comparable.

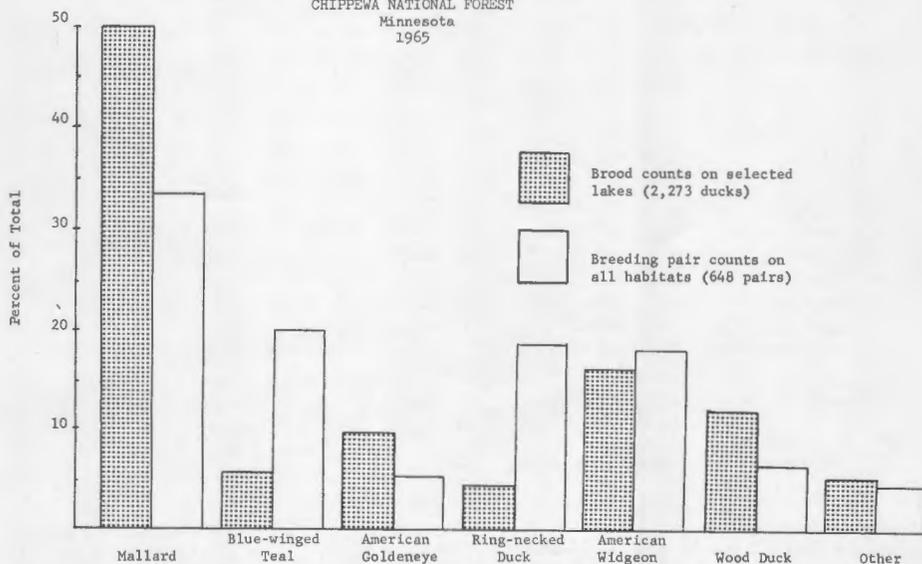
Breeding pair data were divided into three categories of production habitat: lake shoreline, streams, and wetlands containing surface water. Pairs observed on temporary wetlands and permanent wetlands less than 2 acres in size were not used for projecting the population data. The amount of this habitat available is unknown in the case of temporary wetlands, and will vary considerably from year to year.

A summary of the habitat types and their relation to breeding pair density is presented in Table 1.

Lake Shoreline. Breeding pair counts by the wetland inventory crew and those of Johnson (1962) were generally in agreement. Johnson working on 49 miles of lakeshore determined 6 pairs/mile as compared to 7 pairs/mile on a more extensive basis by the inventory crew.

Although lake shoreline accommodates over half of the breeding pair population, its relative unit value to a

Figure 2. WATERFOWL SPECIES COMPOSITION
CHIPPEWA NATIONAL FOREST
Minnesota
1965



BREEDING PAIR DENSITY (1965)

Breeding pair counts were made during the 1965 wetland inventory. These data provide a means of estimating the magnitude of the breeding population on various habitat types.

breeding pair of ducks is obscure. If we assume that the productive segment of a lake is confined to a strip one-eighth mile off shore, this relative value can be compared to other wetlands in terms of acres. Each mile of shoreline

TABLE 1. Estimated Breeding Population Based on Observed Use and Available Habitat (1965)

Type of Habitat	Observed Use	Sample	Habitat Available	Projected Total Population	Estimated Duckling* Production
Lake Shoreline	7 prs./mile	21 miles (11 lakes)	1,775 mi.	12,400	37,200
Streams	6 prs./mile	20 miles (10 streams)	596 mi.	3,600	10,800
Type 3, 4, 5 Wetlands	47 prs./100 A. (50% occupied)	180 acres (34 areas)	20,692 acres	4,900	14,700
TOTAL				20,900	62,700

* Based on 50 per cent nesting success and average brood size of 6.

provides 80 acres of production habitat on this basis. Observed use on this type of habitat was, therefore, 9 pair/100 acres in 1965. It would appear that lake shoreline is not preferred by breeding pairs, but is important in the aggregate (142,000 acres).

Streams. The inventory crew determined a density of 9 pairs/mile on streams while Johnson's data indicated only 3 pairs/mile. Equal weight was given to these two sources in arriving at the 6 pairs/mile as indicated.

Wetlands. The intensity of use on wetlands is more difficult to evaluate. The indicated use of 47 pairs/100 acres is based on occupied habitat only. In 1965 about 50 per cent of the wetlands with surface water were occupied by breeding pairs. This rate of occupancy is probably lower than average due to the great amount of temporary surface water present in 1965. The projected population figure takes into account the occupancy factor. Breeding pair densities on occupied wetlands from other areas are compared in Table 2.

TABLE 2 Comparison of Breeding Pair Density From Various Sources and Areas

Area	Pairs/100 Acre	(Occupied)
Chippewa N.F.	47	This Study
S. Wisconsin	31	John (1964)
N. Wisconsin	10	John (1964)
S. Dakota	70	Evens & Black (1956)
N.W. Minnesota	160	Farnes (1956)
New York	10	Benson & Perry (1965)

These data indicate that breeding pair density on occupied wetlands on the Chippewa is midway between densities in Wisconsin and those recorded in the prairie pothole region. This is a reasonable conclusion since the Chippewa occupies a transition zone between the prairie and the wooded habitat.

The range of pair use on wetlands by size classes is indicated in Table 3.

TABLE 3. Breeding Pair Use of Wetlands by Size Classes

Size Class (Acres)	Sample Size (Acres)	Pairs Observed	Prs./100 (Acres)
1 - 3	26	21	85
4 - 7	80	40	51
8 - 11	74	24	32

This would indicate that larger wetlands support fewer breeding pairs per acre than smaller ones. Since the amount of edge available to breeding pairs does not increase in proportion to size, this is a reasonable conclusion.

Qualifications. The data as presented must be qualified for objective evaluation. The same qualifications will apply as indicated previously for the species composition data. In addition the following will apply:

1. No evaluation was made of pair use on small and temporary wetlands. Temporary surface water was an important component of habitat in 1965, especially for Mallards. More intensive use would have been evident on permanent wetlands had there been fewer temporary water areas.

2. In 1965 the Mississippi Flyway population was considered low, especially the Mallard segment of the population.
3. Water conditions in the prairie region were good in 1965, possibly resulting in relatively fewer ducks utilizing the woodland areas as compared to a dry year on the prairie.
4. The lakeshore data are biased to the degree that lakes vary in their production habitat capacity, and projection of the data did not take this into account.
5. The population estimate is based on data for a single year, so statistics cannot be expressed in terms of a range between years. Populations will fluctuate from year to year, and the data presented for 1965 cannot be evaluated in relative terms. It does, however, provide a base for further studies and serves to emphasize the importance of a woodland area in the Mississippi Flyway.
5. Observed use on various habitat types was 7 pairs/mile of lake shoreline, 6 pairs/mile of stream and 47 pairs/100 acres of other occupied wetland.
6. It is evident that the Chippewa National Forest makes a substantial contribution to the Mississippi Flyway population. The future of waterfowl may well depend on the so called peripheral breeding zones such as the wooded region, where production is perhaps not spectacular, but it is relatively constant. Certainly, woodland areas deserve future study and evaluation.

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1. This paper brings together the characteristics of the breeding waterfowl population on the Chippewa National Forest.
 2. Data pertaining to the waterfowl population were combined from various sources including a cooperative brood survey (1937 - 1965), breeding pair counts by various agencies, and research data from the Minnesota Conservation Department.
 3. Species composition has changed considerably since 1937. The American Widgeon, Blue-winged Teal and Wood Duck are the species showing pronounced changes. The Mallard, Blue-winged Teal, Common Goldeneye, Ring-necked Duck, American Widgeon and Wood Duck comprise over 90 per cent of the breeding population at the present time.
 4. Breeding pair counts in 1965 projected to known wetland acreages indicate a breeding population of 20,900 pairs.

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THE CANADIAN LAKEHEAD

A. E. Allin

Although the mean temperature of 27.0° was 0.5° above normal, November was a cloudy month and the snowfall, 31.7", was the heaviest since 1950. On November 26, we received a paralyzing 13.6" of snow, the heaviest ever in November. As a consequence, fields and their weeds were covered with snow and resulted in an exodus of the usual seed-eating birds, particularly Common Redpolls and Snow Buntings.

December was very mild with a mean of 19.9°, some 6.5° above normal. It was the dullest month since recording began in 1958 with only 12.5 hours of sunshine during the first 15 days. We received 22.9" of snow. January, 1966, was very cold. The temperature fell to -31.0° on January 25. The snowfall of 26" brought the total for the winter to 81.2", double that of a year ago and far above the average snowfall of 51.8" for this period.

The temperature in early February was nearly normal. On February 9, it actually rained and the temperature reached record highs of 44° and 41° on February 9 and 10. On February 18, it dropped to -31° and the maximum of -10° during the day set a new record.

At Graham the temperature dropped to -62°! The early snowfall and the mild weather in early winter resulted in thinner ice than usual but there was little overall effect on the amount of open water available for wintering ducks

A combination of the heavy November snowfall, a poor crop of seeds on the conifers, and relatively few berries on the Mountain Ash trees has resulted in a reduced total numbers of wintering birds. This was particularly noticeable at the feeders. However, this is more than compensated for by the variety of the birds found present. Who would have expected to see Rufous-sided Towhees, Mockingbirds, a Brown Thrasher, or a Pied-billed Grebe at the Lakehead during the winter months?

Predators were present in small numbers, including Goshawks, Pigeon Hawks, Snowy Owls and Northern Shrikes. The numerous reports of their taking small birds was probably a reflection of the deep snow protecting rodents and the relative scarcity of wintering birds. There seem to be few Varying Hares.

The Christmas Census was taken on December 28 with 19 observers participating. It was cold and clear. The temperature was about zero but there was a strong north wind. December days are short at the Lakehead; we did not see our first bird, a Common Raven, until 9:00 a.m. It was becoming dark shortly after 4:00 p.m. A total of 28 species were reported. These included 1 Black Duck; 2 Pigeon Hawks; 2 Glaucous, 1 Iceland, 34 Herring and 2 Ring-billed Gulls; 371 Rock Doves; 3 Snowy Owls; 3 Pileated, 15 Hairy, and 9 Downy Woodpeckers; 10 Gray and 70 Blue Jays; 349 Common Ravens; 36 Common Crows; 140 Black-capped Chickadees; 1 Robin; 1 Mockingbird; 4 Cedar Waxwings; 415 Starlings; 1 Northern Shrike; 1568 House Sparrows; 1 Common Grackle; 13 Evening and 11 Pine Grosbeaks; 1 Rufous-sided Towhee; 11 Common Redpolls, 2 Slate-colored Juncos; 80 Snow Buntings. A White-throated Sparrow was seen in Port Arthur on December 26.

The Rufous-sided Towhee, and the Mockingbird were additions to birds seen on our 26 censuses. The White-throated Sparrow had not previously been reported during the census period. Black Ducks, Common Grackles and Pigeon Hawks were species which had been seen on four previous censuses, and Iceland Gulls on only two.

Herring Gulls were relatively scarce. The decline in numbers of Pine Grosbeaks and Evening Grosbeaks was spectacular. We rarely see so few Common Redpolls. 349 was a record number of Common Ravens and the 36 Common Crows seen was exceeded only by the 101 counted in 1964. The one small bird particularly common was the Black-capped Chickadee. The 140 seen was exceeded only by the 174 counted in 1963 but was far above the 61 recorded in 1964. For the second consecutive year no Boreal Chickadees were seen.

Lakehead naturalists mourn the death on December 16, 1965, of Robert Robb. A Past-President of our local Club and father of Sinclair Robb, the long-time member of the Thunder Bay Field Naturalists and the Federation of Ontario Naturalists, he was also a member of

the M.O.U. and of the Minneapolis Bird Club. An ardent lover of nature, the late Mr Robb had found hundreds of hours enjoyment in studying local birds since his retirement in 1949. Many of our readers were personal friends of the late Mr. Robb. Others will recall meeting this kindly man at our joint winter meetings in Grand Marais and the September Hawk Counts in Duluth.

Loons and Grebes: The winter months are not the time one expects to see loons or grebes, though we know the occasional Red-necked Grebe attempts to winter on Lake Superior. I feel a report of two "loons" on Pine Bay in late December should be considered with scepticism. However, Mrs. Atkinson reports a Pied-billed Grebe wintering on the spring-fed ponds of Dorion Fish Hatchery, with four species of ducks.

Ducks: Few ducks have been seen. Mrs. Atkinson reports a Black Duck, a few Mallards and Common Goldeneyes and Common Mergansers at Dorion. We saw a Black Duck on the Kaministiquia River on December 27 and a pair of Common Goldeneyes on the Mattawin River on January 30. Fifteen were seen on February 15 near Kenora. There is no doubt these diving ducks will attempt to winter wherever there is open water.

Hawks and Falcons: We saw a Goshawk in Fort William on December 19. One was killed in January as it pursued a Rock Dove through an open window into an elevator and struck the wall of the room. Whether they are the pair of Pigeon Hawks which have nested in Fort William for many years, or whether they are different birds, it is obvious that Pigeon Hawks now winter regularly in the Lakehead Cities, feeding on the adequate supply of House Sparrows and Starlings, supplemented by Black-capped Chickadees and grosbeaks. Previously their has been doubt whether more than one Pigeon Hawk remained. This year there are at least two and possibly more. On December 17, I watched one flying low over a city street, obviously laboring under the burden of the Starling which it was carrying. They have

been reported about several feeders. Mrs. Beckett reported one at her feeder, eating a Black-capped Chickadee on January 12 and a Pine Grosbeak on January 4, 1966.

Grouse and Partridge: There was evidence last fall that Ruffed Grouse were more abundant than they had been for several years. The heavy snow should have protected them against predators despite periods of very low temperatures. However, peculiar weather conditions produced a heavy crust on the snow early in the winter which may have made wintering conditions difficult. Very few Ruffed Grouse have been seen during the winter months. There were at least two large covies of Gray Partridge in the local area but deep snows may make their survival difficult as it covers up available seed supplies even along the railroad tracks and about the elevators.

Gulls: Large numbers of Herring Gulls were still present until December 19 but the majority then left. Only 34 were seen on the census in contrast to 215 in 1964 and a record 862 in 1958. However, none was seen on the 1946 and 1960 censuses. There is no suggestion that predators are disturbing them and observers elsewhere should not attribute local scarcities to the known presence of predators without more evidence than is now available. These gulls will winter wherever open waters and food are available. A few were reported at Marathon, at the top of Lake Superior on February 15. Glaucous Gulls were seen on census day for the fifth time. The Iceland Gull seen in Port Arthur scavenging outside a supermarket, was the first one seen on a census since single birds were seen in 1939 and 1940.

Owls: Either the Great Gray Owls moved into northeastern Minnesota from the northwest or we overlooked them as they passed through our area. Our only record is one killed northeast of the Lakehead in mid-December. N. Denis saw a Saw-whet Owl at Pine Portage on December 16. Mrs. Gibson reported a Boreal Owl in Neebing Township on January 24. Another was seen west of Fort William on February 19. It was being mobbed by Black-

capped Chickadees and Pine Grosbeaks.

The first Snowy Owl was reported on November 12. At least two have been present in Fort William and Neebing Township throughout the winter, one a dark bird, and the other almost white. Three were seen on December 27. On January 24, one swooped down in the headlight of a car and picked up a cat crossing a main thoroughfare. There have been several reports of Common Ravens mobbing Snowy Owls; the latter did not seem disturbed.

Woodpeckers: Downy, Hairy and Pileated Woodpeckers are present in their usual numbers. Norman Denis reported a Northern Three-toed Woodpecker on December 16. A Black-backed Three-toed Woodpecker was seen in Rosslyn on February 5 by Mrs. Vibert. Several were reported at feeders south of Fort William during December. Mrs. Peruniak saw them frequently at Atikokan.

Jays to Crows: A record 70 Blue Jays were seen on the census. The 10 Gray Jays seen were exceeded only by the 20 reported in 1955. They are very common about feeders. Instead of the usual pair; at least 5 were present on one occasion at Held's feeders north of Pigeon River. Common Crows are again wintering here in numbers, probably held by the garbage dumps. Common Ravens are present in unprecedented numbers, scavenging about the street and at the garbage dumps. Several can be seen at any elevator, soaring with the up-drafts as they do along their native cliffs. February 20 was a bitterly cold day. We saw only Common Ravens and 2 Black-capped Chickadees on a two-hour, sixty-mile drive. Yet we saw 24 Common Ravens, singly, in pairs, or in definite groups of 3, 4, and 7 birds. Some 25 years ago, when we spent many Sundays in the field, we were happy if we saw a single Common Raven. Only one was seen on the Christmas censuses, 1939-1943. Three were counted in 1945, and 15 in 1946. Subsequently their numbers have steadily increased. 20 were counted in Kenora on February 13.

In mid-December, Chief Musquash captured a Black-billed Magpie, 115

miles northeast of Port Arthur, at Pays Plat River near its outlet into Lake Superior. The bird had lost one foot in some previous accident, probably a trap. There are a few previous records for magpies in Thunder Bay District but few so far northeast. They become more common in winter in Rainy River and Kenora District. This species has yet to be found breeding in Ontario.

Chickadees, Nuthatches and Creepers: Although a heavy movement of Black-capped Chickadees was reported in eastern Ontario, there was no evidence of one locally. However, they have been relatively common this winter at all feeders. A near record 140 were seen on the census and 50 were counted by another couple on the same day. They are present at every feeder and some have fallen prey to Pigeon Hawks and Northern Shrikes. Three Boreal Chickadees were reported during the winter in separate areas. None was seen on the census, nor have any Red-breasted Nuthatches been seen. A single White-breasted Nuthatch is wintering at Mrs. Cryer's. The Brown Creeper is also conspicuous by its absence.

Thrushes and Mimidae: A Brown Thrasher at a school feeder in Paimpooze Township on December 19 was a new winter record. The school closed for Christmas holidays, the feeder was not replenished and the bird was not seen subsequently. One of the three Mockingbirds reported in the fall survived at Roger's feeder until the end of January but disappeared when temperatures fell to -30° . Another was reported in Port Arthur on December 26. One was seen in Kenora in December and survived at least to December 29. In contrast to last winter only a single Robin has been reported. Mrs. Peruniak reported a Varied Thrush associating with Robins, in Atikokan, last fall—a rare record.

Waxwings to Starlings: Waxwings have been scarce. Four Cedar Waxwings were seen on December 27. A flock of Bohemian Waxwings was reported on January 31 and other reports of "waxwings" came to us during that period. We suspect there may have been a minor movement through March, 1966

the area. There is a complete absence of Mountain Ash berries, but one wonders why they were not held by a fairly heavy crop of Crabapples.

Northern Shrikes are possibly more common than usual. There have been several complaints of shrikes capturing small birds about feeders. One man complained that a shrike frequented his feeder and completely terrorized the small birds it attracted.

The Starling population remains high. They are not common at feeding stations, they do not seem to feed on the Crabapples and one wonders what is their chief source of food. Margaret Hogarth reported one flock feeding on seeds of Climbing Bittersweet, for the first time.

Fringillidae: The members of this family have been scarce or absent during the present winter. No crossbills of either species have been reported. Neither have Purple Finches or Pine Siskins. Common Redpolls have decreased steadily since last October. Very few have been seen since Christmas. A year ago Evening Grosbeaks were very common. There is one flock of about 50 frequenting a Port Arthur feeding station. We have seen single birds on two occasions. Only 13 were counted on December 27. A year ago 670 were recorded on the census. A failure of keys on the Manitoba Maples may explain their absence. Pine Grosbeaks are almost as scarce. After their arrival in October they declined in numbers and our census count of 11 contrasted with 697 seen in 1964. A few small groups remained. Generally they are seen feeding on frozen crabapples but sometimes on the samaras of Black Ash.

The Rufous-sided Towhee is a rare visitor to Thunder Bay District. There are two summer records. One fed regularly at a feeder in Geraldton but was found dead after the severe night of February 19, 1963. It was identified at the Royal Ontario Museum as belonging to the eastern race. One was reported at a feeder south of Fort William in early December 1965. Its feathers were found late in that month. Another towhee appeared at a Port Arthur feeding station in late Novem-

ber and is still present at the end of February.

A Slate-colored Junco is wintering locally. It has a nondescript plumage including a poorly defined white patch in one wing. A White-throated Sparrow attempting to winter in Port Arthur succumbed on January 5. At least one flock of Snow Buntings is wintering

near Rosslyn despite a scarcity of weed seeds. Evidently they feed along railroad tracks where shunting cars spill grain and weed seeds sufficient for their needs. One is puzzled to identify these birds when they are occasionally seen perched in the poplars along the tracks.—*Public Health Laboratory, Fort William, Ontario.*

NOTES OF INTEREST

VARIED THRUSH SEEN IN MORRIS—On Sunday, December 5, 1965, a Varied Thrush was seen in their front yard and at their feeding station by Lloyd and Lois Smith, of Morris and also by the two students who live at the Smith home while attending school. It was a new and strange bird to all who saw it, so rough sketches were made and notes of observation were written down. The bird was not to be found in Peterson's eastern field guide. The Smith's other main reference book, "Birds of America," edited by T. Gilbert Pearson, showed only a black and white view of the Varied Thrush, including the very prominent black breast band, which they hadn't noticed on the bird under observation. They wanted a positive identification. The bird came back at fairly regular intervals to feed in the same spot, every day since Sunday, so Tuesday evening, December 7, 1965, Lois Smith called me on the phone, told me about the bird, read her notes over the phone, and asked if I could identify it. After a couple of wild guesses which Lois promptly discarded, with good reasons, I decided that from her notes it just had to be a Varied Thrush, and going out on a limb, said so. I couldn't explain the lack of the dark breast band, however, so the identity of the bird was still in some doubt.

That same evening, after calling me, they took the problem over to the home of Sheridan S. Flaherty, who is probably the "dean" of Stevens County birders at the present time. There they found a colored picture of the Varied Thrush, by Allan Brooks, in the National Geographic "Book of Birds," which almost convinced them that they had found their bird. Sheridan thought so, too, but never having met the bird before, he couldn't account for the lack of a breast band either, unless it just might be a characteristic of the juvenile plumage.

Wednesday forenoon I drove into Morris to see the bird myself, first stopping to get Dick Grant. This was one bird we intended to verify and get into the records.

Altogether, Dick and I spent about 5 or 6 hours around and in the Smith's home, but no bird appeared. But at about 9:40 A.M. on Thursday Mrs. Smith called me again and reported that "Dick Grant and the bird are both here." It took only a few minutes to cover the 10 miles to Morris. Dick had observed the bird at close range for 15 minutes or more, and positively identified it as a Varied Thrush. His written notes quite closely paralleled those taken by Lois Smith and Mike, one of the students, and included notes on such field marks as the orange-russet breast, quite bright in hue, an eyestripe and two wing bars colored about the same, prominent tips of the folded secondaries also orange-russet, the slaty black head and back, showing faint bluish highlights from certain angles, size, actions, bill shape, all very suggestive to the Robin, white showing at the tips of the outside tail feathers. The breast band was almost entirely lacking, except for the partial beginnings of one on each side, hardly noticeable, and leaving a wide expanse of orange-russet where the books show a complete band. Sheridan Flaherty may have been right in his suggestion that this was possibly a young bird. Which might also account for the prominent spots of orange-rufous on the secondary tips much larger, seemingly, than the edging shown in most of the book illustrations.

After Dick left, I spent almost another hour at the window, and was privileged to make all the observations the others had made. The bird was often within 4 or 5 feet of the window, and seemed to be picking up bits of shredded suet, and probably some of the raisins Mrs. Smith had put out for it. In all I observed it for about another 15 to 20 minutes. The legs were pale brownish, possibly with a pinkish tinge. The bill was dark, and from my angle of observation I was unable to detect any trace of the lighter color usually pictured at the base of the lower mandible. Possibly another indication that this was a young bird. There was no sunlight to view the bird in, and in the available light the eye appeared dark, with no eye-ring. The under tail coverts were buffy white, with indistinct, or blurred, streaking or spotting. The flanks and sides showed some grayish edging on the feathers. Most of the time the bird was observed from above while feeding on the ground, but did spend some time for all observers, up in an open, low pine, turning in all directions, presenting excellent viewing opportunities, and at a distance of less than 10 feet.

The dark foggy weather of the week has made conditions for photography extremely poor, but if the bird stays around until conditions improve an attempt will most likely be made. (See front cover)

The Smiths and the students all deserve commendation for the accurate and complete notes they kept. Dick Grant, S. S. Flaherty, and I were all quite certain that when this bird was finally run down, we would be looking at our first Varied Thrush. And that's just exactly the way it turned out.

There have been other reports that may turn out to be Varied Thrushes. One was reported to Sheridan Flaherty by a woman who lives about a mile across town from the Smith's, a bird with a checker-board" back. The reddish secondary tips, when the bird is on the ground and viewed from above, could very well give the illusion of a 'checkerboard'. There could very well be other reports this winter, of Varied Thrushes seen in Minnesota.—*Ernest H. Strubbe, Alberta, Minnesota.*

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VARIED THRUSH SEEN NEAR CUSHING—About 4:00 P.M. on Tuesday, November 22, 1965 my husband became excited when he spotted this different bird in our front yard. He called to me to come and see it. It was the size and its actions were those of a Robin, but different coloring, very pronounced orange stripes at the side of its head, a black collar, rust breast and the lower part white. It also had orange bars on its wings. I immediately looked for it in Peterson's "Field Guide to Birds" and having no luck searched through Audubon's book, no luck again. Then I thumbed through "The Birds of America" by John James Audubon and found it there. The bird fed here all that day and most of Wednesday and Thursday. It appeared again on Friday when we were having a snow storm and that is the last time we saw it, much to our regret. It fed on the ground where we had some cracked corn and sunflower seeds.—*Mrs. Elmer Isaksen, Lake Alexander, Cushing, Minnesota.*

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TOWNSEND'S SOLITAIRE IN LAKE COUNTY.—On December 19, 1965 Ray Glassel, Liz Campbell, my wife Heather and I were birding along the North Shore. Our stop at the Knife River boat-slip almost proved fruitless, since no Glaucous Gulls were to be found. As we were leaving, the stop was redeemed by the "arrival" of a Great Gray Owl. After several minutes of excellent close-up study on the obliging, yellow-eyed owl, we went at once to a nearby phone-booth and summoned Janet Green of Duluth. She left promptly to come up and get a new bird on her life-list and we returned to locate the owl and keep it in view until she arrived. To our surprise, the owl was gone—but a nearby meadow looked most promising. We drove westward around a large stand of spruce to the west end of the meadow. There was the owl and, in the thick willow-alder brush in front of us, some smaller birds were nervously (due to the owl's presence?) flitting about. A Downy Woodpecker and a Blue Jay were immediately identified but the other bird stayed fairly well hidden in the brush. As it flew cautiously to another perch, we noted the junco-like white outer tail

feathers. Then we got a look at it, still partially hidden, at the edge of the brush about 100 feet from our car. The bird was about the size and shape of a Catbird, light gray all over, with prominent white outer tail feathers and a small thin black beak. No wing markings could be clearly seen because of the heavy brush. Nor was an eye-ring noted, but this is often a hard field-mark to note except under good conditions. The sky was overcast but very bright (strong enough to allow photographing of the Great Gray Owl a short time later by John Green) but this brightness was of little help to us because the bird was mostly in the shadows. We did get good, close enough looks to note the above characters. Our looks were quite brief, however, because the bird was very wary. Lack of any black on the face or wings, especially when it flew, ruled out the Northern Shrike. The white outer tail feathers and thin black beak ruled out the Mockingbird, Catbird and junco. As the bird flew off, we followed it into a nearby spruce stand where it was temporarily lost. Then it reappeared and flew to the large spruce stand we had passed on the way in. It perched briefly on the side of one of the tallest spruces and then disappeared. That was our only clear view of the bird, but it was a good 100 yards away and some 60-70 feet up. At this distance we could only note the all-gray color and complete lack whatsoever of any black markings. The beak silhouetted against the sky was hard to discern but it was not the heavy, hooked beak of a shrike. Although we observed this bird under considerably less than ideal conditions, we felt certain that it was a Townsend's Solitaire and its wariness made the name seem quite appropriate. Previously, the northernmost Minnesota record was Duluth in December of 1931. Our observation also compares interestingly with a Townsend's Solitaire seen and photographed about a month earlier this year at Northfield, Minnesota by Dr. George N. Rysgaard.—*Ronald L. Huber, Railroad and Warehouse, 480 State Office Bldg., St. Paul, Minnesota 55101.*

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ROSS' GEESE AT HOWARD LAKE, WRIGHT COUNTY—On December 22, 1965, on my way back from a work assignment at Dassel, Minnesota I decided to stop by the Howard Lake Sportsmen's Park to see the ducks and geese that winter there.

The Howard Lake Sportsmens Park is located on the northwest side of Howard Lake, where there is a small part of the lake kept open each winter by the hot water disposal from the Howard Lake creamery. Here the ducks and geese enjoy open water and free handouts of food, from visitors, each winter.

While watching these birds in the water, the writer noticed three geese, which he presumed to be Snow Geese, come and land in the open water. As the writer watched these three geese, he noticed that two of them were much smaller in size than the other one, yet all looked alike.

As these geese were watched, it was noticed that two of them lacked a "grinning patch" on the mandibles of the beak; whereas the larger goose had this patch. The writer also observed that the smaller geese had a greyish-red patch right next to the base of the beak, where the beak is attached to the head. The rest of the beak and feet were the same color as the larger Snow Goose. Black wing tips were also the same on both small geese as well as the large goose.

On this date I also noticed two more small geese with the same exterior characteristics as the two small geese mentioned above. The latter two birds were by themselves.

I observed these geese on the 26, 27, and 28th of December. Only on December 26 did I observe the four small geese together; after that, only the two with the larger Snow Goose were seen on future trips to the lake; apparently two of the geese had migrated or had run into foul play.

Upon questioning the parks grounds keeper about these small geese, he stated that they had come into the park in the early fall, before the early teal season, the exact date he couldn't remember.

I took pictures of these two small geese on December 29. I could get within 30 feet of them when they were in the water but couldn't get within 50 yards of them when they were on land.

When swimming, these small birds are no bigger than Mallards. I am sure that these small geese at Howard Lake are the Ross' Geese.—*Eugene R. Sullivan, Minnesota Department of Conservation, St. Paul, Minnesota.*

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YOUNG WESTERN GREBES ON FROG LAKE IN NOVEMBER—Scanning Frog Lake on November 6, 1965, Ernest Strubbe and I discovered a small group of birds among hundreds of other ducks, that at first glance resembled (in size) Buffleheads. Upon closer and more careful inspection we saw one bird stretch its neck in typical grebe fashion. Further study showed that there were four birds and they were in downy plumage and not over one-half to two-thirds grown Western Grebes. We studied the birds in company with two adult Western Grebes as they swam in close formation and time and again the young would reveal downy, grayish bodies with a dark stripe up the back of the neck and blackish top of the head. The possibility of these birds being another variety of grebe in full plumage was considered but the factors of downy appearance and small size compared with actual close-up photos of other young grebes were far too convincing in favor of young Western Grebes. Couple this observation with the fact that both Mr. Strubbe and I have seen Western Grebes perform their mating "penguin dance," in late July and one might embrace a theory that these birds could likely mate in late summer after unsuccessful nesting attempts. These very late nestings would account for half grown young in November.—*Ken Haag, 679 E. Jessamine Avenue, St. Paul, Minnesota.*

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EARLY SNOW GOOSE RECORD FOR LAKE SUPERIOR—On March 11, 1965 I observed a flock of Snow Geese flying over Cross River, Cook County. The five birds were pure white except for black wing-tips, and reddish bills. They were circling and calling as if looking for water to land. I was not bird-watching at the time the birds were sighted but my attention was drawn to them by their calling as they passed over. When I returned to my home at Taconite Harbor, I again heard them calling, but they were too high to observe.—*Mrs. Barbara A. Savonen, Taconite Harbor, Minnesota.*

Editors Note: The above record is most unusual and represents the third earliest spring record for Minnesota and this from the northern-part of the state.

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WHIMBRELS SEEN NEAR ROCHESTER—We were banding birds at the Isaac Walton League's wetlands near Rochester and on May 20, 1965 when I went out in the morning to check nets we had set for shore birds these two large dark birds (sunlight behind) were sitting in with our shore bird decoys. The first thought that struck me was that they were ducks but at second glance I knew they were something I had never seen before. As I approached to within 30 or 40 feet of the birds I could see the large **decurved** bill. No other field marks were apparent and needless to say I was a little excited knowing I had seen a new bird. The birds then took off, made a circle, and flew off directly over me and again the only impression I got was that it was a large shore bird with no obvious field marks being apparent to me. As they went over me both birds were calling, to me the sound ranged between a drake Mallard and a Great Blue Heron. Perhaps some people who are more familiar with these birds than I am could make a more positive identification by the call. Carl Frank, of Rochester, whose hobby of many years has been recording bird songs and is very familiar with birds saw these same two birds the same morning at the same place I did with neither knowing the other had seen them. We both called Carl Johnson during the morning, we both gave him the same description and both told him we figured they were Whimbrels.—*John P. Feehan, 604 - 20th Ave. S. W., Rochester, Minnesota*

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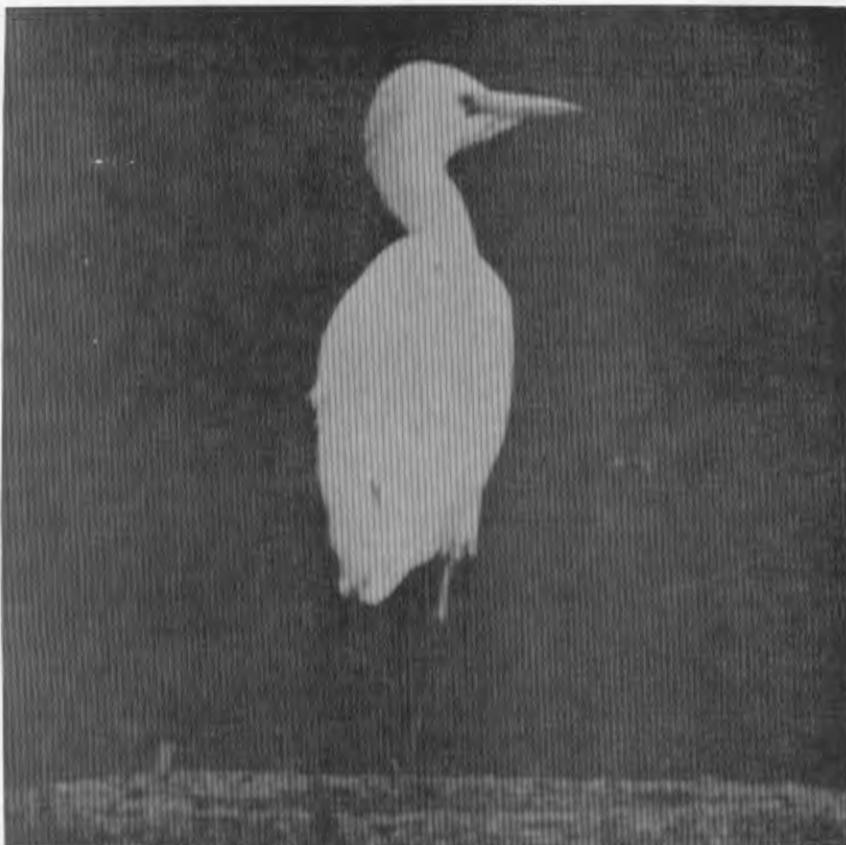
BURROWING OWL IN OLMSTED COUNTY—The Burrowing Owl was seen the last week in April or the first week in May just northwest of Eyota, Minnesota—Olmsted County by Carl Frank, who was looking for Horned Lark

nests and trying to get recordings of the adults in and around the nest area. He was driving around in the evening when he saw this bird sitting close to the road on a mound of dirt near the burrow. He knew as soon as he started watching the bird it was the Burrowing Owl and then observed it about half an hour in and around the hole. A day or two later, he went back to the same location but couldn't find the owl around the burrow. The following Sunday morning Carl Frank, Dr. Mountjoy, Carl and Ted Johnson of Rochester all went to Eyota, but again failed to see the owl. They did, however, all go over to the burrow and all observed pellets and droppings around the entrance to the burrow indicating it had been occupied for some time.—*John P. Feehan, 604 - 20th Avenue S. W., Rochester, Minnesota.*

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CATTLE EGRETS AT WINONA—A pair of Cattle Egrets, birds whose sightings in Minnesota four times previously have been of but one individual, were a prize find of the Hiawatha Valley Bird Club of Winona on its first big May day count, Sunday, May 16, 1965.

Flood conditions still persisted in the low-lying choice birding areas of the city; Prairie Island was a shambles and inaccessible. It was cold, sunless; yet a total of 112 species were tabulated during the day with Brother Theodore, our expert consultant in the field.



The egrets were found about 11 a.m. near the Langowski farms, on the old Homer road, just east of the city, by Brother Theodore and my husband and I. The Common Egret had been seen in the pools off highway 61 and at first

we thought these birds, somewhat hidden in the lush meadow grass, to be the same (or even domestic ducks!) till one bird stretched its neck, revealed its heavy yellow bill and the buffy pink plumage on its head. Interestingly enough, the partially flooded area where the birds were seen was an old cow pasture. The egrets were observed at various times again on May 17. On the 18th they moved on. This sightseeing was a first on the bird lists of most club members, as well as that of Brother Theodore.—*Grace Dahm, 357 E. 5th, Winona, Minnesota.*

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BLUEBIRD TRAIL, WINONA—Hiawatha Valley Bird Club is proud of member Gordon Baab, retired carpenter who is “nudging” seventy, and here is why: he maintains a bluebird trail of 38 boxes, makes regular rounds, keeps records, cleans boxes, in general, is on such intimate terms with his little inmates that he can lift a box front without startling the nester and stroke her soft back!

This year (1965) by April first all of his well-weathered wood boxes were in place on farms in Mt. Vernon township on Oak Ridge, four miles west of Rollingstone, on rolling land, indeed, and mostly on high ground. Each box was numbered and the name of the farmer on whose land it was located recorded (Last year Baab had 24 out).

Because of the cold spring Eastern Bluebirds started nesting a bit later than usual, he thought. His first tenants arrived in the area April 14. On Oak Ridge, Box 33 had an occupant on the 20th, a first egg, the 28th. The ensuing record was this:

May 1—female on nest.
May 5—6 eggs there
May 19—birds hatched, looked about 3 days old
June 2—ready to fly
June 6—birds gone
June 13—nest rebuilt, 2 eggs in
June 24—5 eggs
July 5—1 egg left; something has got at clutch of eggs
July 18—nothing

Every box except No. 18 had bluebird tenants the first time around. Four to six eggs were laid. Baab estimated that at least 152 young came off in the hatch. (No. 18 was used by Tree Swallows, then by Red-winged Blackbirds, and finally by Eastern Bluebirds in early August.)

About 90% of the boxes were occupied for a second brood. Baab estimated again that about 120 young came off these nestings. In the heat of late summer he found some 15% fewer eggs laid and that bird mortality ran higher. In one box seven sizeable dead immatures were found.

In Box 10 two broods of Eastern Bluebirds were raised. Then House Wrens took over and reared a family there.

Mr. Baab is a skilled hunter and fisherman, but he admits to leaving the gun in the car trunk more often than formerly. His wife, Hazel, frequently accompanies him on his rounds of the bluebird trail. The couple lives at 1113 West Fifth, Winona.

But their beige Chevrolet is a familiar object in summer on Oak Ridge, with its specially designed picnic table, extending from the car's open trunk, set with an outdoor meal. And the man bending over his note-keeping and food will be Gordon Baab.

And what is he doing now? Building more and better bluebird houses, of course. From discarded, weather-beaten boards he has already made 18 this December and has farmers' permission to put them out, come spring. Yes, farmer friends in the area appreciate his hobby and with Baab, attest to an increase of Eastern Bluebirds in Winona County.—*Grace Dahm, 357 E. 5th, Winona, Minnesota.*

LATE RECORD FOR THE BAIRD'S SANDPIPER—On November 6, 1965 while birdwatching at Salt Lake, Lac Qui Parle County, two shorebirds were sighted along the east (Minnesota) shore of the lake. These birds were identified as Baird's Sandpipers by Ray Glassel and myself. The medium size, between that of a Semipalmated and Pectoral Sandpiper, black legs, scaly back, buffy breast and lack of a white rump were noted. This date represents a probable late date for Minnesota. On March 28, 1964, Janet Green, Ray Glassel and I saw five Bairds Sandpipers near Eggleston, Goodhue County (Flicker 36:64). This represented a probable early date for this species. This span of dates (over seven months) gives the Baird's Sandpiper one of the longest periods of migration for any of the migratory shorebirds seen in Minnesota.—*Robert B. Janssen, 1817 W. 59th Street, Minneapolis, Minnesota.*

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RED-WINGED BLACKBIRD USES BLUEBIRD BOX AS NESTING SITE—Making rounds of his 38 Bluebird boxes near Rollingsstone, Winona County on June 2, Gordon Baab of Winona found a small amount of nest material in Box 18. On June 6, Tree Swallows seemed to be taking over. On June 11, four white eggs (Tree Swallow) were present in the box. On June 13 all was normal, four white eggs. Mr. Baab did not return to Box 18 until June 28, when he noted three bluish eggs which he thought were those of an Eastern Bluebird. Covering the route again on July 18, however, he found three half-grown Red-winged Blackbirds in the box. The adults were making a fuss around the box and they perched on a nearby fence. On July 28 the birds had left the nest. During a check of the box during the first week in September four young Eastern Bluebirds were seen near the box. Examining the box, Mr. Baab found a typical bluebird nest atop a somewhat dismantled Red-winged Blackbird nest and beneath all, still lined with wild duck feathers was the Tree Swallow nest still containing three white eggs! *Grace Dahm, 357 E. Fifth Street, Winona, Minnesota.*

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FURTHER EVIDENCE OF BIRD MORTALITY—In "The Loon" Volume 37:134-135, an incident of bird mortality due to cold weather during May 1965 was reported from Agassiz Refuge, Marshall County. Further evidence of a general bird kill in late May and early June of 1965 was received from Mr. Richard C. Davids. Mr. Davids was in Clearwater County in early June and sent the following information: "Eastern Kingbirds, Barn, Cliff and Tree Swallows, Scarlet Tanagers and Rose-breasted Grosbeaks got the worst of it. They sat on the roads and highways, as if numb or stupid, in flocks. There might be 15 Eastern Kingbirds in a bunch. I saw Rose-breasted Grosbeaks, practically all male birds, in groups of 20, all dazed. Saw eight or ten Scarlet Tanagers in a flock on a country road. My brother and I stopped to identify the dead birds on a mile stretch of road one day, found one Gray-cheeked Thrush, all others were Eastern Kingbirds." If other people have records of this mortality we would certainly like to hear about it.—*Robert B. Janssen, 1817 West 59th Street, Minneapolis, Minnesota.*

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SIGHT RECORD OF LEAST TERNS IN MINNESOTA—On September 11, 1965 Pete Getman and I observed a flock of Least Terns 3.5 miles south and 1 mile east of Hendricks, Minnesota. The locality, a marsh area in the southwestern part of the state, Lincoln County, is about 2 miles from the South Dakota border. We saw them about 2:00 p.m., the day was overcast and there were strong west-northwesterly winds. The birds came from the west-northwest and passed directly over our heads at a height of 15 to 20 yards. One might speculate that these birds were part of one of the nesting populations along the Missouri River in South Dakota and were migrating and were blown off course by the strong northwesterly winds.—*Bertin W. Anderson, Museum of Natural History, University of Minnesota, Minneapolis, Minnesota.*

ADDITIONAL EIDER AND SCOTER RECORDS—On November 6, 1960, a Common Eider was shot from a flock of about eight ducks at Lake Hendricks, Lincoln County, Minnesota. It is very likely the other ducks in the flock were also Common Eiders. Also, a single White-winged Scoter was shot in October 1957 in a marsh about eight miles northeast of Hendricks, Lincoln County.—*Bertin W. Anderson, Museum of Natural History, University of Minnesota, Minneapolis, Minnesota.*

* * *

BARROW'S GOLDENEYE IN ST. PAUL—While on a Christmas Count, Jan. 1, 1966, I discovered a male Barrow's Goldeneye on the Mississippi River at the St. Paul Sewage Disposal Plant, Ramsey County. It was 10:30 in the morning when I came upon a flock of 80 Common Goldeneyes. I now make it a point to carefully look through such flocks of goldeneyes after having found a male Barrow's Goldeneye last year in a large flock of Common Goldeneyes near Duluth. Since I was using 7 power binoculars, I felt the easiest identifying characteristic to look for was the wings and back having more black on them. Having spotted it 40 yards away, swimming among Common Goldeneyes, I then used a 25 power scope on it. With the sun shining brightly to my side and having other male Common Goldeneyes along side of it in the same field of view, I couldn't have had more perfect observing conditions. The Barrow's Goldeneye was slightly larger than the male Common Goldeneyes. There was a white crescent-shaped patch between the bill and eye. The head sloped from the rear to a flatter crown than that of a Common Goldeneye. Also the entire head showed a noticeable purple gloss as compared to the green of the commoner species. The back and wings had a good deal more black on them, and the slanted white markings on the wings appeared differently. The breast, belly, and sides were white. In addition, it had a distinct black shoulder patch. I watched it while it was swimming for about 5 minutes, then left to call Ron Huber, who saw it that afternoon. It was also seen in the same place that day and the next by other Avifaunal Club members. That was the last time the Barrow's Goldeneye was seen, until March 1, 1966 when, what was probably the same individual, was seen several miles up river from the above location.—*Bill Litkey, 733 Cook Ave. E., St. Paul, Minnesota.*

* * *

GLOSSY IBISES OBSERVED ON AGASSIZ NATIONAL WILDLIFE REFUGE—On May 28, 1965, two Glossy Ibises were observed on Agassiz National Wildlife Refuge, Marshall County. Two days earlier, Claude Alexander, Refuge Manager, had noted two large birds, almost black in color with long decurved bills flying over the marsh. He stated that these birds looked like Glossy Ibises. On May 28, Messrs. Olsen, Thompson, and Dan Anderson from the University of Wisconsin, were checking and photographing an artificial goose nesting platform in Green Stump Pool. When the observers approached within 75 feet of a small grass-covered island, two large, nearly black birds, jumped from the shoreline, flew about 100 yards, and settled down on the other end of the island. As they flushed, they uttered deep guttural notes. Using a 7x50 binocular, under excellent light conditions, the blackish, iridescent color of the birds, the decurved bills, and the trailing legs were clearly discernible. Since none of the observers had previously seen a Glossy Ibis, the area where the birds landed was again approached. As they did previously, the birds flushed at a distance of about 75 feet. Mr. Thompson attempted to photograph them, but the results of his efforts were poor. Again, with the aid of a binocular, the birds were observed in flight for a considerable distance. This was the first observation of Glossy Ibises on Agassiz National Wildlife Refuge.—*David L. Olsen, Lake Andes National Wildlife Refuge, Lake Andes, South Dakota. James M. Thompson, Northern Prairie Wildlife Research Center, Jamestown, North Dakota.*

THE NORTH AMERICAN NEST RECORD CARD PROGRAM FOR 1966

The first year of the North American Nest-record Card Program went very well. The Laboratory of Ornithology mailed out over 45,000 cards to individuals and regional centers from Florida to Alaska. We were encouraged at the response; over 23,000 completed cards were received from 700 individuals. We have accumulated over 500 cards each for several species; among these are Eastern Phoebe, Tree Swallow, Barn Swallow, House Wren, Catbird, Eastern Bluebird, Red-winged Blackbird, and Common Grackle. The Red-winged Blackbird has been selected for a trial run on the computer, and the data from our 2,300 cards on that species are now being punched onto IBM cards.

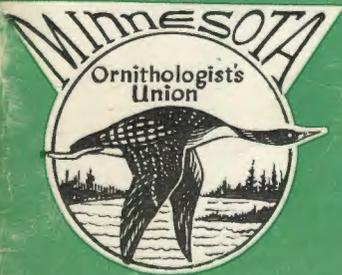
The principal aim of the program is to accumulate a large amount of data on the breeding biology of birds of the entire North American continent. This data will be stored on IBM cards in a form ready for analysis. This data, once processed, will be available to researchers interested in many areas of avian biology, such as annual and geographical variations in breeding seasons, clutch size, fledging periods, and nesting success. We hope that the program will also play a key role in the study of man's modification of his environment through marsh drainage, urbanization, and the use of pesticides.

We need data from all parts of the country. Observations from city parks and back yards, of the commonest species, are as important as those from remote parts of the continent. We need the cooperation of all competent field observers; please get in touch with your local organization and find out if it is cooperating as a regional center for the distribution of cards. If they are not, you may want to help organize a club effort. Individuals may also obtain cards directly from us. In any case, write for information and cards to North American Nest Record Card Program, Laboratory of Ornithology, 33 Sapsucker Woods Road, Ithaca, New York 14850. Be sure to include your zip code with your return address.

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THE LOON

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FRONT COVER

Boreal Owl at Palmers, Duluth Township, St. Louis County on January 16, 1966. Photo by Janet C. Green.

THE PRESIDENT'S PAGE

Have you seen a Western Grebe pirouette madly across a Minnesota lake? A Great Gray Owl perched solitary and magnificent in an inaccessible Minnesota swamp? A Blue Grosbeak perched upon an accomodating telephone line along a Minnesota county road? A Yellow-crowned Night Heron in a Minnesota roadside ditch? Unless you are an experienced birder, an older birder who has had time to see these things, an ambitious birder, or just a plain bird-nut, you have probably not seen all of the birds mentioned previously.

There is a way, over a period of years, for one to see some of the rarer birds of Minnesota. There is a "way," and like most "ways" or methods it requires some organization. Perhaps the MOU can supply the organization.

First, we need individuals, or area bird clubs where such exist, to serve as guides to the best possible sites at the best possible time of the year when a particular species can be seen.

Second, we need a field trip chairman who will select the area to be visited, draft or cajole a local guide to the area, and find out what camping and motel facilities are available in the area. Having done at least these things, he or she would then announce the trip in **The Loon** and the **Newsletter**, and ask that reservations be made either with him or directly with a local club or individual.

Third, we need MOU members who are interested enough in birding to notify the field trip chairman of their intent to make a particular trip and then invest enough time and money to make the trip. The weekend, and most trips would take two days, though not necessarily, could be a camp-out for those wishing to camp. Motel dwellers could rent their own motel rooms. There would be no "program" but to watch birds. There would be no registration fee, no dressing up for a banquet. Just birds and bird-people.

Initially, one trip a year might suffice, but spring, summer, and fall trips could be planned as interest grows. If you are interested in such a program of visiting Minnesota birding areas, please notify the president so that it can be decided if there is enough interest in the program. If you have suggestions for the program (which of course at this moment does **not** exist), those too would be appreciated. Or if you wish to be Field Trip Chairman, do not hesitate to volunteer. Actually, the job would not be complicated at all, compared to some other jobs done for the MOU.

Is there any interest in the subject of this editorial?

FRED LESHER

1966 A.O.U. MEETING IN DULUTH

At the invitation of The University of Minnesota, Duluth, The Minnesota Ornithologists' Union and the Duluth Bird Club, The American Ornithologists' Union will meet in Duluth, Minnesota, from Monday, September 5 to Friday, September 9, 1966. Headquarters will be the Kirby Student Center (on campus), business sessions will convene in the Kirby Student Center and the Home Economics Auditorium, and Public Sessions will be held in the Home Economic Building.

REGISTRATION

Members and guests may register in the lobby of the Kirby Student Center Lounge, beginning Monday morning September 5 at 10:00 a.m. Opportunity to register will be provided each day thereafter through Thursday in the Kirby Lounge. Registration fee will be \$3.50 per adult or \$4.50 for a member and spouse.

FIELD TRIP

Friday, September 9. The all day field trip will visit birding and scenic spots along a portion of the famous North Shore Drive of Lake Superior. Points of interest will include Hawk Lookout, Encampment Forest, Gooseberry Falls State Park, Palisade Head, Shovel Point, Baptism State Park and Temperance State Park. A brief stop will be made at the overlook of the Taconite Plant at Silver Bay.

LOCAL COMMITTEE ON ARRANGEMENTS

DR. PERSHING B. HOFSLUND, *Chairman*

DR. RICHARD BERNARD

MRS. HERMAN GRIFFITH

DR. W. J. BRECKENRIDGE

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MR. JOEL BRONOEL

DR. THERON O. ODLAUG

DR. AND MRS. JOHN C. GREEN

MR. AND MRS. HARVEY PUTNAM

INFLUX OF NORTHERN OWLS, WINTER 1965-66

Janet C. Green

There are four species of northern owls that do not normally nest in Minnesota but are present as regular winter visitants, at least in the northern part of the state. Their numbers vary yearly as does the extent of their penetration into the state. In invasion years two of these owls, the Snowy Owl and the Hawk-Owl, are most common in the late fall and early winter, and their numbers decrease in the following months (see *The Flicker*, v. 35, p. 75-78). Neither of these species was usually common last winter. In fact the Snowy Owl, which regularly occurs farther south than any of the others, was present in below-normal numbers.

When influxes of the other two species, the Great Gray Owl and the Boreal Owl, do occur, they are typically later in the winter or even, for the Boreal Owl, in the early spring. Northeastern Minnesota saw an invasion of both these species last winter. The Great Gray Owl invasion was a major one for this area. This species is normally most common in the northwestern part of the state, but observations in that remote, muskeg country are too sporadic to accurately define invasion years. In the northeast active observers have been present since 1950 and detailed records have been kept from the winter of 1960-61. During this time only one or two sightings have been reported each winter which would make this year's influx a major invasion.

The invasion of Great Gray Owls began in Cook County in early December and spread into southern Lake and St. Louis Counties in mid-December and into Carlton County in early January. The number of owls decreased after that but there seemed to be a slight increase in mid-February which may represent the northward migration of those that survived the winter. Details of the invasion are presented in Table 1. There were no reports from the active observers on the Mesabi Range so "mid-St. Louis County" refers to the Meadowlands-Zim area.

TABLE I

County	First seen	No. of Owls	Last seen
Cook	12/4	6	2/13
S. ½ Lake	12/19	8	2/27
S. ⅓ St. Louis	12/14	9	2/19
mid ⅓ St. Louis	Dec.	6	2/12
Carlton	1/2	6	3/12 ^a
Aitkin	12/2 ^a	1	
Becker		1	2/13 ^a

1. This represents the probable number of different owls; there were many more observations.
2. N. of Nickerson by William Litkey.
3. Rice Lake National Wildlife Refuge by Carl E. Pospichal.
4. Tamarac National Wildlife Refuge by James E. Frates: only observation not in the Northeast.

The Boreal Owl flight began in mid-January and reached a peak in late March through early April. It was almost entirely confined to the North Shore of Lake Superior. About half the reports were of birds found dead, usually in an emaciated condition. All these facts are very characteristic of the occurrence of this species in Minnesota. In February and March, 1963 a similar influx was documented (see *The Flicker*, v. 35, p. 70-71). These late winter invasions may be caused by the unavailability of food in the taiga in contrast to the fall invasion like that of the Snowy Owl which may be caused by overpopulation as well as by food shortages.

In 1966 there was a total of 15 reports of Boreal Owls, all but one from the North Shore of Lake Superior in Cook (2), Lake (3), and St. Louis (9) Counties. The exception was on January 19 at Meadowlands (J. W. Gawbow). The usual situation for the northeastern part of the state is 0-2 reports a winter. The first observation was on January 16 at Palmers, Duluth Twp. (J. C. Green) and the last one was on April 6 at Duluth (K. Sundquist), although a bird that had obviously been dead quite awhile was found on April 22 at Stoney Point (J. C. Green). The occurrence throughout the winter of all the observations is as follows: January (4), February (2), March 1-15 (2), March 16-31st (3), April (4).

Several of the observations were at feeding stations and two of these resulted in the interesting details of behavior given below. 9773 North Shore Drive, Duluth Minnesota

OBSERVATIONS OF A BOREAL OWL AT TWO HARBORS

Ruth Kuchta

January 28, 1966, was the coldest day of the winter on the North Shore of Lake Superior. Here at Two Harbors our thermometer registered -34° at dawn. I hurried outside to refill the bird feeders with sunflower seeds before the birds came to refuel. They would need plenty of food to keep them alive in this weather. I hadn't bothered to throw a coat on, so when I became aware of a poplar tree branch that seemed a little odd-looking, I was in too much of a hurry to return to the warmth of the house to investigate it. After a few minutes I looked out of the window to see if any birds had come to feed. There were a couple of Black-capped Chickadees very busily eating and some Evening Grosbeaks in the tops of the trees. They flew away, however, so my attention was again drawn to that branch that now looked more out-of-the-ordinary than ever. Staring at it, I decided that there had to be something on that branch, and as it remained so still, it was probably a small owl. I grabbed binoculars and held my breath. There were the dark rimmed facial discs and the spotted head I had hoped to see. I had a Boreal Owl right in my back yard!

The sun had climbed over the clouds hanging over Lake Superior by that time, so I went out with a camera to attempt taking color slides of the owl. It turned its head at my approach and seemed to watch my every move as I moved closer. I took three pictures of the owl looking down at me with one yellow eye open, and when I returned to the house, it again followed my movements, then tucked its bill into its shoulder and closed both eyes.

Since the owl seemed in no hurry to leave, I decided to take notes on all its actions and make a sketch or two of it if it ever did anything other than sleep. Stationing myself in the living room window from where I had an excellent view, I sat down to watch and wait.

8:00 a.m.—Discovered owl.

9:00 a.m.—Owl still asleep so called Jan Green to report owl.

9:05 a.m.—Owl seemed startled by Hairy Woodpecker's scolding. Turned head in woodpecker's direction. It then scratched its head, put bill back into shoulder and slept.

9:10 a.m.—While I looked away for a second, the owl pounced down on a shrew. I can see the long nose and dark gray velvety fur through the binoculars. (Shrews have been tunneling through the snow all winter under the feeders, feeding on spilled sunflower seeds.) The owl stood there on the ground, turning its head from side to side, then flew to the top of a feeder with the shrew in its talons. It perched there for four minutes, turning its head around slowly, before lowering its head to eat. I expected it to tear the shrew to pieces in the manner of a Great Gray Owl which my husband and I had seen eating a mouse, so when something dark and steaming fell to the ground, I wondered which part of the shrew the owl rejected. However, when the owl raised its head with the shrew seemingly intact in its mouth, I could see it was going to eat its breakfast in one piece. The shrew disappeared down the owl's throat in an unbelievably short time, considering the large size of the shrew and the small size of the owl. When only the tip of the tail remained in view, the owl stretched and twisted his neck until the entire shrew was down. The owl remained on top of the bird feeder.

9:35 a.m.—I turned away from the window and the owl disappeared.

9:40 a.m.—I went outside to find out what the owl had dropped before eating. It was a pellet, so I picked it up to save. The owl flew up from near the house and lit in a tree.

9:45 a.m.—The owl flew to another tree.

9:45 a.m.—A Starling landed in a tree and appeared very nervous with much tail-jerking and scolding. Owl turned its head in the Starling's direction, and Starling flew off. The woodpeckers, both Downy and Hairy, have been extremely noisy all morning, keeping up a constant din. The chickadees fly around and feed as usual. Grosbeaks have not returned.

10:20 a.m.—Owl suddenly tensed and straightened. I noticed a large hawk circling in the sky. Identified it as a Rough-legged Hawk. After hawk had passed by, the owl settled down. A chickadee lit on the ground in front of the owl to pick up a sunflower seed and the owl turned his gaze in that direction but didn't move.

10:40 a.m.—The owl swooped down again. The speed with which this fluffy ball of feathers can swoop down is amazing. In the blink of an eye it just disappears from its perch. I am unable to see whether it caught anything because it has its back towards me. Now the owl flew off into the woods and I can no longer see it. Attempting to find the owl, I went out into the woods in the direction in which it had gone, and there it was, perched on a branch. It watched me with those big yellow eyes, just out of reach. So I will never know if I could have picked it up. Hoping to drive it back toward the house, I poked at it with a stick,

but it stymied my efforts by retreating farther into the woods where it lit on another low branch. One thing I have noticed about this owl is its preference for perches no higher than seven to ten feet.

Giving up on the owl, I went to take a look at the place where it had made its last pounce. Between the wing marks in the snow was a small tunnel opening.

The grosbeaks returned to the yard and began feeding.

11:25 a.m.—Heard a Starling making a good deal of unnecessary noise outside, so I went to take a look and there was the owl on his former perch.

11:26 a.m.—The owl left again and the Starling stopped swearing.

The owl was not seen again that day till about 5:30 p.m. when I thought I would take just one more look out in the yard, and there it was, perched in the poplar trees near the house again. My husband and son were able to get a good look at it and the owl did not seem to object to having a flashlight beamed in its face. That was the last we saw of our visitor, although the shrew population does not seem to have been cut appreciably by the owl's efforts.—*West Star Route, Two Harbors, Minnesota.*

OBSERVATIONS OF A BOREAL OWL AT DULUTH

Milton Sundquist and O. A. Finseth

No doubt attracted by moles feeding on sunflower seeds dropped from the feeders and scattered among the seed hulls in the snow on the ground below, a Boreal Owl arrived in the late afternoon on Mar. 27, 1966. It is possible it had some success in feeding that first evening but we failed to notice it. It disappeared at dusk, returning the next afternoon about 4:00 p.m.

Perching atop one of the three roof-

ed feeders it sat drowsily motionless for almost an hour with eyes half closed, only a glint of the yellow eye ring visible at times. We had an excellent view as the feeders are only 5 to 10 feet from a large picture window.

About 5:00 p.m. it seemed to wake up. Flew to another feeder closer to our window. Its bright yellow eyes now wide open and fixed on the litter be-

low. The snow was covered and mixed with hulls of sunflower seeds from the winter feeding and in this debris something was evidently stirring although we couldn't see it. Suddenly the owl dropped down from its perch and began struggling with an object in the snow, its wings spread and pressing down on the snow to give it leverage. Having secured the mole it began feeding, but after a few bites it mounted the feeder again and from there flew to a pine tree behind the house. It soon returned, however, to take up its vigil on the feeder and while resting ejected a furry pellet. This was followed by another dive to the snow below, repeating the previous performance and alighting on the same perch with another mole. This one was promptly carried to a low bushy pine but on the front lawn. When Ray Naddy, the na-

ture writer on the Tribune staff, tried to approach close enough to sketch it the little hunter took off for a thicket of poplars across the road and disappeared. That ended the second evening's performance.

About seven the next morning it was again observed on one of the feeders and in the late afternoon it returned for the fourth time, disappearing about 7:30. Once while it was away from the perch we placed some fresh hamburger meat on the feeder roof. At one time it was perched right on that fresh meat but made no effort to sample it. Seems as though it prefers its own fresh killed meat wrapped in fur to the best of the butcher's hamburger. *2629 Anderson Road and 4610 W. 7th Street, Duluth, Minnesota.*

THE FALL SEASON

Ronald L. Huber

Although there was nothing spectacular about the 1965 fall migration, some 71 observers throughout the state came up with an aggregate list of 245 species. The month of September was one of the coldest on record here, with the average temperature for the entire month being some 8 or 9 degrees below normal. October and November were about normal although late November seemed to be milder than usual (there was still some insect activity at the fluorescent lights of our local super-market on Thanksgiving evening and we were delighted to see a small yellowish bat flying around downtown St. Paul on the evening of December sixth). Most of the winter finches put in their appearances after a notable absence last winter, and many penetrated the southern reaches of the state.

Common Loon: latest 11-21 Stearns Co, NH and 11-30 Cook Co, HH.

Red-throated Loon: 9-19 Duluth, 2, MIG.

Red-necked Grebe: latest 9-17 (16) and 10-15 (1) Holt, Marshall Co, DLO.

Horned Grebe: latest 11-9 Mpls, FN and 11-25 Mpls, 3, RBJ.

Western Grebe: 10-3 Mpls, DB, EHH; 10-9 Frog Lake, 20, RAG; 10-11 Lake Carlos, MVS; 11-5 Holt, Marshall Co, DLO.

Pied-billed Grebe: latest 10-31 Collegeville, RPR (none in Nov?).

White Pelican: 9-24 Carver Co, 25, RDT 9-30 Holt, Marshall Co, 15, DLO; 10-9 Lyon Co, PE; these were latest records.

Double-crested Cormorant: latest 10-15 Holt, Marshall Co, 4, DLO and 11-6 Lac Qui Parle Co, 2, RBJ.

Great Blue Heron: latest 11-10 Ramsey Co, VL and Wabasha Co, DGM.

Green Heron: latest 10-18 Bloomington, WWL and 11-9 Washington Co, DS.

Common Egret: latest 10-30 Scott Co, EWJ and 11-5 Dakota Co, FN.

Black-crowned Night Heron: latest 10-15 Marshall Co, DLO, 10-18 Washington Co, WWL and 11-5 Washington Co, DS.

Least Bittern: only report, 9-11 Carver Co, 1, RBJ.

American Bittern: latest 10-21 Marshall Co, DLO and 11-4 Bloomington, WWL.

Whistling Swan: earliest 10-2 Marshall

Co, DLO and 10-12 Aitkin Co, CEP; latest 11-25 Stearns Co, NMH and 11-30 Rochester, JPF.

Snow-Blue Goose: earliest 9-2 Wright Co, *fide* ACR; next record 9-23 Marshall Co, DLO; latest 11-13 Cokato, EC and 11-28 Rochester, JPF.

Black Duck: latest 11-30 Washington Co, DH and Mpls, FN.

Gadwall: latest 11-6 Lac Qui Parle, RBJ and 11-11 Sherburne Co, NMH.

Pintail: latest 11-29 Hennepin Co, DB and 12-2 Mpls, FN.

Green-winged Teal: latest 11-13 Mpls, VL and Washington Co, DS.

Blue-winged Teal: latest 11-12 Hennepin Co, MHM and 11-13 Washington Co, DS.

American Widgeon: latest 11-16 Mpls, FN and 11-23 Mpls, FN.

Shoveler: latest 11-13 Hennepin Co, VL and 11-25 Hennepin Co, 4, RBJ.

Redhead: latest 11-25 Stevens Co, female with 5y, NMH and 12-2 Mpls, FN.

Ring-necked Duck: latest 11-25 Stearns Co, NMH and 11-27 St. Paul, BL.

Canvasback: latest 11-24 Wabasha Co, DGM and 11-25 Stearns Co, NMH.

Greater Scaup: only records, 10-10 (25) and 11-6 (150) Anoka Co, DS; 11-13 Wright Co, E. Sorgatz *fide* ACR; 11-14 Washington Co, 75, DS.

Lesser Scaup: latest 11-28 Stearns Co, NMH and 11-30 Hennepin Co, RDT, FN.

Bufflehead: earliest 9-17 Marshall Co, 10, DLO; next record 10-9 Becker Co, NMH and 10-11 Mpls, VL; latest 11-28 Knife River, JCG and 11-30 Hennepin Co, RDT.

Oldsquaw: 11-7 Two Harbors, 2, Ole Finseth; 11-11 Cook Co, 300, AEA; 11-28 Mille Lacs Lake, MSB; 12-1, 12-2 Mpls, RBJ, FN, et al.

White-winged Scoter: 10-13 Skunk Lake, Morrison Co, *fide* RPR; 11-16 French River, 1, JCG.

Surf Scoter: 10-17 Knife River, 2, JCG.

Common Scoter: 10-24 and 11-7 Knife River, 1 each time, JCG.

Ruddy Duck: VL reports 4 downy y in Mpls on 9-16; latest 11-25 Stearns Co, NMH and 12-1 Mpls, RDT.

Hooded Merganser: latest 11-12 Mpls, VL and 11-24 St. Paul, 16, VL.

Common Merganser: 12-9 Lake City, thousands being harassed by gulls, GD; many of these no doubt lingered on through the winter.

Harlequin Duck: 11-28 French River, 1 sub-adult male, JCG, JNG.

Turkey Vulture: latest 10-5 Hennepin Co, RDT and 10-11 Two Harbors, RK.

Goshawk: 10-10 Hennepin Co, RDT; 10-22 Cook Co, HH, 10-23 Marshall Co, DLO.

Red-shouldered Hawk: 9-23 Winona, GD and 11-15 Hennepin Co, RDT.

Broad-winged Hawk: latest 10-3 Lake Vermilion, St. Louis Co, 1, VFB and 10-10 Collegeville, 2, RPR.

Swainson's Hawk: 10-2 Dakota Co, BL, ACR.

Rough-legged Hawk: earliest 9-3 Holt, Marshall Co, DLO and 9-5 Two Harbors, RK; next record 10-9 Washington Co, ACR.

Golden Eagle: 9-27 (3), 10-29 (6) and 11-13 (1), Holt, Marshall Co, DLO; 11-28 Knife River, 1 ad, JCG.

Bald Eagle: 9-5 Tamarack, 2, MIG; 9-25 Warroad, 3, JLR, PEB; 9-21 Holt, 1, DLO; 9-23 Little Marais, 2 ad, JCG; 10-1 Aitkin Co, 1 ad, 12 imm, CEP; 10-10 Becker Co, 1, NMH; 10-21 Kellogg, 2, DGM; 10-25 Lake Vermilion, DGM; 10-29 Holt, 6, DLO, 11-12 Holt, 1, DLO; 11-25 Sherburne Co, 1, NMH; 11-28 French River, 2 ad, JCG; 11-28 Knife River, 3 imm, JCG; 11-30 Aitkin Co, 1 ad, CEP; 12-3 Pike Lake, St. Louis Co, eating Evening Grosbeak, *fide* PBH; 12-5 Wabasha 5, GD.

Marsh Hawk: latest 11-27 Anoka Co, BL and 12-1 Pine Bend, RG.

Osprey: latest 9-25 Duluth, 1, TKS and 10-2 Goodhue Co, 2, RBJ.

Peregrine Falcon: 9-8 Schroeder, Cook Co, 1, JCG; 9-11 (1), 10-3 (1) and 10-11 (1), Warroad, JLR, PEB; 9-22 Hennepin Co, RDT; 9-22(1), 9-23(2), 9-25(1) and 10-22 (1), Collegeville, RPR; 9-24 Little Marais, 2 and Carlton Peak, 1, JCG; 10-3 Duluth, 1, HFH, RLH; 10-24 Sherburne Co, 1, NMH. Number of reports is encouraging.

Pigeon Hawk: latest 10-2 Dakota Co, RBJ and 10-13 Collegeville, RPR.

Spruce Grouse: 10-17 Shotley, Beltrami Co, MG, only report.

Sharp-tailed Grouse: 10-11 Holt, Marshall Co, 3, DLO.

Gray Partridge: 10-8 Collegeville, 3, RPR.

Sandhill Crane: 9-5 Polk City, Polk Co, GSM; 10-3 Duluth, Don Higgins *vide* JCG; 10-10 Borup, Clay Co, about 1,000, EGA; 10-23 Sherburne Co, NMH.

Sora: latest 9-13 Washington Co, 2, DS and 10-9 Lyon Co, PE.

Common Gallinule: 9-26 Ramsey Co, TKS and 10-9 Hutchinson, McLeod Co, RLH.

Semipalmated Plover: latest 9-11 Lyon Co, 40, PE, and Washington Co, 3, ACR; 9-22 Washington and Ramsey Co's, 4, BL.

American Golden Plover: latest 11-1 Rice Lake Refuge, Aitkin Co, CEP and 11-6 Salt Lake, Lac Qui Parle Co, 4, RBJ.

Black-bellied Plover: latest 10-3 Duluth, 1, JCG and 10-10 Warroad, 6, JLR, PEB.

American Woodcock: latest 10-22 Holt, Marshall Co, DLO and 10-23 Rice Lake Refuge, Aitkin Co, 50, CEP.

Upland Plover: latest 9-14 Lyon Co, 3, PE (details? a full month later than usual).

Spotted Sandpiper: latest 10-3 Minneapolis, 3, RBJ.

Solitary Sandpiper: latest 9-8 Minneapolis, VL and 9-19 Detroit Lakes, MIG.

Greater Yellowlegs: latest 10-24 Sherburne Co, NMH and 11-5 Holt, Marshall Co, DLO.

Lesser Yellowlegs: latest 10-16 Cokato, EC and 11-6 Salt Lake, RBJ.

Pectoral Sandpiper: latest 10-9 Ramsey Co, MIG and Washington Co, ACR.

White-rumped Sandpiper: latest 9-3 Washington Co, 5, ACR and 10-9 Lyon Co, 25, PE.

Baird's Sandpiper: latest 9-21 Lyon Co, PE and 11-6 Salt Lake, 2, RBJ (see Notes of Interest in previous issue on the latter observation).

Least Sandpiper: latest 9-17 (3) and 10-29 (1) Holt, Marshall Co, DLO.

Dunlin: 8-28 Washington Co, 2, ACR (only report).

Long-billed Dowitcher: 10-9 Salt Lake, Lac Qui Parle Co, RLH.

Short-billed Dowitcher: 9-1 Washington Co, Mr. and Mrs. Olin *vide* ACR.

Dowitcher, species: 9-2 Lyon Co, 200, PE and 9-26 Kellogg, 2, DGM.

Stilt Sandpiper: latest 9-11 Washington Co, ACR; 9-22 St. Paul and Washington Co, BL.

Semipalmated Sandpiper: latest 9-9 Stearns Co, 6, NMH; 9-22 St. Paul and Washington Co, 2, BL.

Buff-breasted Sandpiper: 9-11 Duluth, RLH.

Marbled Godwit: latest 8-14 (7) and 8-21 (7) Lyon Co, PE.

Sanderling: latest 9-11 Washington Co, 6, ACR; 9-15 Holt, Marshall Co, 9, DLO.

American Avocet: 9-20 Cottonwood Co, 3, PE, exceptional.

Wilson's Phalarope: 10-9 Lyon Co, 1, PE.

Parasitic Jaeger: 9-16, 9-18 Warroad, 1, PEB, JLR, et al.

Jaeger species: 10-2 Duluth, 1, JKB.

Ring-billed Gull: latest 11-30 Hennepin Co, RDT, FN; 12-3 St. Paul, RLH.

Franklin's Gull: latest 10-27 Nobles Co, HSH and 11-6 McLeod Co, 10, RBJ.

Bonaparte's Gull: earliest 9-1 Sugar Loaf, Cook Co, JNG and 9-6 Stearns Co, 5, NMH; latest 11-13 French River, JCG and 11-22 Alexandria, Douglas Co, 5, EHH (exceptional).

Forster's Tern: latest 9-12 Minneapolis, VL; 9-30 Wabasha, DGM.

Common Tern: latest 10-2 Rochester, MIG and 10-3 Duluth, HFH, RLH.

Black Tern: latest 9-22 Minneapolis, VL and 10-4 Washington Co, WWL.

Caspian Tern: earliest 9-6 Little Marais, Cook Co, JCG; 9-9 Scott Co, 2, FN and Hennepin Co, 3, DB; latest 10-2 Goodhue Co, RBJ and 10-14 Minneapolis, FN.

Mourning Dove: latest 11-25 Morris, 40, RAG; 11-27 Wabasha, DGM and 12-1 St. Paul, TKS.

Black Tern: latest 9-22 Mpls., VL and 10-4 Washington Co, WWL.

Black-billed Cuckoo: latest 10-3 Stearns Co, NMH and 10-22 Rochester, MIG.

Screech Owl: 10-3 Morris, Stevens Co, RAG; 10-31 Collegeville, RPR; 11-22 White Bear, 1 red phase, ELC.

Snowy Owl: 10-27 Warroad, JLR, PEB; 10-29 Rice Lake Refuge, Aitkin Co, CEP;

10-31 Duluth, JCG; 11-5 Holt, Marshall Co, DLO; 11-5 Shotley, Beltrami Co, MG; 11-16 Rice Lake Refuge, Aitkin Co, CEP.

Hawk-Owl: 11-7 Polk City, Polk Co, 1 bird, good details, GSM.

Great Gray Owl: 11-9 Gheen, St. Louis Co, **fide** LTM; 11-13 Rice Lake Refuge, Aitkin Co, CEP.

Long-eared Owl: 10-10 Kanabec Co, DB; 10-24 and 10-31 Duluth, Don Higgins **fide** JCG.

Short-eared Owl: 10-3 and 10-13 Holt, Marshall Co, DLO; 10-31 Duluth, JGH.

Barn Owl: 9-19 Edina, Hennepin Co, **fide** FN (no details).

Saw-whet Owl: 10-6 Cook Co, HH; 10-13 Duluth, 1, JCG; 10-15 Duluth, 1 DOR, JCG; 10-28 Cedar Creek Forest, Anoka Co, 2 trapped by Tom Nicolls; 11-28 Lester River, 1, JCG; 11-28 French River, 1 DOR, JCG.

Whip-poor-will: latest 9-1 Washington Co, WWL; 9-13 Holt, Marshall Co, DLO and 9-25 Rochester, JPF.

Common Nighthawk: latest 10-2 Hennepin Co, RBJ and 10-8 Washington Co, WWL.

Chimney Swift: latest 10-5 Hennepin Co, RBJ and 10-23, Duluth, PBH (exceptional)

Ruby-throated Hummingbird: latest 10-2 Virginia, St. Louis Co, VFB and 10-5 Hennepin Co, VL.

Belted Kingfisher: latest 11-21 Washington Co, DS and 11-29 Hennepin Co, DB.

Yellow-shafted Flicker: latest 10-30 Ramsey Co, ACR; 11-14 Cyrus, Pope Co, WH.

Red-bellied Woodpecker: usual records; northernmost were 9-25 Stillwater, MIG; 10-9 northern Washington Co, ACR and 10-13 Collegeville, RPR; one exceptional record, a male stayed at **Shotley, Beltrami Co**, through 12-17, MG; this surpasses the previous northernmost Minnesota record (to my knowledge) which was a specimen picked up near Cass Lake (specimen is now in Walker Museum). Also compares very interestingly with one seen on Xmas Count near Winnipeg.

Red-headed Woodpecker: latest 10-17 Eyota, FGD; 11-25 Crow Wing Co, LSR and 12-2 Wabasha, DGM.

Yellow-bellied Sapsucker: latest 10-9 Duluth, JCG and 10-13 Collegeville, RPR.

Black-backed Three-toed Woodpecker: 10-9 Duluth, 1 male, JCG; 10-11 Two Harbors, RK; 10-12 Duluth, DOR female, JCG; 10-18 to 10-31 Duluth, JCG; 11-20 Cass Co, DB.

Eastern Kingbird: latest 9-20 Cyrus, WH and 9-26 Cokato, 3, EC.

Great Crested Flycatcher: latest 9-19 Hennepin Co, CKS; 9-19 Washington Co, DS and 9-20 Two Harbors, RK.

Eastern Phoebe: latest 10-6 St. Paul, TKS and 10-9 Washington Co, ACR.

Yellow-bellied Flycatcher: latest 9-19 Minneapolis, VS and 9-25 St. Paul, VL.

Traill's Flycatcher: latest 9-18 Belle Prairie, LSR and 9-21 St. Paul, MIG.

Least Flycatcher: latest 9-26 Rochester, JPF and 9-28 Hennepin Co, VL.

Eastern Wood Pewee: latest 9-23 Little Marais, JCG and Hennepin Co, MHM; 9-25 Sherburne Co, NMH.

Olive-sided Flycatcher: latest 9-11 Hennepin Co, VL and 9-21 Little Marais, JCG.

Horned Lark: latest 10-30 Ramsey Co, ACR; 11-11 Anoka Co, 20, WWL; 12-2 Wabasha, DGM.

Tree Swallow: latest 9-25 Mora, RHJ and Hennepin Co, VL; 9-29 St. Paul, TKS.

Bank Swallow: latest 9-9 Cokato, EC and Washington Co, 200, ACR.

Rough-winged Swallow: latest 9-3 Ramsey Co, 15, ACR and 9-19 Stearns Co, 25, NMH.

Barn Swallow: latest 9-25 Alexandria, MVS and 9-26 Benton Co, NMH.

Cliff Swallow: 9-6 Stevens Co, NMH, only report.

Purple Martin: latest 9-30 St. Paul, TKS and 10-2 Dakota Co, RBJ.

Gray Jay: southerly movement this fall, growing quite strong during October and November; southernmost records, 11-7 Rice Lake Refuge, Aitkin Co, MIG and 11-10 Stillwater (on St. Croix), C. L. Ammerman **fide** GD, JCG.

Black-billed Magpie: 10-9 Clearwater Co, 5, MSB; 10-9 Warrroad, JLR, PEB; 10-19, 10-24 and 11-4 Shotley, MG; 10-21 Rice Lake Refuge, Aitkin Co, CEP; 10-29 Holt, Marshall Co, DLO; 10-30 Rice Lake Refuge, CEP.

Tufted Titmouse: 9-28 Cook Co, HH (probably northernmost Minnesota record); 10-17 Dakota Co, VL; 10-26 Hennepin Co, RDT.

Red-breasted Nuthatch: southerly movement; 11-17 Motley, CW; 11-20 Collegeville, RPR; 11-28 Hennepin Co, FN; 11-29 to 12-5 Winona, several feeders, fide GD; 12-1 Worthington, HSH.

House Wren: latest 9-27 Washington Co, WWL and 10-2 Wabasha, DGM.

Winter Wren: 10-8 Rochester, JPF; 10-10 St. Paul, banded, MIG; 10-24 Minneapolis, TKS.

Long-billed Marsh Wren: latest 9-11 Washington Co, 25, DS; 9-25 St. Paul, ACR, MIG.

Mockingbird: 11-10 and 11-11 Northfield, GNR.

TOWNSEND'S SOLITAIRE: 11-11 to 11-24, GNR (See Notes of Interest in previous issue).

Catbird: latest 10-19 Cyrus, WH and 11-9 Minneapolis, FN, VL.

Brown Thrasher: latest 10-3 Cyrus, WH, and all of November, Shotley, MG.

Wood Thrush: 9-8 Hennepin Co, MHM, only report.

Hermit Thrush: latest 10-9 Eyota, FGD and 10-10 Ramsey Co, ACR.

Swainson's Thrush: latest 10-1 Tofte, MOP and St. Paul, MIG; 10-3 Washington Co, DS, WWL.

Gray-cheeked Thrush: earliest 9-10 Two Harbors, RK; latest 10-2 Lake Vermilion, St. Louis Co, VFB and 10-14 Minneapolis, VL.

Veery: latest 9-2 Rochester, JPF and 9-25 St. Paul, MIG.

VARIED THRUSH: 11-22 Cushing, Morrison Co, Mrs. Elmer Isaksen (see Notes of Interest in previous issue); 12-5 Morris, Stevens Co, many observers (ditto).

Eastern Bluebird: latest 11-9 Tofte, Cook Co, MOP and 11-20 Crow Wing Co, MSB.

Ruby-crowned Kinglet: latest 11-6 Washington Co, WWL and 11-10 Collegeville, RPR.

Water Pipit: 9-25 Tofte, Cook Co, MOP and 10-17 Cyrus, Pope Co, WH, only reports.

Sprague's Pipit: 10-25 Cokato, Wright Co, EC (no details; exceptionally late).

Bohemian Waxwing: 11-6 Duluth, 30, JCG; 11-7 Motley, CW; 11-18 Motley, 20, CW; 11-29 Stearns Co, NMH.

Northern Shrike: earliest 10-17 Kanabec Co, RPR, 10-22 Duluth fide JCG and Wabasha Co, DGM; 10-23 Hennepin Co, RBJ.

Loggerhead Shrike: none reported!

Yellow-throated Vireo: latest 9-15 St. Paul, ACR and 9-20 Wabasha, DGM.

Solitary Vireo: latest 9-26 Rochester, JPF and 10-1 Minneapolis. VL.

Red-eyed Vireo: latest 9-29 Rochester, JPF and 10-1 Minneapolis, RBJ; one very exceptional record, 11-6 Hennepin Co, RDT, excellent details, undoubtedly latest date on record for Minnesota.

Philadelphia Vireo: latest 9-20 Washington Co, DS and Belle Prairie, LSR; 9-22 Minneapolis, VL and Hennepin Co, DB.

Warbling Vireo: 10-26 Hennepin Co, RDT, only report.

Black-and-White Warbler: latest 10-8 Duluth, JCG and 10-11 Two Harbors, RK.

Golden-winged Warbler: 9-8 Belle Prairie, LSR; 9-9 Minneapolis, FN and 9-19 Crow Wing Co, MSB.

Tennessee Warbler: latest 10-7 Wabasha, DGM and 10-8 Two Harbors, RK.

Orange-crowned Warbler: earliest 9-8 Minneapolis, VL and 9-15 St. Paul, ACR; latest 10-9 Hennepin Co, RDT and 10-12 Belle Prairie, LSR.

Nashville Warbler: latest 10-12 Minneapolis, VL and 10-16 St. Paul, MIG.

Parula Warbler: latest 9-20 Two Harbors, RK and 9-22 Washington Co, WWL.

Yellow Warbler: latest 9-18 Belle Prairie, LSR and 9-25 St. Paul, ACR.

Magnolia Warbler: latest 9-30 Cook Co, HH, 10-1 Minneapolis, VL and 10-2 Mora, RHJ.

Cape May Warbler: 9-26 (DS) and 9-29 (WWL) Washington Co, only reports.

Black-throated Blue Warbler: 9-8 (VL) and 9-9 (FN) T. S. Roberts' Sanctuary, Minneapolis (details?).

Myrtle Warbler: latest 10-27 Minneapolis, VL and Wabasha, DGM.

Black-throated Green Warbler: latest 9-26 Washington Co, DS and Rochester, JPF; 10-1 Cook Co, HH.

Blackburnian Warbler: latest 9-21 Washington Co, WWL and 10-22 Duluth, VL.

Chestnut-sided Warbler: latest 9-27 (DS) and 9-29 (WWL) Washington Co.

Bay-breasted Warbler: latest 9-27 Minneapolis, CKS; 9-29 Hennepin Co, RDT and Washington Co, WWL.

Blackpoll Warbler: earliest 8-29 Lake Co, JCG and 9-9 Minneapolis, FN; latest 9-29 (WWL) and 10-1 (DS) Washington Co.

Pine Warbler: 9-21 Washington Co, DS; 10-3 Stearns Co, NMH; 10-11 Alexandria, MVS.

Palm Warbler: nine October records; latest 10-9 Washington and Ramsey Co's, BL and 10-15 Tofte, Cook Co, MOP.

Ovenbird: latest 9-27 Minneapolis, DB and 9-30 Hennepin Co, VL.

Northern Waterthrush: latest 9-18 Belle Prairie, LSR and 9-22 Two Harbors, RK.

Connecticut Warbler: 9-4 St. Paul, VS and 9-8 Minneapolis, VL, only reports.

Mourning Warbler: 9-28 Minneapolis, VL and 9-29 Washington Co, WWL, latest reports.

Yellowthroat: latest 9-28 Minneapolis, VL and 9-29 Rochester, JPF; no October records?

Wilson's Warbler: latest 9-25 Rochester, JPF, St. Paul, ACR and Hennepin Co, MHM, 9-29 Minneapolis, VL.

Canada Warbler: latest 9-6 Washington Co, WWL and 9-15 St. Paul, ACR.

American Redstart: latest 10-2 Eyota, FGD and 10-12 Duluth, 12, JCG.

Eastern Meadowlark: latest 10-25 Washington Co, DS and 10-30 Knife River, JCG.

Western Meadowlark: latest 11-10 Cyrus, WH and 11-16 Cokato, EC.

Yellow-headed Blackbird: latest 9-10 Washington Co, ACR and 9-24 Holt, Marshall Co, DLO.

Baltimore Oriole: latest 9-10 St. Paul, MIG and 9-17 Washington Co, DS.

Rusty Blackbird: earliest 9-2 Duluth, PBH and 9-12 Washington Co, DS, latest 11-14 Knife River, JCG and 11-25 Stearns Co, NMH; a few overwinter in southeastern part of state.

Brewer's Blackbird: latest 11-8 Tofte, MOP and 11-11 Cook Co, AEA.

Scarlet Tanager: latest 9-24 White Bear, ELC and 9-25 St. Paul, ACR; one fantastic record, 11-14 Bemidji, Beltrami Co, 1 male, no details, reported by Evan B. Hazard of the ornithology staff at Bemidji State College.

Rose-breasted Grosbeak: latest 10-2 Minneapolis, TKS and 10-26 Washington Co, WWL.

Indigo Bunting: latest 10-2 Goodhue Co, RBJ and St. Paul, BL.

Evening Grosbeak: pronounced southward incursion the last week of November; south to Washington Co (DH), Stearns Co (NMH), White Bear (ELC), Hennepin Co (VL, FN), Northfield (GMR), Wabasha (DGM) and Winona (GD).

Pine Grosbeak: earliest 10-23 Two Harbors, RK, Duluth, PBH, Tofte, MOP and Jay Cooke Park, VL; noticeable southward movement after last winter's absence; noted this fall from Little Falls (LSR), Anoka Co, (MIG), Crow Wing Co (MIG, ELC), Minneapolis (VL, FN), Aitkin Co (CEP), Collegeville (RPR), Holt (DLO), Douglas Co (EHH), Itasca Co (DB), Sherburne Co (NMH), Dakota Co (FN) and Northfield (banded, GMR).

Hoary Redpoll: 10-30 Knife River, 1, JCG, only report.

Common Redpoll: two unusual reports, 9-20 Rochester, JPF (exceptional—no details) and 10-14 Minneapolis, VS (no details); next record 10-16 Tofte, Cook Co, MOP, 10-18 Two Harbors, RK and 10-21 St. Paul, TKS; many reports thereafter, south and west to Washington Co (DH), Morrison Co (LSR), Sherburne Co (NMH) Morris (RAG), Stearns Co (NMH, RPR), Polk Co (GSM), Pope Co (WH), Northfield (GMR), Wright Co (ACR, EC), Crow Wing Co (MSB) and numerous Twin Cities area reports.

Red Crossbill: usual nomadic self; 10-10 Minneapolis, 11, VS; 10-24 Hennepin Co, 6, RPR; 10-26 Minneapolis, 1, VL; 10-31 Crosby, 3, MSB; 11-6 Cass Co, 6, RPR; 11-10 Ramsey Co, 12, VL; 11-14 Wadena Co, RO; 11-30 Washington Co, 1, DH.

White-winged Crossbill: 9-10 Cook Co, 4, JCG; 10-3 Collegeville, 6, RPR; 10-5 St. Joseph, 27, RPR; 10-9 Stearns Co, 9, *vide* NMH; 10-20 Ramsey Co, 15, ACR; 10-23 Hennepin Co, 3, EWJ; 10-24 Duluth, 3, JCG; 10-29 Minneapolis, 9, VS, VL; 11-6

Cass Co, 4, RPR; 11-6 Mpls, RBJ; 11-6 Kellogg, DGM; 11-9 Minneapolis, 6, FN; 11-15 Tofte, Cook Co, MOP; 11-25 Northfield, 18, BL, GNR.

Rufous-sided Towhee: latest 10-3 Duluth, PBH and 10-12 Winona, GD.

Savannah Sparrow: latest 10-2 Dakota Co, BL, ACR and 10-3 Duluth, JCG.

Henslow's Sparrow: 9-5 Dakota, Winona Co, BT, FV, other members of Hiawatha Valley Bird Club, good details; only report.

Vesper Sparrow: latest 11-8 and 11-13 Tofte, Cook Co, MOP, good details; very unusual locality.

Lark Sparrow: 9-20 Cyrus, Pope Co, WH (details?), only report.

Oregon Junco: 10-1 Hennepin Co, 1, VS; 10-7 Hennepin Co, RDT; 10-13 Washington Co, 1, WWL; 10-27 Minneapolis, 1, VL; 10-30 Hennepin Co, EMB; 11-6 Tofte, Cook Co, 1, MOP; 11-29 Tofte, 1, MOP; 11-30 Rice Co, 1, DB; 11-30 Winona, 1, GD; the early October dates are most interesting; one wonders if these are really *oregonus* or actually the black-headed race (*cis-montanus*) of the Slate-colored Junco; specimens are needed here, any found dead should be turned in to the Museum of Natural History.

Tree Sparrow: earliest 9-28, St. Louis Co, VFB; 10-2 Rochester, MIG and 10-5 Washington Co, WWL; 10-8 Tofte, MOP and Two Harbors, RK; many thereafter.

Chipping Sparrow: latest 10-6 Mora, RHJ and 10-9 Washington Co, MIG, ACR.

Clay-colored Sparrow: 9-5 Becker Co, MIG; 9-24 Little Marais, JCG; 9-28 Polk Co, GSM; only reports.

Field Sparrow: latest 9-25 Ramsey Co, VL; 10-17 Wabasha, DGM; one exceptionally late, 11-29 Pickwick, Winona Co, GD, good details; one northerly record on 10-16 Orr, St. Louis Co, NJH, is most unusual; this bird is rare north of the latitude of St. Cloud; it is also easily confused with the Tree Sparrow.

Harris' Sparrow: earliest 9-14 Two Harbors, RK, 9-23 Holt, DLO and 9-24 Warroad, JLR, PEB; latest 10-31 Minneapolis, VL and 11-20 Evansville, MVS.

White-crowned Sparrow: earliest 9-14 Two Harbors, RK, 9-19 Worthington, HSH (early down there?); 9-21 Duluth,

JCG; latest 11-4 Two Harbors, RK; 11-13 Tofte, MOP (look at those November dates for the North Shore); 11-25 Rice Co, RBJ, BL, RG.

Fox Sparrow: earliest 9-24 Warroad, JLR, PEB; 9-26 Minneapolis, EHH and St. Paul, TKS; latest 11-5 Ramsey Co, ACR and Washington Co, DS; 11-6 Wabasha, GD and 11-7 Rochester, JPF.

Lincoln's Sparrow: latest 10-12 Minneapolis, VL; 10-25 Morris, Stevens Co, RAG; 11-1 Minneapolis, VL.

Swamp Sparrow: latest 10-22 Collegeville, RPR and 11-2 Minneapolis, VL.

Lapland Longspur: earliest 10-24 Sherburne Co, NMH and 10-28 Two Harbors, RBJ.

Snow Bunting: earliest 9-1 Rice Lake Refuge, Aitkin Co, 50, CEP (**very early**); next record 10-3 Schroeder, Cook Co, 50, MOP and 10-10 Becker Co, NMH; many reports thereafter, south to Frontenac, Goodhue Co.

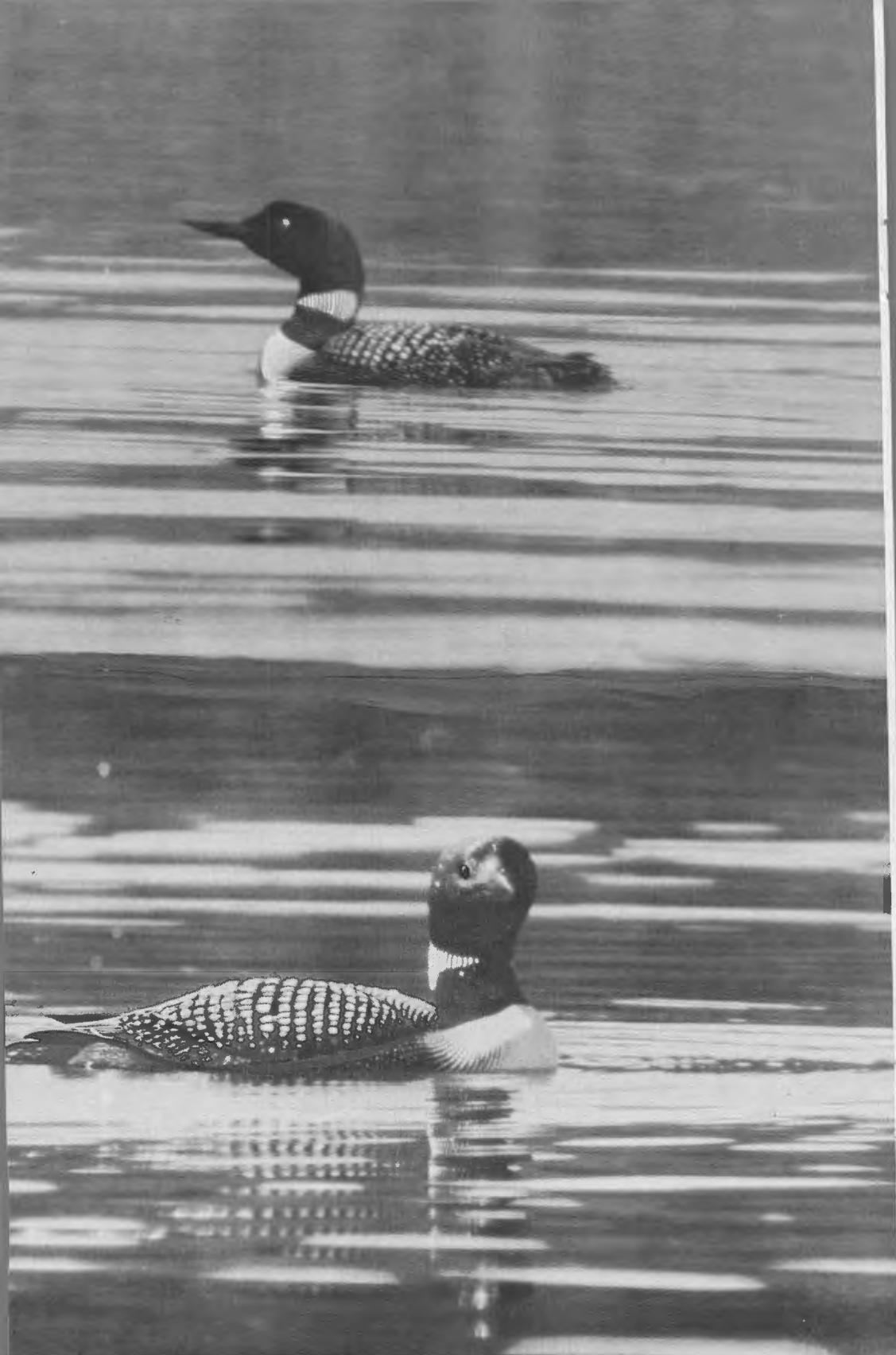
Summary: Some very interesting late dates were accumulated, no doubt due to the very mild weather during late Fall. The winter finches showed good southern movement and some of them seemed to have arrived rather early—I hope these dates weren't errors in transcription. As with last spring, the fall was a poor one for shorebirds. The two Great Gray Owl appearances were the beginnings of what was to become a small invasion later on in the winter. The November dates for almost all of the herons are especially noteworthy. The Townsend's Solitaire and Varied Thrush were probably the biggest news of the season. If the reader has access to *Iowa Bird Life* or *Audubon Field Notes*, a fast review of some of the Iowa Xmas Counts will demonstrate even more fully the effects of a mild December.

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Spring, bringing its labyrinth of newness in various ways, has as its own special harbinger to Twin Citians in mid April—none other than our State Bird, the Common Loon.

To the surprise of many, and to the delight of few sharp eyed bird watchers, the loon has been for some ten years and likely longer, somewhat of an April epic, a renewed entity of nature appearing on our city lakes as soon as the ice opens and a rim of open water is of full avail.

*the
loons' haunting
joy-cry
echoing across
a city lake
in spring
is a sustaining
virtue of the
wilderness . . .*

Ken Haag

An April Epic - The Loons on Lake Phalen

On Lake Phalen in St. Paul, the Common Loon makes its most auspicious April debut, gathering in great numbers. In 1965 there were 22 loons, loafing, fishing and courting on this city lake totally embraced by civilization. While their numbers fluctuate; 11 in 1963, 31 in 1964, 11 in 1966, their stay is always limited to no more than a fortnight. But what a fortnight! And in a setting that is a magical mirror of nature's changeover.

The gray, waning snow appeared as dirty embroidery on lavish green upholstery around the lake . . . the chopping gray-green water chased the silver wafer of ice into a vanishing centerpiece. All around the loons dived and danced in symphonic accord. Then for the first time (April, 1965) on Phalen, I observed the courtship of the loon. The male would rear up and thrust itself forward, wings open and feet churning, and ride the waves almost like a Western Grebe. The loon,

however, in a much labored effort could only tread water for a very short distance of five or six feet. A rather peculiar aspect of the courting male was that, in one instance, he swam aimlessly around, half submerged with his head and bill in the water, finally making a very conspicuous dive to culminate the performance.

During this 1965 observance, I was fortunate to have heard the "frenzied call" of the loon. This call is seldom if ever heard, even by avid students of ornithology. The common tremolo call is heard quite regularly, as is the "wolf call" during courtship, but the "frenzied call" is an extreme rarity. It can best be described as a chilling scream, so wild and high pitched that it is almost unbearable.

Why do loons choose to visit city lakes during migration? A logical reason seems to be that Lake Phalen is in line with an ancestral migration route that has remained unchanged regardless of inroads of civilization. This migration route includes Lake Gervais, Lake Vadnais and Centerville Lake, where in 1950 there were two to three hundred loons appearing on the ice-free lake on or about April 19th. Lake Calhoun and Lake Harriet in Minneapolis also are included in the April migration of the loon.

Other activities and characteristics to look for during the loons' spring visit include the "belly roll" or rolling preen which is typical any time of year.



Photos by Bruce Keyworth

June, 1966

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The loon rolls over almost on its back and exposes its pure white belly while preening itself quite vigorously, all the while waving a foot in the air.

Most years the northward moving loons are gone from the city lakes by May 1st. One of the closest heavily nested areas of loons is near Alexandria on Lobster Lake. Several studies of this lake revealed many successful nesting loons. Lobster Lake is a large lake completely made up of deep bays, inlets and an island. I have counted as many as 14 loons on this lake during July and have seen several pairs with two young on the lake simultaneously. The heaviest nesting area for loons in Minnesota is the northeastern corner of the state.

Loons apparently mate for life and return to the same nesting area from year to year until one of the pair is killed or they are forced to leave.

On smaller lakes of northern Minnesota, only one pair of loons are likely to nest whereas a big lake with islands and bays might include many pairs nesting. On a big lake, however, territories are established by the nesting pairs and intruding by other loons is cause for battle. The so-called "landlord" makes certain that his territory is used by none, save lady loon and offspring.

No more than two eggs are laid by the female, and success here is very much a matter of conditions. Often times predators will wipe out a nest as the loons nest on or near islands. And on land the loon, with its feet set far to the rear of its body, can only shuffle along halfway on its belly in a crude manner. So it would be quite vulnerable.

Young chicks are a sooty black color at birth, but in several weeks take on a brown-gray appearance. While the young loons are two to three weeks old, the female loon will stay close at hand, often times allowing fishermen or a photographer to get quite close.

The young often ride "piggyback" on the parent bird and once while ap-

proaching a mother with a chick close by, I was amazed at the aquatic capers performed by the birds. With a special blood and muscle chemistry to store and release oxygen at will, the adult loon can submerge at any rate of speed she chooses. In this instance the adult loon half submerged to allow the young chick to merely swim directly above her and with a quick emersion she had the chick up on her back, tucked in between her wings, and was off to the races!

Any shortcomings the loon might have as a land rover are positively overshadowed by its marvelous maneuverings in the water.

Near the Cascade River on the North Shore of Lake Superior, fishermen have taken loons in their nets at a depth of 200 feet. Loons can rise from the water surface only by making a long spattering run, but once in flight they are strong and swift (up to 60 miles per hour) owing to a small wing ratio. At any rate, the loon can swim as fast as fish under water and can dive so rapidly that it is virtually impossible to shoot them with a shotgun. They dive before the pellets can reach them unless they are within 30 yards or closer.

So befitting to the State that sports "10,000 lakes" on its car license plates and has more surface water than any other state is the loon with its spectacular attributes. It lends its vogue fully and fittingly to the land of sky-tinted waters. Its haunting joy-cry echoing across the northern lakes in summertime is a sustaining virtue of the wilderness, borne and cradled in the hands of time and upheld by ornithologists as the remarkable symbol of a waterbird legacy.

For those who did not realize that our State Bird can be seen right in the Twin Cities as regularly as the swallows at Capistrano, or the hawks at Duluth, the loons' return to Lake Phalen will become synonymous with April.—679 *Jessamine Ave., St. Paul, Minnesota.*

THE WINTER SEASON

Janet C. Green

Since my style differs somewhat from that usually used in this column, I will first explain my notations and assumptions. All the observations that were reported for each species are listed unless a summary statement is made. A few ubiquitous species have been omitted: Ruffed Grouse, Ring-necked Pheasant; Pileated, Hairy and Downy Woodpeckers; Blue Jay; and Black-capped Chickadee. If no number is given after the date, it is assumed that only one was seen. In most cases, only the county name is used for the location of the observation and the word "County" is then omitted. When the state has been divided into "North" and "South", the boundary between them is the southern border of Pine, Kanabec, Morrison, Todd, Douglas, Grant and Traverse Counties. If the division is into "North," "Central," and "South," then the northern border of these counties is used plus the southern border of Dakota, Scott, Sibley, Renville and Lac qui Parle Counties.

The picture that emerges from the reports is of course biased by the geographical extent of the coverage for the state. So that the reader may interpret the seasonal summary with this bias in mind the counties covered will be listed below. The number following the county name is the number of regular (i. e., submitting a complete report) contributors in that county. If there is no number, then the county was covered by just a few miscellaneous observations. North: Marshall, 1; Polk 2; Clay; Cass; S. $\frac{1}{4}$ Beltrami, 3; Wadena; Crow Wing, 1; Aitkin, 1; S. $\frac{1}{3}$ St. Louis, 2; mid $\frac{1}{3}$ St. Louis, 1; S. $\frac{1}{2}$ Lake, 1; Cook, 4. Central: Stevens, 2; Pope, 1; Stearns, 2; Swift; Kandiyohi; Wright, 1; Morrison, 2; Washington, 2; Dakota 1; Scott; Carver; Mille Lacs, 1; Kanabec, 1; Chisago; Anoka; Hennepin, 10; Ramsey, 3. South: Nobles, 1; Cottonwood, 1; Murray; Lyon; Rock; Rice, 1; Goodhue; Wabasha, 1; Olmsted, 2; Winona.

There are many interesting areas of the state that are not covered at all. We particularly would like to get informa-

tion from some of the many birders in Winona, Mankato, Albert Lea, Willmar, and St. Cloud as well as any observers in the western or northern parts of the state. If anyone we have not contacted would like to contribute, please write to me and I will be very glad to send the forms.

Common Loon. 12/1, Hennepin, VL.

Pied-billed Grebe. Last, South: 12/2, Hennepin, VL. 1/9, "Black Dog", Dakota Co., RBJ, RG.

Whistling Swan. 12/3, Hennepin, RDT.

Canada Goose. All winter: small groups in Aitkin, Stearns, Wright, Ramsey, Hennepin, Dakota, Wabasha; large group (7400, 1/2, Xmas), Olmsted.

Snow Goose. 12/12-26 and later?, (1-3), Howard Lake, Wright Co., EMB, WL, DAB, MGGs. All winter, (1) Watab Lake, Stearns Co., RPR.

Blue Goose. Wild?: 12/25 (MGGs), 12/26 (EMB), 3/6 (VL), Howard Lake, Wright Co. 1/2, Rochester, Olmsted Co., Xmas.

ROSS' GOOSE. 12/5 (D. Strom & K. Hanson) - 12/29 (E. R. Sullivan), (2); 12/22-26 (4), E. R. Sullivan; Howard Lake, Wright. Co.

Mallard: All winter: groups of 10s-100s, Hennepin, Ramsey, Dakota, Goodhue, Wabasha, Winona, Olmsted; groups of 10-20, Ottertail (Xmas), Kandiyohi (Xmas), Stearns (RPR), Cook (semi-wild, JCG). Migrants?: 2/21 (10), St. Joseph (RPR) and 2/26 (1), St. Cloud (NMH), Stearns Co.; 2/26 (750), "Black Dog", Dakota Co., JRR.

Black Duck. All winter: (2-10), Hennepin, Ramsey, Dakota, Goodhue, Wabasha, Winona, Olmsted, Stearns. 12/7 (6), JCG, and 2/12 (3), W. J. Breckenridge, Grand Marais, Cook Co.

Pintail. Last, South: 12/10, Hennepin, VL.

American Widgeon. Last, South: 12/19, Hennepin, VL. 1/2, Olmsted, Xmas.

Wood Duck. Last, South: 12/7, Hennepin, DAB. All winter (1 wild), Howard Lake, Wright Co., EMB.

Redhead. Last, South: 12/11, Hennepin,

RBJ. 1/9, Ramsey, DAB, (third winter record).

Ring-necked Duck. Last, South: 12/8, Hennepin, RDT. All winter (2 females), "Black Dog", Dakota Co., RBJ, RG, EMB. 1/8 (injured? male), Carver, RBJ.

Lesser Scaup. Last, South: 12/18, Hennepin, WL. 1/5, Ramsey, DAB. 1/8 (RG) - 2/12(RBJ), (1-2), "Black Dog," Dakota Co.

Common Goldeneye. All winter: (10s-100), Cook, Lake, St. Louis, Morrison, Stearns, Cass, Hennepin, Ramsey, Washington, Dakota, Goodhue, Olmsted, Wabasha. Migrants?: 2/22 (500), Hennepin, Mpls. Aud.; 2/24 (250), Ramsey, WL.

BARROW'S GOLDENEYE. 1/1 (WL) - 1/8 (fide EMB), and again 3/1 - (WL) - 3/5 (EMB), one male, Ramsey.

Bufflehead. Last, South: 12/12, Hennepin, MHM. 12/14 (3), 1/6 (4), Lake, JCG. 12/24 - 2/6 (1-2), "Black Dog", Dakota Co., RBJ, RG.

Oldsquaw. 12/1 (RDT) - 12/11 (RG), (2) Hennepin. Lake Superior: first, 12/7 (7), Cook, JCG; only small groups (3-10) all winter except on 1/18 (105), St. Louis, JCG; and 2/5 (50), Cook, MA.

HARLEQUIN DUCK. 11/28 - 1/18, sub-adult male, "Ironstone House," Duluth Twp., St. Louis Co., JCG, JG, RK, RAK, et al. 1/23, sub-adult male (different bird because of markings on head), Clifton, Duluth Twp., St. Louis Co., JCG. 12/31, pair, Two Harbors, Lake Co., RK, RAK.

EIDER SP. 1/16, one female or immature either King or Common, Two Harbors, Lake Co., JCG, JG.

Ruddy Duck, Last South 12/1, Hennepin, RDT.

Hooded Merganser. Last, South: 12/8, Hennepin, RDT. 1/8 (female), 1/30 (male), "Black Dog," Dakota Co., RG.

Common Merganser. Last, North: 12/4, Aitkin, CEP. Last, South: 12/14, Hennepin, VL. All winter: Lake Superior (1-12); Wabasha (10-50); Howard Lake, Wright Co. (1); Dakota (EMB); Washington (Xmas). 2/5, Birch Lake Dam, Lake Co., RG.

Red-breasted Merganser. Last, Lake Superior: 12/14, St. Louis, JCG. Only other 1/8, Dakota, EMB.

Goshawk. North: 12 observations by 6

people in Cook, Wadena, Cass, Marshall, St. Louis, Aitkin. Central: 8 observations by 8 people in Stearns, Anoka, Hennepin, Ramsey, Dakota. South: only, 2/23, Olmsted, JPF.

Cooper's Hawk. Hennepin: 12/3, Mpls. Aud.; 12/7, VL; 2/19, MHM. Stevens: 2/8, RAG; Olmsted: 2/12, JPF.

Sharp-shinned Hawk. 12/20, French River, St. Louis Co., R. A. Widmeier. Xmas Count, Willmar, Kandiyohi Co. 1/1, Wabasha, RBJ. 2/6, Goodhue, EMB, RG.

Red-tailed Hawk. All winter: reported by 20 people in Hennepin, Ramsey, Dakota, Washington, Goodhue, Wabasha, Winona, Rice, Olmsted, Migrants?: 2/25 (3), Hennepin Mrs. EWJ.

Red-shouldered Hawk. 12/29, Wabasha DGM, Xmas, 1/1, Ramsey, ACR, Xmas; 1/1 Washington?, St. Paul NE. Xmas; 1/2, Winona, Xmas; 2/6, Hennepin, RDT.

Rough-legged Hawk. All winter. North: 5 observation by 5 people in Marshall, Cook, Lake, Aitkin, Roseau. Central: 11 observations by 9 people in Stearns, Hennepin, Ramsey, Washington, Dakota. Southeast: 5 observations by 5 people in Olmsted, Rice, Goodhue. Southwest: "every trip," Nobles, HSH; "common," Rock, B. Anderson.

Bald Eagle. North: migrants (none wintered)—7 birds near Duluth, 6; Aitkin, 1, Wadena, 1) seen by 6 people through 12/23 with peaks on 12/3 (2 birds) and 12/18 (3 birds); last, 12/31, Duluth, A. K. Arndt. Central: migrants?—12/4-8 (2), Hennepin, fide R. L. Huber; 12/22, Hennepin, EMB; 12/5, Dakota, WL; winter—singles on the St. Croix and Mississippi Rivers in Washington and Dakota Counties. South: wintered along Mississippi in Wabasha and Winona Counties: peak count—1/1 (20 adults), Read's Landing and (2 adults), Weaver, RBJ, RG.

Golden Eagle. 1/22 and 1/29, Cook, LES. 2/27 (2), Marshall, Az. Staff.

Marsh Hawk. 12/1, Wabasha, DGM. 1/1 (2), Washington?, St. Paul NE. Xmas. 1/9, Rosemont, 1/10, Coates, RG; 1/15, Hastings, RBJ, EMB; Dakota Co. (all the same bird?).

GYRFALCON. 12/13 (1 medium gray bird), French River, St. Louis Co., R. A. Widmeier. 1/29, JCG, and 2/5, RAK (1 gray bird), Two Harbors, Lake Co. 2/12

(1 light gray bird), near Grand Marais, Cook Co., E. Campbell, R. Campbell, W. J. Breckenridge. 3/10 (1 gray bird), Shakopee, Scott Co., RG.

PIGEON HAWK. 2/5 (female), St. Cloud (NMH) and 2/25 (female), St. Joseph (RPR), Stearns Co. (same bird?). Third winter record.

Sparrow Hawk. Central: 26 observations by 15 people; Dec. and Jan. reports in the Twin Cities area only; migration? in Feb.—2/11, Kanabec, NAJ; 2/28, Wright, RPR; Twin Cities, one report before 2/24, five that date and later. South: reported in Wabasha (once), Rice (once), Olmsted (once), Lyon (once), Nobles (occasionally 1-2, HSH).

Sharp-tailed Grouse. St. Louis: 12/30 (2), Hibbing, HM; 2/12 (1), Floodwood, RG. Marshall: daily with greatest number, 16, Az. Staff. Aitkin: occasionally with greatest number, 7, CEP.

Bobwhite. 1/15-2/16 (9-10), Dakota, EMB, RBJ.

Chukar. 1/8 (14), Ely, St. Louis Co., DAB.

Gray Partridge. 12/9 (1), Olmsted, FGD; 12/22 (10), Clay, Xmas; Feb., Nobles, HSH; 2/2-28 (8), Dakota, EMB; 2/12 (4), Marshall, Az. Staff; 2/28 (2), Polk, G&SM.

American Coot. Last, South: 12/19, Hennepin, VL. 12/18 (WL)—1/12 (EGC) (3), Howard Lake, Wright Co. 1/8-2/15 (1), "Black Dog," Dakota Co., EMB, RBJ, RG. 1/2 (2), Rochester, Olmsted Co., Xmas.

Killdeer. 1/2 (4), Winona, FGD.

Common Snipe. 12/5 (1), ACR, 2/27 (2), WL, Ramsey. 1/2 (2), Excelsior Xmas Count 1/1 (3), St. Paul NE Xmas Count. 1/1, Dakota, RBJ. 1/2 (2), Winona, FGD. 2/9-13 (1), Goodhue, EMB.

Glaucous Gull. Lake Superior, Knife River-Two Harbors: 12/9 (1 adult), JCG; 12/14 (different adult), JCG; 1/1 (1), RK; 1/15-23 (2 adults, 3 immatures), JCG; none seen after that, lake frozen past Two Harbors.

Herring Gull. Lake Superior: all winter—Lake Co., (6-800) until lake froze in late Jan., (10-50) after that, fewest in many years, no commercial fishing to attract them; Grand Marais, Cook Co.—

12/9 (500), 2/12 (42), JCG. North: early wanderers, 2/26 (3), Gunflint Lake, Cook Co., HH, not seen again. Central: hundreds until freeze-up on Mpls. lakes, 12/19; last on rivers, 1/5, Ramsey, DAB and Dakota, EMB; first wanderer, 2/19 (1 adult), Ramsey, WL. South: hundreds along the Mississippi until 1/1 (200), Goodhue, RG; greatest number 12/18 (1000), Wabasha, DGM; Xmas Counts, 12/29 (31), Wabasha and 1/2 (11), Winona; last, 1/4 (6), Wabasha, DGM and 1/3 (flocks), Winona-Houston, fide F. M. Voelker.

Ring-billed Gull. Central: last regular migrant, 12/19, Hennepin, VL; on river, 1/1 (1), St. Paul N. Xmas. South: with Herring Gulls along the Mississippi; last, 1/2 (14), Winona Xmas, and 1/3, Winona-Houston, fide F. M. Voelker.

Mourning Dove. North: 2 attempted to winter at grain elevators in Duluth, found frozen in Jan., fide JCG. Central: all winter, groups of 1-6, about 22 observations by 10 people in Hennepin, Ramsey, Stevens, Pope, Scott. South: all winter, groups of 1-12 (except 1/2 (25) Winona, FGD), reported by 5 people in Wabasha, Winona, Rice, Olmsted, Nobles.

Screech Owl. 12/19, Stearns, NMH. 12/20, Ramsey, WL. 1/1, Ramsey, St. Paul N. Xmas. 2/22, Stevens, RAG. Jan. & Feb., Nobles, HSH.

Great Horned Owl. North: reported by 5 people in Lake, S. St. Louis, Aitkin, Crow Wing. Central: reported by 12 people in Stearns, Sherburne, Washington, Wright, Hennepin, Ramsey, Dakota, Kandiyohi, Stevens. South: reported by 6 people in Rice, Olmsted, Wabasha, Nobles, Murray, Lyon.

Snowy Owl. Only a few this winter (March data included): 12/20-3/11, Hibbing, HM. 12/23-1/23, Polk, G&SM. 12/8, S. Beltrami, MG. 1/4 (RPR)—2/9 (A. Grewe), St. Joseph, Stearns Co. 12/10 (1), 12/21 (different one?) 3/1 (2). Rice, OAR. 2/5, Sax, St. Louis Co., JCG. 1/2-3/7, Duluth, J. K. Bronoel. Last week Dec. (2), Taconite Hbr., Cook Co., W. Nelson. 3/26, Stevens, RAG.

Hawk-Owl. All winter, Cloquet Valley State Forest, St. Louis Co., a few, L. S. Ryan. 1/22 through "rest of winter," Aitkin, CEP. 2/27, Grand Portage, Cook Co., EMB. 2/5, Floodwood, RG; 2/5 (JCG)—2/26 (EMB), N. of Meadowlands;

2/26, Biwabik, EMB; all St. Louis Co.

Barred Owl. North: reported by 3 people in Cook, S. St. Louis, Aitkin. Central: reported by 10 people in Washington, Hennepin, Ramsey, Dakota, Stearns. South: reported by 3 people in Winona, Wabasha, Olmsted.

Great Gray Owl. See article in this issue.

Short-eared Owl. 12/4, Lutsen, Cook Co., LES, (latest record for North). 1/9 (RG) 1/19 (EMB) Dakota. 1/30 (F. Cruzen)—2/25 (Mpls. Aud.) (1-2 with 3 on 2/2, MHM. and 2/6, WL) International Airport, Hennepin Co.

Boreal Owl. See article in this issue.

Saw-whet Owl. 12/25, Aitkin, CEP. 2/3, Duluth, Jane Highum.

Belted Kingfisher. 12/24, Ramsey, ACR. Xmas Count period, Olmsted.

Yellow-shafted Flicker. Central: 12/11, Pope, WHS; 1/1, Ramsey, ACR; 2/6, Dakota, RB; 2/26, Big Stone, RAG. Southeast: 12/22, Rice, OAR; 1/13, Wabasha, DGM; 2/26 (3, migrants?), Olmsted MHM. Southwest: 2/6, Cottonwood, Mrs. LAF; all^c winter, 3-4 a week, Nobles, HSH; all winter, some with hybrid characters, Rock, B. Anderson; 12/28 (5), Lyon, Xmas.

Red-bellied Woodpecker. North of usual range: Nov.-late Dec., S. Beltrami, MG; 12/23, Little Falls, Morrison Co., LSR (good details); 2/5 (1), 2/12 (different bird), Colledgeville, Stearns Co., RPR. All winter, reported by 12 people as regular in Hennepin, Ramsey, Dakota, Goodhue, Washington, Wabasha, Winona, Olmsted, Rice plus Kandiyohi Xmas. 2/20 (pair), Lake Shetek, Murray Co., HSH.

Red-headed Woodpecker. All winter, reported by 7 people as occasional in Wabasha, Winona, Olmsted, Rice plus 3 each on Excelsior and St. Paul NE. Xmas.

Black-backed Three-toed Woodpecker. 12/29, 1/14, 2/15, Cook, LES.

Horned Lark. All Winter: usually small groups (2-15) before migration in Stevens, Pope, Hennepin, Dakota, Wright, Scott, Wabasha, Goodhue, Winona, Olmsted, Rice, Cottonwood, Nobles, Lyon. Migration: Central—1/30 (influx, 3-400), Dakota, EMB; next wave 2/10-13 (many first arrivals); biggest wave, 2/24 (100+, Stearns, NMH)—2/26 (large flocks, Stevens, RAG). Migration: North—first ar-

rivals (none wintered): 2/10, Crow Wing, JB; 2/12, Duluth, MGGs, and Grand Marais, E. Putnam; 2/24 (4), Aitkin, CEP; 2/25, Polk, G&SM; 2/26 (40), Marshall, Az. Staff.

Gray Jay. All winter, regularly (perhaps more common than normal) reported by 13 people in Cook, Lake, St. Louis, S. Beltrami, Aitkin (1-3 all winter, CEP). 1/2 (4), Walker, Cass Co., Xmas. 1/12 (2), Brainerd, Crow Wing Co., LSR. 1/19 (1), St. Paul, R. E. Cole fide WL.

Black-billed Magpie. 12/18, Wadena, RO. 12/11 (6), 12/25 (2), 1/1 (2), Marshall, Az. Staff 1/24, S. Beltrami, MG. 2/8 (5), Polk, G&SM.

Common Raven. All winter, reported by 14 people in Cook, S. Beltrami, Marshall (12/11 (1), Az. Staff, St. Louis, Lake, Aitkin, Cass (Xmas). There was an exodus from the Duluth area when the first Crows returned, 1/23-31, JCG.

Common Crow. Wintering regularly (2-50) in Hennepin, Washington, Ramsey, Dakota, Pope, Stevens, Rice, Winona, Wabasha, Olmsted, Nobles, Lyon (Xmas), Kandiyohi (Xmas). Wintering occasionally (1-2) in Morrison (all winter, LSR), Lake (12/23-24, RK), Stearns (12/4, NMH), Clay (4, Xmas). Migration: 1/23-2/4, 5 people reported first arrivals of 1-3 birds where none had been present before in Duluth, fide JCG; 2/2 (1), Aitkin, CEP; 2/4, Wright, EGC; 2/6 (4), Floodwood, St. Louis Co., RG; 2/10 (15), Stearns, NMH; no more migration noted until 2/25-26 in Stearns (RPR), Aitkin (CEP) and Roseau (J. Ruos). The migration around Feb. 1st in the North is about three weeks early.

Boreal Chickadee. Reported in Cook (Lutsen, Gunflint Lake), Lake (Encampment Forest) and St. Louis (Hibbing, Embarrass, Babbitt).

Tufted Titmouse. Reported by 13 people in Hennepin, Washington, Goodhue, Dakota, Ramsey, Winona, Olmsted, Wabasha, plus Kandiyohi Xmas. Xmas count numbers unusually low.

White-breasted Nuthatch. North: 1-2 reported regularly by 8 people in Polk, Beltrami, Crow Wing, Aitkin, St. Louis (Hibbing, Duluth) plus Xmas in Clay, Cass. South: 1-5 reported regularly by 22 people in Morrison, Mille Lacs, Stearns, Wright, Hennepin, Ramsey, Washington,

Dakota, Wabasha, Winona, Rice, Olmsted, Nobles, Cottonwood, Pope, Stevens plus Xmas in Anoka, Lyon, Kandiyohi,

Red-breasted Nuthatch. North: only a few observations in Crow Wing (until mid-Jan., JB), Cook (once), St. Louis (once), Wadena (twice), Cass (3, Xmas); scarce. Central: reported regularly in Stevens (2, RAG), Ramsey (1-2, MGGs; also 18 on Xmas, St. Paul N.) Stearns (4-6, RPR); 26 other observations by 14 people in Stearns, Hennepin, Ramsey, Kandiyohi, Washington. South: reported regularly in Nobles (HSH); 4 other observations by 4 people in Rice, Winona, Olmsted, Cottonwood plus Lyon Xmas.

Brown Creeper. South: 1-3 reported occasionally by 14 people in Stearns, Hennepin, Anoka, Stevens, Nobles, Washington, Winona, Olmsted, Wabasha, Ramsey plus Xmas in Lyon, Kandiyohi.

Winter Wren. 12/29, Whitewater Refuge, Wabasha Co., DGM.

Brown Thrasher. Late fall—1/12, Duluth. Mrs. Guy S. Engle. Late fall—1/26, St. Paul, Mrs. Norman Haglund.

Robin. 1-2 seen occasionally in Polk, Wadena, St. Louis (Duluth), Morrison, Hennepin, Ramsey, Dakota, Goodhue, Rice, Olmsted. One group: 1/2 (13), Winona, DGM.

VARIED THRUSH. 12/5-18, immature male, Morris, Stevens Co., EHS, RAG, WL. 1/2—last week Jan., adult male, Mendota Heights, Dakota Co., WL, DAB, MGGs, EMB.

TOWNSEND'S SOLITAIRE. 12/19, Knife River, Lake Co., RG, R. L. Huber, E. Campbell.

Golden-crowned Kinglet. 1/20, Stearns, RPR. 12/22 (3), Rice, OAR. 12/25, Olmsted, JPF; 1/2 (2), Olmsted, Xmas. 12/25 (2), 12/27 (3), 1/9, Wabasha, DGM. 1/5 (2), 1/14, Cottonwood, Mrs. LAF. 12/28, Lyon Xmas. 1/2 (3), Excelsior, Xmas.

Bohemian Waxwing. Scarce. Reported in Stevens (1/30, JAH—2/10, RAG; largest group, 20, 1/31, RAG); Morrison (12/23, 14, LSR); Crow Wing (6 in Jan., JB); S. Lake 12/19, 5, RG); S. St. Louis (1/2, 20, JCG; 2/3, 37, D. Higgins).

Cedar Waxwing. Scattered reports (8 by 8 people) from 1/1-2/5 in Stevens, Hennepin, Ramsey, Winona; largest groups on Xmas St. Paul N. (total, 23) and St. Paul NE (total, 56). Influx in mid-Feb-

ruary: first arrivals, 2/10-15; then 17 observation by 10 people from 2/19-28 in Stevens, Hennepin, Wabasha, Stearns, Wright, Nobles; flocks up to 30-50 seen.

Northern Shrike. North: about 50 observations by 13 people in Marshall, S. Beltrami, Wadena, Crow Wing, Aitkin, St. Louis, Lake, Cook, Cass; common. Central: 42 observations by 15 people in Stearns, Hennepin, Ramsey, Washington, Dakota, Stevens, Anoka. South: 8 observations by 3 people in Winona, Wabasha, Olmsted; last, 2/20, Wabasha, DGM.

Meadowlark sp. 12/22, identified as Western, Clay, Xmas. 12/30, Rice, OAR. 1/8, then daily, Wabasha, DGM. Dec., and 1/5, Pope, WHS. All winter, a few, Nobles, HSH. 2/6 (3), Dakota, EMB.

Yellow-backed Blackbird. 12/5, Marshall, Az. Staff.

Red-winged Blackbird. North. 2/13, Cook, Mrs. Selnes. South: December (4 observations)—12/18, Pope, WL; 12/27 (4), Kandiyohi, Xmas; 12/28, Lyon, Xmas; 12/29 (12), Wabasha, DGM. January (9 observations total)—big groups: 1/1-14 (500), Hennepin, VL; 1/2 (338), Winona Xmas. February (10 observations)—big groups: 2/6 (300), Goodhue, EMB; 2/26 (400), Hennepin, RBJ; 2/26 (50, males and females, migrants?), Stevens, RAG; small groups also in Scott, Dakota, Washington, Ramsey.

Rusty Blackbird. 12/22, 1/15 (14), Rice, OAR. 1/1 (5), Ramsey, WL. 1/2, Hennepin, RG. 1/15, Dakota, RBJ. 1/15, Chisago, MHM. Also, Goodhue, EMB.

Brewer's Blackbird. 12/7-8 (1 injured; good details), Cook, JP. 12/22, Moorhead, Clay Co., Xmas. 1/30 (2), Dakota, EMB.

Common Grackle. All winter, 1-2 occasionally in Cook, Stevens, Morrison, Dakota, Hennepin, Ramsey, Rice, Wabasha, Winona, Nobles plus (13), Olmsted, Xmas. Migrants?: 2/10 (7), Ramsey, ACR; 2/25, Wright, EGC; 2/26 (150), Anoka, MHM; 2/28, Stearns, RPR.

Brown-headed Cowbird. 1/2, Rochester, Olmsted Co., Xmas. All winter (1), Dakota, EMB.

Cardinal. North: 12/1, Polk, CCE; 12/28 Duluth, E. Davidson. South: reported by 26 people in Stearns, Stevens, Swift, Hennepin, Ramsey, Washington, Wright, Dakota, Rice, Winona, Olmsted, Wabasha, Cottonwood, Murray plus Xmas, Lyon, Kandiyohi.

Evening Grosbeak. Local groups (up to 50) reported but generally uncommon and irregular, although reported throughout the state with the notable exception of the Twin Cities area where the only observations were Xmas count period, Excelsior and 1/1 (23), St. Paul NE. Xmas. Also not reported from Pope, Wright, Hennepin (except above), Ramsey, Washington, (except above), Dakota, Cottonwood, Nobles.

Purple Finch. North: 12/9-15 (50) Polk, CCE; 1/2 (6), Cass, Xmas; 12/22 (2), Clay Xmas; no other reports. South: regularly all winter in small groups (2-15) from Stevens, Stearns and Mille Lacs Counties southward; reported by 25 people.

Pine Grosbeak. North: reported as abundant in Aitkin (CEP), Crow Wing (JB); large groups also at Hibbing (12/30, 218, Xmas); scarce on the North Shore, 16 observations of 1-11 birds; scattered reports also in Marshall, Polk, S. Beltrami, Cass, Wadena, Morrison, Mille Lacs. South: abundant in Stevens (12/15-27, 50-100, RAG; fewer in Jan.; 2/5, 75, JAH; last, 2/28, JAH) and later in Stearns (1/19, 5—2/25, 100, RPR). Scattered reports of small groups (1-10) to the east: first 12/4, Rice, OAR; next, 12/7, Hennepin, Mrs. EWJ; then, 10 observations in Jan. in Hennepin, Ramsey, Chisago, Dakota, Washington, Goodhue; last, 2/16, Wabasha, DGM and Feb., Winona, fide GD.

Hoary Redpoll. A few (1-4) reported in the flocks of Common Redpolls that wintered abundantly in the state. 12/22, female collected, Wadena, RO. Reported also from Cook, Stevens, Hennepin, Dakota, Washington, Stearns. Last: 2/28, Stevens, JAH.

Common Redpoll. South: the most abundant winter finch; present in invasion numbers all winter in the southern part of the state with counts of flocks of 50-100 commonly made in Stevens, Pope, Swift, Stearns, Morrison, Wright, Anoka, Hennepin, Ramsey, Washington, Dakota, Rice, Goodhue, Wabasha, Olmsted, Winona. Largest counts: 12/23 (1500), Morrison, LSR; 1/15 (1000), Dakota, EMB; 2/6 (2000), Dakota, RG; total of 5000+ on Xmas counts, greatest Xmas count total. Also reported in Nobles (1/16) and Jackson 2/1, 50), HSH; plus Xmas in Lyon (44) and Kandiyohi (42). Northeast: quite scarce; reported by 4 people in

Cook, Lake, St. Louis (Duluth); none from 12/7, Lake, JCG, until 2/11, Cook, JP. Northwest: flocks reported through Dec. in Marshall, Wadena, Clay; a few there the rest of the winter and also in Polk, S. Beltrami.

Pine Siskin. North: reported only in Cook (1/15, 12, HH), Aitkin (2/10, 15, CEP), Clay (12/22, 4, Xmas), Duluth (1/2, 2, Xmas). Central: reported by 13 people, usually only 1-4 but a few flocks of 20 present in Twin Cities (Ramsey, Hennepin); also seen in Anoka, Washington, Stearns. South: reported in Goodhue (12/5, MHM), Winona (1/2, 9, Xmas), Olmsted (1/2 20, Xmas).

American Goldfinch. North: all winter, a few, Crow Wing, JB. South: all winter, reported by 19 people in groups up to 10-30 in Hennepin, Ramsey, Washington, Dakota, Rice, Wabasha, Olmsted, Winona plus Lyon Xmas.

Red Crossbill. 12/11-24, 1/12, Wadena, RO.

White-winged Crossbill. 12/1, Rice, OAR. 12/8 (2-3), Stearns, RPR. 12/18-26 (4-8), Stevens, RAG, JAH. 1/1 (6), Ramsey, WL. Xmas count period, Lyon. 1/5, Rice, GNR. 2/1-3 (5-6), Washington, Mrs. WWL.

Slate-colored Junco. North: present, Polk, G&SM; 12/30 (64), Ottertail, Xmas; 1/2 (2), Duluth, Xmas; 1/2, Cass, Xmas. Central and South: all winter, reported by 28 people, usually in small groups (1-10) from Morrison and Mille Lacs Counties southward. Migrants?: 2/6 (55), 2/15 (100), Sherburne, NMH.

Oregon Junco. A few (1-2) reported by 16 people wintering with the Slate-colored Juncos. Since observers differ as to exactly what to call an Oregon Junco, no actual count of the number of observations can be given. Descriptions would be welcomed.

Tree Sparrow. South: all winter, small groups (1-10) in Stevens, Stearns, Wright, Chisago, Hennepin, Ramsey, Washington. Dakota plus Lyon, Xmas; more common (up to 100) in Rice, Goodhue, Wabasha, Winona, Olmsted. Nobles plus Xmas, Excelsior (462).

Harris' Sparrow. 1/15, Shakopee, Scott Co., RG.

White-throated Sparrow. 12/8 (2), 1/5, 2/25, Collegeville, Stearns Co., RPR. 1/2 (2), Winona, DGM.

Swamp Sparrow. 12/10, RG, and 12/19, RBJ, Hennepin.

Song Sparrow. 12/5, Ramsey, ACR. 1/2, Hennepin, RDT. 1/1, St. Paul NE. Xmas. 1/2, Winona, DGM. 1/8-14, Hennepin, VL. 2/6, Rice, RG.

Lapland Longspur. Reported as "all winter" in Stevens (JAH) and Olmsted (JPF; 100, Rochester). 1/1 (30), Afton, Xmas. 1/8, **Two Harbors**, Lake Co., E. Hermanson.

Snow Bunting. All winter, large flocks (counts up to 250) in Stevens, Marshall, Pope, Polk, Chippewa, Kandiyohi. Reported as "common" in S. Beltrami, Crow Wing, Aitkin. Flocks (up to 100) in Winona, Wabasha, Cass, Washington. Also in St. Louis (12/30, 25, Hibbing, HM); Lake (12/7, 4, JCG, late migrants?); Hennepin (2/5, 8, EMB); Olmsted (1/2, 3, Xmas).

CORRECTIONS: The opportunities for mistakes in this column are more numerous than I like to contemplate, ranging all the way from errors in identification to typographical mistakes. In the interests of making the record of the bird-life of Minnesota as accurate as possible, I would like to urge all readers to inform either Ron Huber or me of any mistakes that they spot and the correction will be published in the next issue. Because it is so easy to put down the wrong date or a number after the wrong species, we frequently send out "request-for-details" sheets to make sure the information is correct. But we don't locate all errors this way so please help us.

The observation of a Western Kingbird on 6/6/65 at Tofte (Loon, v. 38, p. 14) should read Eastern Kingbird on the same date.

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THE CANADIAN LAKEHEAD

A. E. Allin

March was a mild month. The mean temperature of 24.9° compared favorably with an average 20.5° and thermometer readings fell below zero on only three mornings. Precipitation consisted of 0.54" of rain and 20.1" of snow. April was cool with a mean temperature of 35.1° which is 0.7° below normal. We received 0.52" of rain and 7.2" of snow so precipitation was below average. The total snowfall to the end of April was 111.7", the heaviest since

1955-56 when 169.1" of snow fell locally. The weather was relatively warm from April 15 to April 25 but then turned cooler and 4.5" of snow fell on April 28.

The first half of May was cold and cloudy. Growth of early vegetation and bird migration were retarded. However, much of the delay in bird arrivals was probably due to the cold, unseasonable weather present in a vast area extending much south of the Minnesota-Ontario border. Conditions

improved after the middle of the month. A maximum temperature of 79° was attained on May 22. This warm weather prevailed until May 26, bringing waves of migrants. Towards the end of the month the weather was again unseasonably cold and snow fell on May 28. Late migrants had failed to arrive by May 31.

Predators were present in small numbers throughout the winter. The first Snowy Owl was seen on November 12. A few were present in Fort William throughout the winter. The last one was reported on March 24. The occasional Goshawk and a few Northern Shrikes were seen. At least two, and possibly more, Pigeon Hawks successfully wintered in the Twin Cities. These may represent a resident population as Pigeon Hawks have nested in Vicker's Park and its environs for many years. We failed to see Great Gray Owls at the time they were regularly reported at Duluth and north to Tofta. However, we had several reports which may have represented birds returning to their northern homes. One was found dead on March 1, on the Spruce River Road; individuals were seen on March 2 and March 15 at Sunshine and MacIntyre Township. K. Denis saw one east of Dryden on March 18. Boreal Owls were seen in Neebing Township on January 24 and February 19. Others were seen in Port Arthur on March 13 and 26. We photographed another at the Cascade River, Cook County on March 13. On March 10, T. Perrons saw "three small owls" in the headlights of his locomotive engine between Ignace and Fort William. Had these owls wintered locally or were they returning to their summer homes after wintering further south?

With the mild weather of late February and March, an early spring was anticipated. A few Pussywillows had lost their flower scales as early as February 26. Water was running over the ice in local streams on March 21 and some creeks were open on April 8. Navigation in the local harbor opened on April 13. Skunks were reported active in late February. Common Ravens were engaged in aerial displays usually associated with breeding on February 27. Rock Doves were pairing

off on the same date and House Sparrows were noisy in the early morning hours. Crocuses were in bloom in our garden on April 11 and the botanical tulip, the first, on the unprecedented early date of April 25. We heard our first Chorus Frogs on April 20 and Wood Frogs were calling on April 22.

But conditions changed. As indicated above, late April and the first three weeks of May were cool. Many inland lakes were still frozen in mid-May when snow was still piled several feet deep in the woods. Some larger, deeper, lakes were not to open until late in the month. By mid-May the only spring plants in bloom were Hepaticas, Bloodroot, Pussytoes, and a few early Violets. As late as May 22 only traces of green were appearing on the forest trees.

It is almost impossible to determine the beginning of spring migration. How can one separate hardy individuals which wintered here from the earliest migrants of the same species? This year, due to the almost complete absence of wintering Robins, Red-breasted Nuthatches, Cedar Waxwings, Purple Finches and Herring Gulls, the problem was somewhat simplified. Disregarding the owls and other winter visitors returning to their summer homes, the first migrants were probably Common Redpolls, Herring Gulls, and Common Crows, seen on March 11, 12 and 13 respectively. The Robin and the Slate-colored Junco seen by Mrs. Knowles at Rosslyn on March 22 were possibly migrants although no other Robins or juncos were seen for two to three weeks later. The only other migrant reported in March was a Horned Lark seen by Mrs. Peruniak near Atikokan on March 23.

The next wave of migration was a limited one. Single Great Blue Herons, Sparrow Hawks, and Yellowshafted Flickers were reported on April 3. Killdeer arrived on April 8 and for the next two weeks new migrants were reported almost daily. Mrs. Vibert reported a heavy wave of sparrows including six species on April 23. With the advent of cold weather and snow, migration was then delayed. The deep snow in the woods and the still-frozen lakes held back the advances of thrush-

es, blackbirds, ducks and geese. We were not to see another major migration wave until May 18 when there was a modest migration of the early warblers. This continued for the next few days. However, it is doubtful if many birds had arrived at the end of May.

Loons and Grebes: Early loons and grebes faced problems of arriving to find most lakes still frozen. Mrs. Peruniak reported a flock of 70 Common Loons at the mouth of the Seine River on May 6, and smaller numbers congregating on other areas of open water. Horned Grebes, found in such numbers on Lake Superior near Duluth, are relatively uncommon migrants locally. One was seen on the local harbor on May 7. Pied-billed Grebes are frequently very early migrants and can feed on very small bodies of water. Mrs. Peruniak saw one on April 16.

Pelicans to Bitterns: Once seen regularly along Lake Superior, the Double-crested Cormorant has become very scarce. None have been reported this season. We always wonder how Great Blue Herons find sufficient food, arriving here when only small areas of open water are available to them. One was seen this year on the Kaministiquia River on April 3. The only sight record for the Black-crowned Night Heron was one seen on Slate Island several years ago. Mrs. Vibert saw one in Neebing Township on May 3. Mrs. Knowles saw what may have been the same bird, the following day. There have been several reports of the American Bittern, the earliest on May 5 and May 7.

Swans to Mergansers: A few Whistling Swans were seen on April 29 and 30. A small flock was still present on Lake Superior on May 21. Geese were reported in immense numbers over Fort William on April 23. Mrs. Vibert reported huge flocks of Canada Geese of two distinct sizes feeding on last year's unharvested grain in Paipoonge Township on April 22. About 1,000 were still present on Lake Superior, near Port Arthur, on May 12. A flock of 25 Snow and Blue Geese was seen over Neebing Township on May 8.

Duck migration was greatly hindered by the late season. The diving ducks were more effected than the dabblers.

Thousands of the latter, mostly Black Ducks and Mallards, fed on abandoned grain on April 21. More Green-winged Teal than usual were seen but the migration of Pintails was late and they were present in small numbers. No Wood Ducks were seen. It has recently come to our attention that a Wood Duck was shot in September, 1965, some 35 miles north of Geraldton, the farthest north a Wood Duck has been collected in Ontario.

The first migrating diving ducks were the Common Goldeneyes which found small areas of open water at the mouths of still frozen lakes. A few venturesome Ring-necked Ducks soon joined them. Greater and Lesser Scaups were slower in arriving and were still present in the local harbor in flocks on May 22. We saw a small flock of Redheads with them on May 19. Buffleheads were first seen on April 24 and were present in larger numbers than usual.

Hooded Mergansers were first seen on April 11, Common Mergansers on April 11, and Red-breasted Mergansers on May 7. They, too, were forced to linger locally as they awaited the opening of inland lakes and rivers.

Vultures, Hawks, Eagles and Falcons: The only hint of a good hawk migration was Mrs. Peruniak's comment that Broad-winged Hawks were numerous on May 8. Sparrow Hawks are also present in their usual numbers. (On April 26, we saw only one on the 200-mile drive from Marathon to Sault Ste. Marie, although migration otherwise was further advanced than at the Lakehead). Mrs. Peruniak saw 2 Turkey Vultures on May 5, a Bald Eagle on April 19, and an Osprey on April 24 at Atikokan. None of these species was reported locally.

Grouse to Coots: Although fears were expressed that Ruffed Grouse suffered from ice-crusting snow last winter, conservation people report that the population wintered well. No Spruce Grouse have been reported and probably only a few persist within a radius of 50 miles of the Lakehead. The same applies to Sharp-tailed Grouse. The pale, western form has been reported only from Savanne on March 26, and Sapawe on March 25.

A Sandhill Crane was seen in Sibley Provincial Park on May 8. Mr. Enns reported the return of a pair near Reesor, some 450 miles northeast of the Lakehead. Since he has seen them in that area for several years, there is a likelihood they breed there. The Sandhill Crane found injured last September near Atikokan was presented to the National Museum of Canada and identified as belonging to the recently-described race *rowani*. Mrs. Vibert saw an American Coot on April 28.

Waders and Gulls: To date the migration of waders has been very poor. With the exception of Greater and Lesser Yellowlegs only a few individuals of many species have been seen and some species are yet to be reported. An American Woodcock was seen on April 21 and a Common Snipe on April 23. We were surprised on May 22 to see a Common Snipe perched on the 20-foot stub of a dead White Birch tree. Lesser and Greater Yellowlegs returned on April 24 and 25. Upland Plovers have been seen in two areas. A Long-billed Dowitcher was seen, and heard calling "keek-keek-keek" on May 14. I saw a single Ruddy Turnstone, and a Dunlin on May 19 and a Marbled Godwit on May 22. W. Zaroski saw a Whimbrel and a Black-bellied Plover on May 25.

Herring Gulls failed to winter here. They returned March 12. A few Ring-billed Gulls were seen on April 21. Bonapart's Gulls are uncommon migrants locally. We saw 6 in the local harbor on May 21.

Doves to Owls: The only report of a Mourning Dove was one seen by Mrs. Vibert on May 3 in Neebing Township. We discussed records of owl observations in an earlier paragraph. A Short-eared Owl was seen on April 21. The first Chimney Swift was seen over Fort William on May 21, coinciding with the onset of warmer weather throughout our general region. Only one was seen in the next 10 days.

Kingfishers and Woodpeckers: The Belted Kingfisher was first reported on April 24. A few Yellow-shafted Flickers were seen on April 3 a very early date, but the main migration was much later. Yellow-bellied Sapsuckers appeared on April 17. There

have been few reports of Pileated Woodpeckers.

Flycatchers, Larks and Swallows: Migration of flycatchers has been very slow. An Eastern Phoebe was seen on April 22 and a Least Flycatcher, May 9. We saw 2 Eastern Kingbirds on May 22, but at the end of May, Eastern Kingbirds were still scarce and I had seen few other flycatchers. Mrs. Peruniak reported a Horned Lark near Atikokan on March 23, a very early date.

Numerous observers reported Tree Swallows on April 24 and there is some evidence that they had been seen near Stanley for a few days previously. These birds, and Eastern Phoebes, must have been hard-pressed to obtain food throughout the following weeks of inclement weather. On May 15, few swallows could be found, and these were congregating in local areas. Tree, Barn and Cliff Swallows were seen on May 22.

Jays to Creepers: A few Common Crows wintered here; the first local migrants were seen on March 11; Mrs. Peruniak reported a few at Aitkokan on March 8. Common Ravens were still abundant at the Lakehead throughout March but in April were generally dispersed throughout the District.

Boreal Chickadees have been scarce and Red-breasted Nuthatches have yet to be reported. The White-breasted Nuthatches at the Cryers' station wintered successfully. The first Brown Creeper was seen on April 24, many accompanied the warbler wave of May 18.

Wrens to Kinglets: Mrs. Blake saw a Winter Wren on May 17 and a pair of Brown Thrashers on May 19 in Vicker's Park. I saw a pair of Catbirds on May 29. I have yet to see or hear a House Wren. Robins are quite common. The migration of thrushes has been very poor. Hermit Thrushes were reported on April 24; a wave passed through on May 19. There was a movement of Swainson's Thrushes on May 23. Two pairs of Eastern Bluebirds returned to the Hogarth Tree Farm. We saw 3 Eastern Bluebirds in that area on May 22, and others have been

recorded. Golden-crowned Kinglets have been recorded but we think this species is less common than it was a decade ago. Ruby-crowned Kinglets have been very common.

Pipits to Starlings: No Water Pipits have been reported. Mrs. Peruniak reported the only Bohemian Waxwings, two at Atikokan, on April 30. Northern Shrikes were seen on April 2, 8 and 11. Large flocks of Starlings on April 2, suggested returning migrants, although large numbers are resident here.

Vireos and Warblers: The migration of these birds has been very slow. The Myrtle Warbler was first seen on May 3. A few more Myrtles, the occasional Palm and a single Nashville were reported in the next fortnight. May 18 was cloudy with some precipitation and was somewhat warmer. Ten species of warblers were seen in Vicker's Park. These included many Myrtles, a number of Palm, Cape May and Bay-breasted and the occasional Blackburnian, Chestnut-sided, Black and White. Ovenbird, Magnolia and American Redstart. May 23 was very warm, with some drizzles. Birds had been heard overhead at midnight. Bay-breasted, Blackburnian and Wilson's were common but Tennessee, Nashville and a Black-throated Green Warbler were identified. On May 29, I saw my first Solitary Vireo but have yet to record a Red-eyed Vireo.

House Sparrow to Cowbirds: Another House Sparrow, stained by iron-ore dust, was seen by us on February 27. It was distinctly ochraceous and was identified with some difficulty. The first male Bobolink was seen on May 23. Western Meadowlarks are very scarce. Red-winged Blackbirds were first seen on April 11 but their subsequent migration was greatly delayed and few or no females were present on May 22. Migration of Rusty Blackbirds was poor. Brewer's Blackbirds

returned to at least one area. Common Grackles arrived on April 14 and have been quite common. Mrs. Vibert reported Brown-headed Cowbirds on April 11. Flocks were present on May 22, the cowbirds feeding about pasturing cattle. Four fed at our feeder with Purple Finches and Chipping Sparrows. Mrs. Peruniak reported an early Scarlet Tanager on May 16. The Baltimore Oriole is an occasional spring visitor. I saw one on May 29.

Fringillidae: If any section of migration could be considered normal, it was the movement of sparrows. Mrs. Vibert reported a heavy migration of sparrows on April 23. The six species involved, included Song, Vesper, Savannah, Tree and Chipping Sparrows and Slate-colored Juncos. The migration of the latter was particularly good. Mrs. Vibert saw 5 juncos on April belonging to the Oregon complex. Fox Sparrows were common. Many White-crowned Sparrows were seen. At Aitkokan they evidently belonged to the race *gambelii*. White-throated Sparrows have been common. A few Harris' Sparrows were identified. I saw a male on the late date, May 21. Rose-breasted Grosbeaks were uncommon. A male was seen on May 18 and I saw a female on May 23. Evening Grosbeaks returned in large numbers in mid-May. K. Denis reported 4 Pine Grosbeaks still present at Reflection Lake on March 23. Only a relatively small number of Common Redpolls were reported. The majority passed through in mid-March. We saw 2 Hoary Redpolls on March 11. Pine Siskins fed at my feeder on May 20 and were common during the next few days. We had no reports of migrating Lapland Longspurs. We saw our last Snow Buntings, a flock of 40, on April 23.—Public Health Laboratory, Box 1100, Fort William, Ontario.

NOTES OF INTEREST

SNOWY EGRET AT AGASSIZ REFUGE. On July 7, 1965 at 10:15 a.m., I spotted a Snowy Egret while driving on the west side of Agassiz Refuge, Marshall County. I was driving west on a road paralleling a large ditch when I noticed the egret take off about 100 yards ahead of me. I stopped the truck and observed the egret with 7x50 field glasses, using R. T. Peterson's *A Field Guide to the Birds* as reference for identification. As the egret flew directly overhead, the conspicuous yellow feet verified the identification. It appeared to be an adult as no yellow stripe was apparent on the back of the leg. The Snowy Egret was again observed flying in the same location early the same afternoon by myself and John Ellis, Assistant Refuge Manager. He was also able to make positive identification. At around 5:00 p.m., John Ellis and another assistant on the refuge again located the Snowy Egret, making it possible for three refuge personnel to make positive identification. This is the first time a Snowy Egret has been found this far west or north. *Russell R. Grow, Wildlife Aide, Agassiz National Refuge, Middle River, Minnesota.*

EDITOR'S NOTE: This is the northernmost Minnesota record and is the fifth time this species has been reported from our state. All but one of these reports has been well-documented, with reference to the yellow feet, characteristic of the adult plumage.

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EUROPEAN WIDGEON NEAR REDWING—Date, April 20, 1966. Time—7:45 a.m. Sky thin high overcast with fair to good light. Wind from the NNW at about 7 MPH. The evening previous had been wet with considerable wind from the south resulting in a very large movement of migrant birds into the area to include our first shore birds. Migrants present include the Ring-necked Duck, Lesser Scaup, Gadwall, Green-winged Teal, American Widgeon, Shoveler, Bufflehead, American Coots, Lesser Yellowlegs and considerable increase in the number of local nesters—Mallards, Blue-winged Teal, Wood Duck and Great Blue Heron. As I approached my favorite haunts $\frac{3}{4}$ mile north of Red Wing before work this chilly morning I passed the slough that has memories for me of nine Yellow-crowned Night Herons, now two years passed, my favorite Pileated tree and that old damp stump and adjacent log that for many years has been a gossip center for the male Wood Duck as he waits for the new mother to bring in the hatch. Slowing down to a snails pace hoping to find a Bufflehead in close to the road edge, I noticed a gathering of Gadwall and two American Widgeons within the flooded tree area which would separate slough and pond when the water level is at the summer normal, such now being high with spring rain and run off. As the birds moved out of the tree area with my approach, I noticed what first appeared to be a Redhead within the weed area and this species not being rare but fairly uncommon in the area I stopped to enjoy the fresh beauty of the breed bringing my glasses up for a good look. To my amazement the head immediately appeared to be far more brilliant than that of the Redhead, almost appearing to glow of rusty irradiance and as the bird moved out into the open with the Gadwall and American Widgeon, his ashlike gray back immediately tipped me off to something unusual. With slow movements of the group my bird of attention now about 85 feet distant turned his head to the back and side displaying the bright cream colored forehead and crown, greyish bill with black tip. Additional movement brought him to a complete side view and having already recognized my exciting find his black under tail coverts with the beautiful almost dainty grape colored breast brought identity to a conclusion. I watched the bird fully five minutes at which time he did not get more than two hundred feet away while engaging in courtship display with Bufflehead as well as the American Widgeon and Green-winged Teal during this period of observation. The bird was observed several times in making return trips on April 21st at which time a record photo was made. He has been

the object of much consideration, the prime cause of many trips by bird lovers from the entire area. At the date of this writing, April 30th, he is yet in our area. *Richard Behrens, Red Wing, Minnesota.*

EDITOR'S NOTE: The location where the European Widgeon was seen by Mr. Behrens and other bird watchers is on the Wisconsin side of the Mississippi River about ½ mile from the Minnesota boundary.

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GYRFALCON OBSERVATION IN LAKE COUNTY—After a week of extremely cold, below zero weather I went up the North Shore on January 29, 1966 to check on the gulls in the Knife River—Two Harbors area. I did not see a single gull at the usual concentration places or even flying along the lake which was shrouded in sea smoke but not yet frozen in this area except for the protected bays. However, driving out the dirt road from the Two Harbors dump I spotted a large hawk approaching the road from the north. Fortunately I was driving very slowly and the road-side was brushy and open on either side for about 100-150 feet which gave me enough time to stop the car and get my binoculars on the hawk before it crossed the road about 100 feet in front of the car. It was a large hawk and before I got my binoculars on it I thought it was probably a Goshawk. However, when I saw it through the glasses I immediately noticed the sharp-pointed wings and recognized the falcon-type flight. I have seen hundreds of Goshawks and tens of Peregrines, besides thousands of other falcons and accipiters, during the hawk migration at Duluth and my quick differentiation of a falcon from an accipiter was the result of this experience. I noticed that the flight of this bird consisted of swift strong wing beats with a "rowing" quality that reminded me of a Pigeon Hawk. It was flying just above the tree tops and before it reached the trees beyond the opening on the south side of the road it set its wings for a second in a brief glide. My total time of observation must have been on the order of 15 seconds but I knew it must be a Gyrfalcon from the large size and the falcon-type flight and shape. I could not see any markings on the bird because I was looking into the light (the sun was obscured by haze) and I also had on my dark glasses (which was a good thing since the glare was less). However, the angle of the light was good enough where it disappeared over the trees for me to be sure that it was not a white phase bird, but just how dark it was I cannot say. I made notes on my impressions of the size of the bird and the style of flight before I consulted any field guides. My opinion was that it was a large hawk, the size of a female Goshawk, which would rule out the only other possible species—the Peregrine Falcon. I had never seen a Gyrfalcon before. The bird was headed toward the town of Two Harbors and Lake Superior and although I immediately drove that way, I did not see it again. The fact that I did not see any gulls on this trip may not have been only a coincidence since Gyrfalcons are assumed to prey on the gulls by other people (falconers) who have seen them in this area. What was undoubtedly the same bird was seen flying over the town of Two Harbors on February 5, 1966 by Richard Kuchta. In mentioning this observation to other people I have learned of two additional Gyrfalcon sightings—one this winter and one last winter. Robert Widmeier, a falconer who lives in Duluth Township, St. Louis County, saw a dark phase bird on December 13, 1965 when it flew over his farm and panicked his flock of pigeons. The bird did not linger. Ruth Kuchta reported seeing a light grey bird flying over some fields at Toimi, Lake County on February 14, 1965. She saw it well enough to see that it was a light-colored, very large falcon and felt sure that it must have been a Gyrfalcon, but she had been reluctant to report the sighting because the observation had been so brief. This species is probably more regular in winter than we realize but only reveals itself in brief glimpses that even experienced observers (like the two above) hesitate to report because of the lack of specific details.—*Janet C. Green, 9973 North Shore Drive, Duluth, Minnesota.*

June, 1966

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GYRFALCON SEEN IN SCOTT COUNTY—On March 10, 1966 while birding in St. Marks cemetery at Shakopee, Scott County, I saw a hawk fly overhead that I believe was a Gyrfalcon. When I first saw it the bird was flying toward me from the south. It was quite high but with the binoculars I immediately recognized it as a falcon by its pointed wings and long tail. I ruled out a possible Peregrine Falcon because of its great size, broad based wings and manner of flight. Although it did not appear to be traveling fast it soon passed overhead and when it was quite a distance it turned and circled several times, headed north and was lost from view. The day was cloudy and the bird was high therefore I could see no markings or color so I am basing my identification on three factors: size, wing shape and manner of flight. I would say the bird was about Goshawk size, although size is hard to judge with no comparison but the body seemed much larger than say a crow or pigeon and not as slim. It had a long tail which would rule out possible confusion with a gull. The wings were broad at the base giving them a triangular look. The manner of flight was different from a Peregrine's in that the wing beats were slower and the down stroke short. After about a half dozen strokes it would sail a bit and then begin the flapping again. It had three periods of sailing while passing overhead. After I got home I was looking in Pough's Audubon Water Bird Guide and it states, "In flight they have a slow, powerful, short wing beat often interrupted by a short glide." I do not know if this gliding or sailing is characteristic of the Gyrfalcon alone but I have never seen a Peregrine fly in this manner—*Raymond Glassel, 8219 Wentworth Ave. S. Minneapolis, Minnesota.*

* * *

VARIED THRUSH IN DAKOTA COUNTY.—On January 2, 1966, Mrs. F. P. Bradford of Mendota Heights (adjacent to and just west of West St. Paul) discovered a Varied Thrush at her feeder. For the following week, telephones all over town were jangling and some 80 observers enjoyed Mrs. Bradford's hospitality that week while adding a new species to their lists. The bird was blackish gray dorsally, with a buffy breast, wing-bars and eye-stripes. The breastband was complete and grayish in color, suggesting that the bird was an adult female. The legs were fleshy colored as were the mandibles. Maury Goldberg secured photographs of the bird. My records indicate that there have been 12 records of this species in Minnesota since 1941. Four of these reports occurred since this past fall. Wisconsin also had four reports this past fall and winter and there were numerous other reports southward and eastward of the bird's normal range. It was truly an invasion year for the Varied Thrush. Mrs. Bradford's visitor from the far northeast was last seen on January 17, 1966 at the feeder of Mrs. Thomas G. Mairs, several doors away. The bird seemed to prefer suet as its food item and remained quite wary during its entire stay.—*Ronald L. Huber, 480 State Office Bldg., St. Paul, Minnesota 55101.*

* * *

FIRST COMMON GALLINULE RECORD FOR NORTHEASTERN MINNESOTA—On May 10, 1965 Mr. Karl F. Schulze who lives in the Lakeside area of Duluth phoned Raymond Naddy, nature writer for the Duluth newspaper, to tell him that he had a strange bird in his garden. He was not a bird watcher but knew something about ducks and described the bird to Mr. Naddy as being brownish with a red bill with a knob on it. Mr. Naddy asked him if the shape of the bird was like an American Coot and Mr. Schulze replied that it was. The next day Mr. Naddy again talked to Mr. Schulze and found out that the bird was still there. It was very secretive and hid under the bushes in his flower garden. Mr. Schulze had been able to look it up in a bird book and stated that it was just like the picture of the Common Gallinule. The bird was seen by both Mr. and Mrs. Schulze and remained only those two days. To the best of my knowledge this is the first record of this species for northeastern Minnesota.—*Janet C. Green, 9773 North Shore Drive, Duluth, Minnesota.*

SIGHTING OF A LONG-BILLED CURLEW—On April 24, 1966 as we were returning to Minneapolis via Highway 75 between Bellingham and Madison in Lac Qui Parle County, we saw three fairly large birds (nearly female pheasant size) about 200 feet from the road in a grassy, marshy field. All three birds seemed different: one was somewhat ruddy below and with a long **upturned** bill, back and sides were brownish; the second bird was a little larger with a straight bill and grayish-brown overall; the third bird was about the same size as the second but appeared taller and with a very long (at least four inches) **decurved** bill. This latter bird was a light buffy color on the neck and underparts, the head was plain and the back brownish. We checked in our Peterson "Field Guide" and decided the third bird was a Long-billed Curlew as it did not have the head stripes of the Whimbrel and it had such a long decurved bill. On flushing the birds we noted that they were all plain on the backs and tails. The first, we knew, must be a Marbled Godwit, possibly young because of the ruddy coloration. The second bird fit the Marbled Godwit also as Peterson's "Western Guide" mentions that some birds have straight bills. My husband, daughter and I observed the three birds for several minutes under clear, sunny conditions with 8 x 30 and 7 x 35 binoculars.—Mrs. William Lender, 2817 Robbins Street, Minneapolis, Minnesota.

* * *

NORTHERLY RECORD FOR THE CERULEAN WARBLER—On June 22, 1965, my wife, two of our sons and I put our boat on Mille Lacs Lake from Father Hennepin Park. The park is located on the southeast shore of the lake. It was a calm, quiet, partly cloudy day and the lake was smooth as glass. While trolling for fish about one mile west of the park toward Wahkon, near a point that juts out in the lake, we heard what I believe to be the song of the Cerulean Warbler. This song was repeated for the ten minutes that we were within hearing distance of that shore line.—Donald Bolduc, 4211 Blaisdell Avenue, Minneapolis, Minnesota.

* * *

YOUNG RING-BILLED GULLS—On June 22, 1965, while fishing in Mille Lacs Lake, we trolled around Hennepin Island. There were numerous Common Terns nesting on the island. There were no visible signs of young. We also observed about ten adult Ring-billed Gulls. Upon closer observation near the rocks close to the water we saw six immature Ring-billed Gulls. Four of these were starting to feather out, but the other two were in the downy stage.—Donald Bolduc, 4211 Blaisdell Avenue, Minneapolis, Minnesota.

* * *

APRIL PARULA WARBLER IN DULUTH—This bird was observed in my back yard from my living room. It was in a poplar tree about thirty feet from the house and was viewed through field glasses several times during the day. With Peterson's guide in hand the bird, a male, was identified to my satisfaction. My notes made at the time merely state that the bird stayed in the large poplar tree most of the day. On the same date, April 30, 1965, I made a trip up the shore and at the mouth of the Cross River I saw a Myrtle Warbler. This would seem to indicate that warblers had begun to reach this area.—Lyle Patterson, 9 East Mankato Street, Duluth, Minnesota.

* * *

THE FIRST BALTIMORE ORIOLE X BULLOCKS ORIOLE REPORTED FOR MINNESOTA—A few weeks ago I found, in the deep freeze at the Museum, a bag full of orioles killed at a television tower near Westport, Minnesota during the night of the 9th and 10th of September, 1962. Having an interest in hybridization in this species, I decided to examine the sample for the presence of hybrids. This search revealed 7 birds with hybrid characteristics among the 11 adult male orioles present in the sample. The hybrid characteristics in these specimens are as follows. **MMNH No. 21,225**. This bird has a faint orange superciliary line. The Bullock's Oriole has a distinct yellow superciliary while

the Baltimore Oriole has a completely black head. The ear coverts are yellow at the bases in this specimen. Baltimore Orioles have fully black and Bullock's Orioles have fully orange ear coverts. The throat of the Baltimore Oriole is completely black and completely orange in the Bullock's Oriole. This specimen is most similar to a Baltimore Oriole in throat color but it does have several orange feathers in the throat region. The side of the neck, black in the Baltimore Oriole, also has some orange in it in this specimen. The normally rather narrow white wing bar of the Baltimore Oriole is much expanded in this specimen and is rather close to the wing bar seen in the Bullock's Oriole. The bases of the outer tail feathers are yellow in this specimen as in the Bullock's Oriole. The Baltimore Oriole has black triangles at the base of the outer tail feathers. Sibley and Short (*Condor* 66:130-150) have investigated the hybrid situation among the orioles of the Great Plains and have developed a hybrid index. (Incidentally, they also consider the Baltimore and Bullock's Oriole to be conspecific, that is, the same species, and relegate them to the subspecific level.) The hybrid index number assigned to a pure Baltimore Oriole is "0" and that assigned to a pure Bullock's Oriole is "12." The hybrid index of this specimen is "3" so it is about 25% Bullock's Oriole and about 75% Baltimore Oriole. **MMNH No. 21,226.** This specimen shows the following hybrid characters: 1) the ear coverts are about half yellow, 2) the side of the neck is black mixed with yellow, 3) there is orange on the throat forward to the rear of the eye, 4) the white wing bar is much expanded. The hybrid index of this specimen is also about "3." **MMNH No. 21,227.** This specimen has some orange traces in the ear coverts, a much expanded white wing bar and the base of the outer rectrices are almost completely yellow as in the Bullock's Oriole. The hybrid index is "2." **MMNH Nos. 21,228, 21,229, 21,230.** These four specimens show greatly expanded wing bars and have a hybrid index of "1." **MMNH Nos. 21,231, 21,232, 21,233, 21,234.** These four specimens appear to be phenotypically pure Baltimore Orioles. The mean hybrid index for the entire sample is 1.1. Assuming that the entire group of birds had the same point of origin one can postulate that birds with this amount of influence from western genes (as determined by the hybrid index) were from a breeding population about 100 miles west of Minnesota at an undetermined latitude and that they were migrating in an southeasterly direction. Field identification of hybrid characters is, at best, exceedingly difficult. Birds indexing at 1 and 2 are likely to be undetectable in the field but at 3 or higher they could be detected by a careful and patient observer. People watching birds in the western regions of the state have the greatest opportunity to observe hybrids during the spring and fall migrations. Of course, utmost caution must be exercised before identifying hybrids in the field. *Bertin W. Anderson, Museum of Natural History, University of Minnesota, Minneapolis, Minnesota.*

* * *

THE RELATIVE ABUNDANCE OF THE GREATER SCAUP IN EARLY SPRING ALONG THE MISSISSIPPI RIVER—A total of 18 Greater Scaup were found in the well publicized oil kill of waterfowl in late March, 1962. Although this is less than one per cent of the total ducks killed it indicates that Greater Scaup do migrate through this area in the spring and they are probably more abundant than most of us think. The total of 18 Greater Scaup outnumbered more noticeable river species represented in the kill such as the Mallard, Red-head, Common Merganser, Ruddy Duck, Canvasback and Hooded Merganser. A review by bird enthusiasts of the characteristics of this large scaup, coupled with careful observation in early spring could give more accurate information concerning the abundance of the Greater Scaup in migration through Minnesota. —*Bertin W. Anderson, Museum of Natural History, University of Minnesota, Minneapolis, Minnesota.*

* * *

INTERESTING FALL SHOREBIRDS—On the weekend of July 31-August 1, 1965, Bill Pieper and I observed several species of birds along the western

border of Minnesota not often recorded at this time of year.

On July 31, we saw two American Avocets still with tinges of orange about the head and neck, at the sewage ponds one mile southwest of Luverne, Rock County. At Salt Lake, Lac Qui Parle County, the water was too high to provide good conditions for shorebirds. However, among the few shorebirds present were three Northern Phalaropes—several days earlier than the earliest fall date for our state. Later on in the same day, we observed a flock of sixteen Buff-breasted Sandpipers in a well-grazed pasture, three miles east of Breckenridge, Wilkin County. *Dave Pearson, C.V.B. 82, Pacific Lutheran University, Tacoma, Washington.*

* * *

ADULT FERRUGINOUS HAWK—On August 1, 1965, Bill Pieper and I saw and heard at least eight Yellow Rails in a prairie marsh southwest of Waubun, Mahnomen County (see *The Flicker*, vol. 32, no. 3). That afternoon, while watching and listening to a skylarking Sprague's Pipit southeast of Felton, Clay County, we observed a light-phased Ferruginous Hawk flying low over the prairie. The dorsal wing spots were immediately noticeable, and when it landed in a lone, dead tree, the white tail with very little pink, light head and breast (contrasting with dark legs and back) could be seen quite well through both our binoculars and a 20X spotting scope. Bill Pieper had seen this bird several times before in Minnesota and I had become quite familiar with it in central California and eastern Washington.—*Dave Pearson, C.V.B. 82, Pacific Lutheran University, Tacoma, Washington.*

* * *

WINTERING BROWN THRASHER—We have always had Brown Thrashers in our back yard so I didn't think it unusual to see one at our feeder late in the fall. But when he was still around at Christmas time, I was sure he had missed the last flight south. Most surprising was the afternoon of January 25, 1966 at about 4:00 p.m. when it was 27 degrees below zero and there he was again, scratching around on the ground below the feeder. I noted the long reddish brown tail, long black bill, yellow eyes, wing-bars and the streaks on his white breast. The next day he was out there again, but I haven't seen him since.—*Mrs. Norman Haglund, 1784 Lindy St., St. Paul, Minnesota 55113.*

* * *

YELLOW-BREASTED CHAT IN ROSEVILLE—In May of 1965, while visiting in southern Wisconsin, we had an opportunity to observe at very close range our first Yellow-breasted Chat, which a bander in Milton, Wisconsin had caught in her mist net. Back here at home the following week, my husband and I saw a chat in our elm tree at a distance of about 20 feet. The next day, May 13, 1965, our neighbor across the street, who also watches birds, mentioned seeing a grayish-green bird with a chattering, broken sort of song. We went and looked for it. About noon it came to her plum tree, a bird larger than a sparrow, olive-green back, yellow breast going to white toward the tail, white eye-ring, no wing bars. He was a rather nervous and fluttery bird and looked exactly like the chat we had seen in Wisconsin. I saw it a couple of times after that.—*Mrs. Norman Haglund, 1784 Lindy Street, St. Paul, Minnesota 55113.*

* * *

FURTHER NOTES ON MORTALITY OF INSECT BIRDS—Dr. O. A. Stevens of North Dakota State University submitted the following letter, which correlates strongly with D. W. Anderson's article (*The Loon*, 37:134-135).

"Dear Dr. Stevens,

On the evening of May 26, 1965, we had very strong southwest winds and many warblers fluttered into our yards apparently exhausted. It had been storming heavily in the western part of the state. That night and the next, the temperature went to 29 degrees with northwest winds and some snow.

They settled down here and there in the yard and were soon dead. Some were brought into the house, but died. One lady told me there must have been 50 dead birds in her yard. In Drayton, 200 were reported picked up. There

were many American Redstarts. I also found vireos, Wilson's Warblers, Yellow Warblers, a Canada Warbler, and others that I did not recognize. *Mrs. Flora McDonald, Bowesmont, North Dakota.*" Editor's Note: Bowesmont is in Pembina County, North Dakota, immediately adjacent to Kittson County, Minnesota. RLH.

* * *

WINTER RECORD FOR THE PIGEON HAWK—On February 25, 1966 Kim Eckert and I observed a female Pigeon Hawk at St. Joseph, Stearns County, Minnesota. The bird flushed out of an evergreen tree directly above my head and flew with characteristic falcon flight to an apple tree where it perched. From about 70 yards away we clearly saw the banded tail and noticed that its size was about that of a Sharp-shin. The falcon soon took off, revealing a small bird in its talons. I presumed that this was a Common Redpoll as they were very common in the area. Although there are two other Minnesota winter records, this is the first winter record for the central part of the state. As Pigeon Hawks are recorded with some regularity in winter in the Canadian Lakehead area, Illinois, and Iowa, they perhaps have been overlooked in Minnesota. Outside of migration, Pigeon Hawks tend to be quite wary and frequently dense stands of trees and swamps.—*Robert P. Russell, Colledgeville, Minnesota*

* * *

MORE ON BREEDING OBSERVATIONS OF THE KING RAIL IN SOUTH-CENTRAL MINNESOTA—Previously I have reported a breeding observation of the King Rail in Martin County (*The Loon*, 36 (1):28-29, March 1964). On June 11, 1965 I observed an adult King Rail accompanied by one black, downy young about 4 miles southwest of Madelia in the NW¼ of Section 16, Township 106N, Range 30W, Watonwan County. These birds were observed with 9 x 35 binoculars at about 50 yards distance. They were walking and feeding in about 2 inches of water among the sedges at the edge of a 15-acre shallow open water marsh. During the 6 to 7 minutes that I observed them I did not see more than the one young. Also, on September 8, 1965 I observed one adult King Rail (if a juvenile it was fully grown) on the Mickelson Wetland Unit about 4 miles north of Madelia in the SW¼ of Section 35, Township 108N, Range 30W, Brown County. I observed this rail from a distance of only 5 to 8 feet away. It was feeding in about 3 to 4 inches of water in a thick bed of floating duckweed and cattails. The rail was not at all frightened by my presence and merely ducked into the cattails when I waved my arms.—*Robert A. Chesness, Game Biologist, Game Research Center, Madelia, Minnesota.*

* * *

COURTSHIP ACTIVITY OF THE HOODED MERGANSER—This year a very early break up in the Mississippi basin created the unusual condition of all back water ice being completely gone by the second week of March. As the result a high water condition of all lower areas developed at this early date. This usually occurs the second week in April. This combination of factors brought about a very early return of some migrants. The first to appear in numbers . . . Red-wing and Rusty Blackbirds, Common Grackles, a few Wood Ducks and the early arrival of Hooded Mergansers in unusual numbers. These two possibly the most prevalent, however, they were joined by a few Mallards, Shovelers and Gadwalls. On March 21, 1966 in an attempt to get a portrait size shot of both male and female Hooded Mergansers, which by the way I did not accomplish, I noticed in the pond upon which I had my blind a predominance of males. In many groupings there was sometimes three, most of the time two courting one female. The observations were somewhat obscured by reeds and willows. One male bird appeared to be very aggressive in his intent and with the unusual effort to gain recognition he not only employed the usual dance observed by all that pursue the birdlore i.e., body tilted back, breast held high off the water, chest puffed considerably and the head brought over the upper tail coverts and to the front again in complete rhythm several times. This was followed by a very fast, aggressive preening of the feathers, not only upon his back, but

also the tail feathers which were spread broad in fan like fashion. Then momentarily oscillating his head left to right and back again over his back in an extremely fast and vigorous manner, the head tilted in such a manner as to be horizontal and held to the side always moving in a backward direction in relation to the bill. After this very active session of possibly five to ten seconds he would extend his wings up and back, extend the head out and hold neck horizontal to the water and with beak open go into a convulsive shimmy-like dance upon the water. It was not apparent whether this last action was to be part of the courtship ritual or a deterrent to competitive males which were not too close, however, about four to five feet distant. At the time of this display the female was not observed to go into the partially submerged head extended typical action prior to contact. This was a most interesting observation. The Red Wing area being a very excellent nesting area I have seen this display repeated several times and have a fair record recorded upon film. I am wondering if anyone else has had the opportunity to observe such courtship action and if so, what conclusions were made.—*Richard Behrens, Red Wing, Minnesota.*

* * *

RED-WINGED WHITE BIRD—On June 6, 1964, Dave Pearson, Harding Huber and I had been birding in Rock County, the object of our trip being the Blue Grosbeak. On the return trip, we headed for Salt Lake, the well-known shore-bird spot in Lac Qui Parle County. About eight or ten miles southeast of Salt Lake, we stopped to check out a strange looking white bird in a cat-tail marsh. The bird appeared to be completely white and was perched atop a cat-tail. We thought at first that it might be some kind of tern, although its posture was inappropriate for that determination. As we moved closer, it assumed various unusual poses, much as Red-winged Blackbirds do on their breeding grounds. We were still puzzled until the bird suddenly left its perch and flew directly toward us. As it did so, we noted frosty pink epaulettes, characteristic of the Red-winged Blackbird. This was apparently an incomplete albino Red-wing, with the muted scarlet of his "shoulder" patches just barely showing through as a light pink. Had this not been the case, we probably would not have been able to identify the bird with any certainty, except perhaps at very close range, where the beak, profile, etc. could be ascertained. This was the first time any of us had seen albinism in one of the normally black species of birds, although we had read of albino Common Crows being collected in Minnesota some years back.—*Ronald L. Huber, 480 State Office Bldg., St. Paul, Minnesota 55101.*

BOOK REVIEWS

THE GIANT CANADA GOOSE by Harold C. Hanson. Southern Illinois University Press. 1965. 226 pages, 74 b & w photographs. \$9.75.

For readers who delighted in Walkinshaw's *Sandhill Cranes* and Mayfield's *Kirtland's Warbler*, another volume of specialized scope has come forth.

Dr. Hanson's book, the by-product of more than twenty years' study on *Branta canadensis*, is of very special interest to Minnesotans. During January of 1962, Dr. Hanson trapped a sample of the Canada Geese which were overwintering at Silver Lake, Rochester, Minnesota. The birds were banded, weighed and measured while

“. . . the temperature held around zero and a strong wind blew." It was here and then that *Branta canadensis maxima*, the "Giant" Canada Goose, presumed extinct or more than thirty years, was rediscovered.

A re-check of Dr. Hanson's data and other available literature showed that *maxima* was far from extinct, with populations widely dispersed over the Canadian prairie provinces, northern plains states and upper Mississippi valley states.

Dr. Hanson's study of behavior, physiology, population dynamics and sex/age characteristics of *maxima* bears the distinction of being the only book

(to date) devoted exclusively to the Canada Goose. The author concludes the text with the indication that the data contained therein was not definitive but merely an examination of the known facts, thus encouraging further research by conservationists, biologists, bird lovers and sportsmen.

This book should be a particular stimulus to the avid Minnesota birders who visit Rochester periodically for observation of overwintering waterfowl. It is a challenge to try separating *maxima*, by size and coloration, from several of the smaller races present. Strongly recommended for the birder. *Ronald L. Huber.*

THE ORIGINAL WATER-COLOR PAINTINGS BY JOHN JAMES AUDUBON FOR THE BIRDS OF AMERICA, Houghton-Mifflin Company, 2 Park Street, Boston, Massachusetts. Publication Fall 1966. \$75.00, pre-publication \$55.00.

For more than a century The New York Historical Society has meticulously preserved the original paintings by John James Audubon for "The Birds of America." Now their entire collection is being reproduced for the first time in a magnificent two-volume edition by The New-York Historical Society and American Heritage.

Most people are not aware that the "Audubons" seen heretofore in books and prints are not reproduced directly from his original paintings. When Audubon painted his birds, no process existed for precise reproduction of works of art. Instead, craftsmen in London engraved a copy of each painting on a plate—at times adding background and changing compositions. The plates were printed in monochrome and colored by hand and published 140 years ago as the Double Elephant Folio. Recently a collector successfully bid \$65,000 for one of the last surviving copies. The surviving prints have often suffered from age and misuse. Subsequent reproductions of Audubon's birds have been copies of copies in an almost endless descent until we have lost sight of the essential qualities of the man's original art. As a result, few have ever been able to enjoy the full beauty and charm of the pictures as Audubon painted them.

Now a complete collection of the

paintings—over 1,050 birds in full color in the natural setting, representing nearly 500 species—will be available in bookstores this fall, bound in two volumes.

The amount of painstaking care and attention to detail that have gone into the book can be gauged from the fact that this unique edition has been four years in preparation and represents an investment of more than three-quarters of a million dollars. Each painting was photographed at least three times in color, using various light techniques. Subsequently proofs were checked directly against the originals at The New-York Historical Society by color experts from Europe working with the art staff of American Heritage. The printers then tried several techniques, dozens of inks and a variety of paper stocks before achieving the desired quality of reproduction.

The paper on which the pictures are printed is heavy vellum, acid-free, especially made to last for generations. The volumes are bound in Osnaburg buckram over heavy boards with color endsheets reproduced in facsimile from the famous English Cockerell design. A slipcase in matching Cockerell pattern protects the work, which totals 852 pages, measures 14 by 11 by 3 inches overall, and weighs 14 pounds.

Of the 431 pictures in the two volumes, 360 are one-page color prints. Sixty-four of the paintings cover two pages. Every one of these is printed on one sheet, often as a "gatefold," to avoid any center break in the picture.

Each of the 431 color plates is preceded or faced by a text block which provides scientifically accurate identifications of the birds and their floral background and includes relevant passages from Audubon's own writings.

Previous Audubon books, because they are reproductions of reproductions, do not show the artist's many marginal notations that reveal intimate aspects of Audubon's method and style. They are, of course, faithfully reproduced in the forthcoming edition.

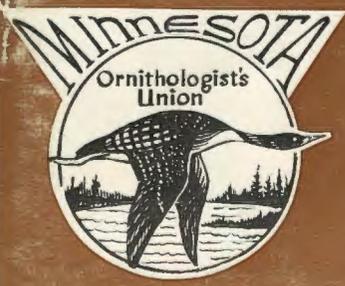
The saga of how the artist achieved his "The Birds of America" is described in a 7,500-word introduction by Marshall B. Davidson, former editor of publications at the Metropolitan Museum of Art in New York, and Senior Editor of *Horizon* magazine.

Vernon M. Kloss

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FRONT COVER

First Minnesota record of the Black Brant. Photographed by Frank R. Martin on May 21, 1966 at the Rice Lake National Wildlife Refuge, Aitkin County.

THE PRESIDENT'S PAGE

"Reverence for Life." This phrase came as a key to ethics and life for Albert Schweitzer as he rode on a native river barge through a herd of hippopotami in an African river in 1915.

Schweitzer believed that any reflective man would "devote himself to his life with reverence in order to raise it to its true value." For him, the true value of one's life was not to be found in the acquisition of power or pleasure or knowledge, but rather in the recognition of the right and will of living things to live. He was realistic enough to recognize that all living things are in the predicament of holding their existence at the cost of other existing things, but believed that it was the mistake of "civilization" to emphasize the struggle for power rather than the life expended in the struggle.

Whatever the complexities and difficulties of his ethical system, he believed all life, plant and animal, to be sacred. Under such a system one cannot take life thoughtlessly. To so revere life is to be truly civilized. Obviously, any "civilization" that destroys life needlessly is less than civilized and its members more barbaric than civilized.

Certainly the railroad company that indiscriminately sprays "weeds" together with healthy young oak trees along its right-of-way has little reverence for life. The country club which dumps its raw sewage into one of the Great Lakes sabotages its supposed sophistication. The city which sprays DDT for mosquitoes under pressure of telephone calls from irate citizens who want all outdoors as sterile as their living rooms, hardly considers the effects of DDT on other forms of life.

Perhaps Schweitzer was entirely out of touch with "progress," and anyone who espouses views such as his is a sentimentalist. But his point that knowledge and power have made true civilization harder rather than easier is well taken. The question is, have corporations, municipalities, state and local governments and private citizens begun to realize the barbarity of indiscriminate spraying and thoughtless pollution? If the answer is "Yes," it has been long in coming, and the further question, will the necessary measures be taken to stop such barbarism, remains unanswered. If the answer is "No," the future for the living things is indeed gloomy.

Fred Leshner

NEW CHECK LIST AVAILABLE

A new check list of Minnesota birds is now available. A copy is enclosed with this issue of **The Loon**. The list can be used with the forthcoming book on Minnesota birds soon to be published by the Minnesota Ornithologists Union. The large size with ample room for notes and the complete list of birds found in the state make this check list a valuable companion piece to any of the recent Field Guides used for identification. Additional copies of the check list can be ordered from the Union at 5 cents each plus 5 cents postage, or 50 for \$1.25 plus 15c postage.

"SYMBOL OF OUR NATION"

The United States Department of Interior, Fish and Wildlife Service has recently announced the release of a folder, **Symbol of Our Nation**. This folder concerns itself with the Bald Eagle and was produced as a part of the continuing effort to alert Americans to the dwindling number of our national bird. The folder contains a large painting of the Bald Eagle by Bob Hines. The simple design of the folder makes it suitable as a display piece for bulletin boards in schools and libraries or for framing and hanging on walls of offices and elsewhere. Copies of the folder are available from the Superintendent of Documents, U. S. Government Printing Office, Washington, D. C. at 50 cents per copy.

1966 Inland Bird Banding Association Convention in Minneapolis

At the invitation of the Minnesota Banders, and the Minnesota Ornithologists Union, the Inland Bird Banding Association will hold its annual Convention at the Museum of Natural History, University of Minnesota, in Minneapolis, on the weekend of November 18, 19, and 20th, 1966.

REGISTRATION

All Banders in the Inland Territory are urged to attend, and all interested members and guests of the MOU are cordially invited to attend. The registration deadline is November 10th, 1966, and should be made with the Arrangements Committee Chairmen. Registration fee is \$2.00. The Banquet to be held Saturday, November 19th, will cost \$3.00. Reservations for the Banquet should be made also with the Arrangements Committee Chairmen.

PROGRAM

Some of the outstanding speakers on the program are Earl B. Baysinger, Chief of the Bird Banding Laboratory, Laurel, Maryland; Chandler S. Robbins, Chief of the Migratory Bird Populations Station, Laurel, Maryland; and Dr. Dwain W. Warner, Curator of Ornithology, Museum of Natural History, University of Minnesota.

ARRANGEMENTS COMMITTEE CHAIRMEN: Mr. and Mrs. Fred Cruzen, 1441 Angelo Drive, Minneapolis, Minnesota 55422.

PROGRAM CHAIRMAN: Mrs. Murray Olyphant.

BANQUET COMMITTEE CHAIRMEN: Mr. and Mrs. Maury Goldberg.

1965 CHRISTMAS COUNT IN MINNESOTA

Raymond Glassel

The fifteen groups submitting Christmas counts counted 34,839 individual birds representing 79 species. Total for the previous year was 34,258 individuals and 76 species. One new bird was added to the count all time species list: the Barrow's Goldeneye at St. Paul. This makes 138 species seen on the Christmas counts since 1950. Other unusual birds seen were American Widgeon (second time), Ring-necked Duck, Winter Wren, Varied Thrush (second time) and Brown-headed Cowbirds.

New state high totals of individuals were 7400 Canada Geese (Rochester), 6 Bald Eagles (Plainview), and 1675 Common Redpolls (N. E. St. Paul). Seven species of ducks were counted which was the same number as the 1964 count compared to 13 species in 1963. Herring Gulls remained into early January accounting for their presence on the St. Paul, Plainview and Winona counts, an unusual situation.

Birdlife in general was scarce in northern Minnesota and this was reflected by Duluth's 1549 individuals which was just about half as many as the year before. Northern finches were more common than usual in southern Minnesota. Common Redpolls had a record invasion being recorded on all southern counts in good numbers but only 26 on the Duluth count and none at Hibbing.

	Hibbing	Moorhead	Duluth	Willmar	St. Cloud	Cedar Creek	Excelsior	Mpls.-North	N. E. St. Paul	St. Paul	Afton	Plainview	Winona	Rochester	Northfield	Total
Canada Goose									55	57		3		7400		7515
Blue Goose														1		1
Mallard Duck				2			22	15		4	9	7	55	200		314
Black Duck								6			2		10	8		26
American Widgeon														2		2
Ring-necked Duck							1									1
Common Goldeneye			14					13		80	3	170		34		314
Barrow's Goldeneye										1						1
Common Merganser												17				17
Goshawk						1				2						3
Sharp-shinned Hawk														1		1
Red-tailed Hawk							3		8	4	1	3	8	3	2	32
Red-shafted Hawk							1		6	1				1		9
Rough-legged Hawk							1		6	2				1		10
Bald Eagle									1		1	6	2			10
Marsh Hawk									2							2
Sparrow Hawk								2	3	2	2					9
Ruffed Grouse				1		1			1		2					5
Sharp-shinned Grouse		2														2
Ring-necked Pheasant			2	1	4			42	9	9	51	2	1	10	35	166
Gray Partridge			10													10
American Coot														2		2
Killdeer													4			4
Common Snipe							2		3				1			6
Glaucous Gull			3													3

	Hibbing	Moorhead	Duluth	Willmar	St. Cloud	Cedar Creek	Excelsior	Mpls.-North	N. E. St. Paul	St. Paul	Afton	Plainview	Winona	Rochester	Northfield	Total
Herring Gull		359								6		31	11			407
Mourning Dove							5			1		2	26			34
Screech Owl										1						1
Great Horned Owl			1	1			1		1	3	1					8
Snowy Owl	1		1													2
Barred Owl							1			3	2		1			7
Belted Kingfisher														1		1
Yellow-shafted Flicker										1					1	2
Pileated Woodpecker	1						5	1	4		4	1				18
Red-bellied Woodpecker							9		15	1	18	2	22	4	3	74
Red-headed Woodpecker							3		3			3	6			15
Hairy Woodpecker	8	5	6	6	3	1	32	4	23	9	17	1	11	5	5	136
Downy Woodpecker	7	2	17	9	2	4	44	7	18	13	18	5	22	13	4	185
Horned Lark							15						45			60
Gray Jay	1		1													2
Blue Jay	45		9	12	18	70	141	42	234	218	224	50	97	33	33	1226
Common Raven	3		2													5
Common Crow		4		6	1	12	44	13	123	107	67	8	44	19	22	470
Black-capped Chickadee	141	18	105	55	54	17	284	28	274	217	169	32	100	38	37	1569
Boreal Chickadee	3															3
Tufted Titmouse				1			3		3		7		2	4		20
White-breasted Nuthatch	4	10	4	10	11	2	72	9	90	49	60	11	34	14	9	389
Red-breasted Nuthatch	1		1	3	2		2	1		18	3		2	2	1	36
Brown Creeper							3			1	2		3	1		10
Winter Wren												1				1
Robin					1		2			2			13		1	19
Varied Thrush										1						1
Golden-crowned Kinglet					12		3							2	3	20
Bohemian Waxwing			20		14											34
Cedar Waxwing					6				56	23	10		13			108
Northern Shrike			1			2	2	1	6	1		1	2			16
Starling	147	158	430	3	8	3	134	59	620	599	167	75	312	78	25	2818
House Sparrow	320	210	252	160	100	245	1487	390	1253	514	1087	400	1385	50	200	8043
Western Meadowlark		1														1
Red-winged Blackbird				4					1		3	12	338			358
Rusty Blackbird										5					1	6
Common Grackle							1	1				1	6		3	12
Brown-headed Cowbird															1	1
Cardinal				8	5	3	136	7	32	36	21	15	189	26		478
Evening Grosbeak	51		272						23		2	11	11			370
Purple Finch		2		1			43	10	7	27	68	2	16	7		183
Pine Grosbeak	218		19		11		7		18	18	12					303
Hoary Redpoll							2			1						3
Common Redpoll		30	26	42	32	652	255	455	1675	388	309	200	333	45	215	4657
Pine Siskin		4	2		14		19		2	1	2		9	20		73
American Goldfinch					8		159	23	111	54	38	29	43	11	87	563
White-winged Crossbill										5						5
Slate-colored Junco			2	6	47	13	244	85	135	235	92	16	259	24	50	1208
Oregon Junco				1			2						2		2	7
Tree Sparrow							462	21	105	65	165	150	585	27	407	1987
White-throated Sparrow													2			2
Song Sparrow							1		1				1			3
Lapland Longspur											30			100		130
Snow Bunting	25								9		152		95	3		284
Total Species	17	13	24	19	20	14	38	23	37	41	37	32	43	35	24	79
Total Individuals	978	456	1549	334	349	1016	3695	1202	4936	2826	2773	1266	4120	8191	1148	34839

A DOUBLE-BROODED WOOD DUCK RECORD

W. J. Breckenridge

Our home, "The Brackens," was the scene of several somewhat unusual happenings among our nesting Wood Ducks during 1966. At the start of the season we had four duck houses erected on our three-acre place on the Mississippi River north of Minneapolis. During the season, however, we had seven nests of Wood Ducks containing the surprising number of 133 eggs, an average of 19 eggs per nest. The 7 nests actually contained 30, 26, 21, 17, 17, 13 and 9 eggs respectively. The enormous clutches were not normal, of course, but were those known as "dump" nests in which more than one duck laid eggs, probably due to their inability to locate satisfactory nest cavities elsewhere. An unusually high Wood Duck population was further indicated by the fact that two of the four houses brought off two broods during the spring. Furthermore, one duck was seen persistently trying to enter a hole in an oak tree cut by a Pileated Woodpecker. The hole was too small to admit the bird so I enlarged it with a hand axe and the cavity was soon occupied. In fact it appeared to please the fancy of at least two and probably three ducks since on April 16 it contained two eggs and on April 23, 20 eggs; 18 laid in 8 days!

The unusually large clutches of eggs unfortunately did not mean a large production of young in these nests. For instance, the nest with 30 eggs produced but 10 young. I believe the explanation is that the duck is unable to adequately incubate this large a clutch and those eggs outside the protection of her feathers became chilled. If the eggs remained undisturbed during incubation many more than 10 could be successfully brooded but each time she turned the eggs which she does frequently, other eggs would gradually be shifted beyond her protection and by hatching time a majority of the eggs would have been chilled to the point of killing the embryos or unduly slowing their development.

The story of one of the double-brooded houses is an interesting one. The house had been occupied on several preceding seasons. The very first Wood Duck seen in the spring of 1966 was a bird flying across the lawn and zooming up into the house on March 15. Later this bird was examined carefully with binoculars and seen not to be wearing a band. One morning after this bird had started incubating I noticed a pair of Wood Ducks alight on top of the house. The female peered into the house repeatedly before leaving obviously disturbed by the presence of the incubating duck. This female was banded and I presumed it was the bird which nested in the box in 1965. Near the end of the calculated incubation period of 30 days on May 7 I went up to band the incubating female and to my surprise the bird was already banded, #505-76601. Evidently this bird which I had banded in this box in 1963 had succeeded in displacing the original owner. Two days later, May 9, she brought off 10 young from the 13 egg clutch. On May 24, 15 days later, I noticed a female enter the house and on checking I found the nest contained 2 eggs. Four days later there were 7 more eggs and on June 5 the nest had 17 eggs. Obviously a second duck was laying in this nest also. On June 12 I carefully removed the house roof and, reaching down cautiously, I was able to expose the bird's leg as I have often done in banding Wood Ducks. In this case I read and reread the number, #505-76601, the same bird was again incubating 17 eggs in the same box from which she had brought off an earlier brood of 10. This probably meant that she had lost her earlier brood to predators or the young had joined another family. Later on July 2 she successfully brought off this brood of 12 young. This appears to be one of the rare instances on record where a Wood Duck has hatched two successive broods in a single season.

During the 1964 season I placed several duck houses of a new design given me by Mr. Kenneth Sather of Round Lake, Minnesota. These were "A" shaped and rather small. The bottom was 10" x 12", the total inside height was 11½" and the lower edge of the 3¼" door was only 6¼" from the floor. Ducks were seen to enter these houses but after turning about several times and finding they could peer out of the door opening while sitting on the nest they would leave and none of these houses were used that season. Early in the 1966 season I removed the bottoms of two of these houses and joined them together by inverting the one and blocking its entrance making a diamond shaped house with the lower unit generously filled with rotted wood. This gave the house greater depth and early in the season it was occupied. It must have proved eminently satisfactory since it became the dump nest mentioned above as having 30 eggs and which was used for a second brood later in the season.

After a number of years of experience with Wood Duck houses I find the most successful method to safeguard houses against predation by raccoons is to place them on a sturdy pole 12'-15' high with a 3'-4' metal band about the base of the pole. If these are set well away from surrounding trees this method also assures protection against squirrels occupying the houses.

These experiences are an indication of how readily Wood Ducks will take advantage of man-made nesting boxes. In fact several families in the Minneapolis-St. Paul area are reporting equally good or even better success with these birds. With the extensive habitat available throughout much of Minnesota many more families should be able to develop with little effort equally exciting and productive colonies of these colorful ducks.—8840 West River Road, Minneapolis, Minnesota.

THE SPRING SEASON

Ronald L. Huber

Unusual weather played a part in the Spring Migration this year. A warm February, with rain on several occasions, and a warmer-than-usual March brought in a pretty good migration of water-birds during mid-March. Then cold and rain during April and May retarded some of the passerine migration although a few species had already arrived quite early. Observers around the Twin Cities area were somewhat disappointed with the migration, but the delayed arrival of warm weather resulted in some very interesting late dates for transient species.

Common Loon: earliest 3-15 Wright Co, EGC, 3-31 Stearns Co, RPR and 4-2 Washington Co, WWL.

Red-necked Grebe: earliest 4-8 Agassiz National Wildlife Refuge, DLO, 4-14 Morrison Co, LSR and 4-15 Minneapolis, VL and Duluth, JCG.

Horned Grebe: earliest 4-1 Minneapolis, RBJ, 4-3 Two Harbors, RK and 4-10 Hennepin Co, EMB, MHM.

Eared Grebe: earliest 4-16 White Bear, MIG, 4-22 to 4-27 Duluth, JCG et al and 4-29 Agassiz National Wildlife Refuge, DLO.

Western Grebe: earliest 4-16 Stevens Co, ES, 5-5 Lake Traverse, DB and Agassiz National Wildlife Refuge, DLO.

Pied-billed Grebe: earliest 3-13 Rice Co, OAR, 3-17 Wabasha, DGM and 3-19 Goodhue Co, EMB and Hennepin Co, RBJ.

White Pelican: 4-16 Lake Traverse, EHH and Lake Shetek, HSH; 4-21 Agassiz National Wildlife Refuge, DLO; 4-24 McLeod Co and Big Stone Co, VL; 4-25 Rice Co, EWJ; 5-1 Agassiz National Wildlife Refuge, DLO; 5-5 Lake Traverse, DB; 5-13 Agassiz Refuge, DLO; 5-15 Morrison Co, LSR; 5-19 Jackson Co, NMH; 5-21 (BL)

and 5-28 (EMB) Lac Qui Parle Co.

Double-crested Cormorant: 4-14 Agassiz National Wildlife Refuge, DLO; 4-16 Stevens Co, ES; 4-17 Duluth (JGH), Wabasha (DGM), Goodhue Co (EMB), Dakota Co (EMB) and Rice Lake National Wildlife Refuge (CEP); 4-23 Dakota Co, MIG, ACR and Goodhue Co, BL, RBJ; 4-24 Big Stone Co, VL; 4-25 Rice Co, EWJ; 4-29 Morrison Co, LSR and Wabasha Co, DGM; 4-30 Sibley Co, RBJ; 5-1 Hennepin Co, CKS and Rice Co, OAR; 5-5 Lake Traverse, DB; 5-7 Grant Co, MVS; 5-15 Cass Co, EBH; 5-16 Agassiz Refuge, DLO; 5-19 Jackson Co, NMH; 5-21 Salt Lake, BL; 5-22 Winona, GD, GG, FV; 5-24 Lac Qui Parle Co, EHH.

Great Blue Heron: earliest 3-14 Benton Co, NMH; 3-17 Rice Co, OAR; 3-18 Stearns Co, RPR.

Green Heron: 4-23 Dakota Co, EMB, RBJ, BL and Hennepin Co, EMB; 4-24 Kanabec Co, RHJ; one very northerly record; 5-16 East branch Baptism River, Lake Co, JGH.

Common Egret: earliest 4-4 Rice Lake, OAR; 4-9 Osakis, ML; 4-10 Olmsted Co, JPF and Agassiz Refuge, DLO.

Black-crowned Night Heron: earliest 4-4 Stevens Co, JAH; 4-9 Lake Wilson, HSH; 4-14 Hennepin Co, MHM.

Yellow-crowned Night Heron: 5-7 Red Wing, MIG; 5-26 La Crescent, GD, GG, FV; 5-30 Rochester, CMJ.

Least Bittern: 5-14 Washington Co, WWL; only report.

American Bittern: earliest 4-10 Washington Co, ACR; 4-18 Collegeville, RPR and Douglas Co, MVS; 4-21 Two Harbors, RK, Norman Co, GSM and Agassiz Refuge, DLO.

Whistling Swan: earliest 3-15 Wright Co, EGC, Carver Co, EWJ and Stevens Co, RAG; 3-18 Winona Co, 450, KK; 3-20 Nobles Co, HSH; Don Gray, manager of the Upper Mississippi Wildlife Refuge, reports some 3500 swans at Weaver on 4-8; latest 5-3 St. Louis Co, NJH; 5-7 Hennepin Co, BL and 5-8 Stevens Co., JAH.

Canada Goose: earliest 3-9 Nobles Co, HSH; 3-14 Pope Co, WH and 3-15 Dakota and Hennepin Co's FN/MAS.

BLACK BRANT: first Minnesota record; one adult spent several weeks at the Rice Lake National Wildlife Refuge near McGregor, Minnesota where it was found by refuge manager Carl E. Pospichal; also seen by RG, WRP, HFH, RLH and excellent photos taken by Frank Martin of the U.S. F. & W. S. The bird was last seen on May 31. (See front cover).

White-fronted Goose: 3-29 Lac Qui Parle Co, 5, EHH.

Snow-Blue Goose: earliest 3-16 Washington Co, WHL; 3-17 Beltrami Co, JAM and 3-18 Nobles Co, HSH, latest 4-22 Nobles Co, HSH; 4-25 Rice Co, EWJ and 5-3 Rice Lake Refuge, 150, CEP.

Mallard: earliest 3-4 Wabasha, DGM and Rice Co, OAR; 3-7 Cottonwood, MMM; 3-13 Stearns Co, RPR.

Black Duck: earliest 3-13 Hennepin Co, EMB; 3-19 Ramsey Co, BL; 3-25 Dakota Co, DB and Wabasha Co, DGM.

Gadwall: earliest 3-12 Cottonwood, HSH; 3-13 Rice Co, OAR; 3-19 Dakota Co, EMB.

Pintail: earliest 3-4 Wabasha, DGM; 3-10 Dakota Co, RBJ and 3-12 Cottonwood, 100 plus, HSH.

Green-winged Teal: earliest 3-12 Dakota Co, RBJ; 3-16 Rice Co, GNR; 3-19 Dakota Co, BL and Rice Co, OAR.

Blue-winged Teal: earliest 3-13 Hennepin Co, EMB; 3-16 Rice Co, GNR and 3-19 Rice Co, OAR.

EUROPEAN WIDGEON: a fully adult male was seen and photographed by R. Behrens of Red Wing during late April in the backwaters of North Red Wing, Wisconsin; Mr. Behrens showed the bird to Wally Jiracek and RLH on 4-21 at which time the bird flew from its pond westward through the trees to the Mississippi River and possibly across the river into Minnesota. The bird was seen a few days later by HFH, WRP, RBJ and others, still at North Red Wing. See Notes of Interest in the June issue.

American Widgeon: earliest 3-15 Rice Co, OAR; 3-15 Nobles Co, HSH; 3-18 Wabasha Co, DGM; 3-19 Hennepin Co, VL and Dakota Co, EHB.

Shoveler: earliest 3-18 Nobles Co, HSH; 3-19 Rice Co, GNR and Dakota Co, BL; 3-21 Rice Co, OAR.

Wood Duck: earliest 3-3 Nobles Co, HSH; 3-10 Dakota Co, RBJ; 3-11 Washington Co, DH.

Redhead: earliest 3-10 Nobles Co, HSH; 3-12 Dakota Co, RBJ and Cottonwood, 100's, HSH; 3-13 Dakota Co, EMB.

Ring-necked Duck: earliest 3-10 Nobles Co, HSH; 3-12 Cottonwood, HSH; 3-12 Rice Co, 200, OAR; 3-13 Dakota Co, EMB.

Canvasback: earliest 3-14 Rice Co, OAR and Dakota Co, RBJ; 3-16 Wabasha, DGM and Dakota Co, EMB.

Greater Scaup: earliest 3-26 Dakota Co, RBJ; 4-8 Washington Co, DS and 4-12 Washington Co, WWL; latest 4-24 St. Louis Co, PH; 4-30 Cook Co, MAF; 5-10 Dakota Co, DB, EHH.

Lesser Scaup: earliest 3-3 Nobles Co, HSH and St. Paul, RLH; 3-5 Wabasha, DGM; on 3-31 HSH reports 1000 in Nobles Co.

Common Goldeneye: earliest 3-1 Rice Lake Refuge, CEP; 3-8 Nobles Co, HSH.

BARROW'S GOLDENEYE: on 3-1 the same adult male (?) seen in January near the Pig's Eye Sewage Disposal Plant in St. Paul was seen again by BL near Navy Island in St. Paul on the Mississippi River. Another report, without details, was received on 3-25 from northeast Minneapolis on the Mississippi River near Hall's Island, in company with the well-known wintering raft of Common Goldeneyes; perhaps also the same bird?

Bufflehead: earliest 3-12 St. Louis Co, JOT; 3-13 Washington Co, DH; 3-15 Wabasha, DGM; latest 5-14 Pope Co, RPR; 5-20 Minneapolis, VL; 5-21 Duluth, JCG.

Oldsquaw: 3-17 Two Harbors, 15, RK; 3-31 Hennepin Co, 1, RBJ; 4-14 Duluth, 13, JCG; 4-16 Duluth, 2, JCG; 4-16 Cook Co, 8, MOP; 4-23 Cook Co, 30, MOP; 4-27 Two Harbors, 10, RK; 5-28 Two Harbors, 2 pair, RG, DG.

White-winged Scoter: 5-31 Lake Co, 1 male, 1 female, JGH; only report.

Ruddy Duck: earliest 3-10 Dakota Co, RBJ; 3-21 Rice Co, OAR; 4-5 Hennepin Co, MHM.

Hooded Merganser: earliest 3-5 Wabasha, DGM; 3-15 Rice Co, OAR.

Common Merganser: earliest 3-3 Rice Co, OAR; 3-12 Nobles Co, HSH; 3-13 Hennepin Co, EMB.

Red-breasted Merganser: earliest 3-15 Wabasha Co, DGM; 3-18 Stevens Co, RAG; 3-31 Hennepin Co, RBJ.

Turkey Vulture: earliest 3-16 Hennepin Co, FN/MAS; 3-20 Winona Co, GD, GG, FV; 4-2 Stearns Co, NMH.

SWALLOW-TAILED KITE: 4-29 Marine-on-St.-Croix, Washington Co, one bird found DOR on State Hwy 95 by Charles P. Stone and his son, Charles, Jr. The specimen was taken to the Minnesota Museum of Natural History on Minneapolis campus where it is now on display.

Goshawk: 3-5 Hennepin Co, EMB; 3-12 Stearns Co, RPR; 3-28 Sherburne Co, NMH; 4-8 Agassiz Refuge, DLO; 4-18 Agassiz Refuge, DLO; 5-8 Frontenac, MIG; 5-26 Bemidji, EBH.

Sharp-shinned Hawk: earliest 3-28 Sherburne Co, 15, NMH; 4-8 Cook Co, MAF; 4-13 Agassiz Refuge, DLO.

Cooper's Hawk: earliest 3-19 Stearns Co, RPR; 3-23 St. Louis Co, WJM; 3-31 Stearns Co, RPR; 4-2 Cokato, EGC.

Red-tailed Hawk: earliest 3-7 Stearns Co, RPR; 3-7 Rice Co, OAR; 3-10 Carver Co, EWJ; 3-13 Hennepin Co, EMB.

HARLAN'S HAWK: 5-1 Colby Lake, Washington Co, HFH; good details; this hawk is difficult to identify and it appears that the forthcoming book on Minnesota birds will recognize only specimens that have been collected.

Red-shouldered Hawk: more reports than usual; 3-19 Dakota Co, RBJ; 3-19 Stearns Co, RPR; 3-21 Ramsey Co, BL; 3-28 Olmsted Co, JPF; 4-4 Ramsey Co, ACR; 4-6 Goodhue Co, ACR; 4-9 Pope Co, JAH; 4-22 Stevens Co, ES; 5-10 Wabasha Co, GD, GG, FV; 5-14 Collegeville, NMH; 5-18 Dakota Co, EWJ; 5-31 Wabasha Co, EHH.

Broad-winged Hawk: earliest 4-10 Ramsey Co, ACR; 4-18 Rice Lake Refuge, CEP; 4-23 Goodhue Co, RBJ; 4-23 Minneapolis, EMB; 4-23 Hastings, MIG; 4-23 Orr, St. Louis Co, NJH.

Swainson's Hawk: 3-19 Stearns Co, 1, RPR (amazingly early; details do not preclude an immature Red-tail); 4-11 Luverne, Rock Co, 1, RO, BA; 4-21 Hartville, Dakota Co, 1, RLH; 5-21 Lac Qui Parle Co, BL.

Rough-legged Hawk: latest 4-14 Agassiz Refuge, DLO; 4-23 Dakota Co, RBJ; 4-23 Hastings, ACR; 4-26 Dakota Co, EMB.

Golden Eagle: 3-13 Minnesota City, Winona Co, 1 trapped, *fide* GD.

Bald Eagle: 3-6 Two Harbors, RK; 3-6 St. Louis Co, JKB; 3-6 Chisago Co, DH; 3-13 to 3-27 Wabasha Co, great numbers, KK; 3-13 Washington Co, DH; 3-15 St. Louis Co, 2, Ray Sanbeck; 3-15 Hennepin Co, EWJ; 3-16 Stevens Co, RAG; 3-16 Washington Co, WHL; 3-17 Carlton Co, JCG; 3-18 KK says "on Mississippi River all month of March," Wabasha and Winona Co's; 3-17 Stearns Co, RPR; 3-21 JAM reports "by 3-21 about 10 on territory, Itasca and Cass Co's,"; 3-24 Wabasha Co, DGM; 4-1 (3) and 4-3 (7) Rice Lake Refuge, CEP; 4-3 Red Wing, ES; 4-5 Wabasha, 8 or 10, DGM; 4-7 St. Louis Co, 1, NJH; 4-8 Duluth, 1 ad, DNH; 4-8 Agassiz Refuge, 4, DLO; 4-12 Walker, Cass Co, EBH; 4-23 Wabasha, 1, DGM; 5-26 Cook Co, HH.

Marsh Hawk: earliest 3-6 Olmsted Co, JPF; 3-7 Nobles Co, HSH; 3-8 Stearns Co, RPR.

Osprey: earliest 4-2 Goodhue Co, DB; 4-16 Lake Phalen, MIG; 4-18 Kanabec Co, RHJ and Beltrami Co, JAM.

GYRFALCON: 3-10 Shakopee, Scott Co, RPB; see Notes of Interest in June issue.

Peregrine Falcon: 3-20 Hennepin Co, TEM; 4-5 Hennepin Co, 1, MHM; 5-6 Agassiz Refuge, 1, DLO; 5-7 Dakota Co, 1, BL, and Washington Co, EMB; 5-15 Hennepin Co, EMB.

Pigeon Hawk: earliest 4-12 Crow Wing Co, MSB; 4-27 Two Harbors, RK; 4-29 Stearns Co, NMH and Cook Co, MOP.

Sparrow Hawk: earliest 3-2 Rice Co, OAR; 3-12 Wabasha, DGM; 3-13 Washington Co, DH.

Ruffed Grouse: one report in March, Itasca Co, ACR; five reports in April from Goodhue, Olmsted, St. Louis, Aitkin and Kanabec Co's; nine reports in

May from Dakota, Wabasha, Stearns, Winona, Cook and St. Louis Co's.

Sharp-tailed Grouse: 3-20 St. Louis Co, 4, LTM; listed as resident in Rice Lake Refuge, 7, CEP.

Bobwhite: 3-8 Wabasha, 8, DGM; 4-25 Olmsted Co, 1, FGD; 5-15 Wabasha Co, 3, EMB; 5-25 Beltrami Co, MK, northernmost record for state, no details, possibly a transplant?

Chukar: two reports from White Bear in mid-May and one was photographed in south Minneapolis, appeared in Richfield newspaper; all are presumed escapees from some local game farm.

Gray Partridge: 3-1 Nobles Co, 2, HSH; "seen in March" Agassiz Refuge, DLO; "fairly common this spring," Rice Co, OAR; 4-13 Ada, Norman Co, 3, BRK; 5-3 Wabasha, 2, DGM; 5-21 Norman Co, 2, BL.

Sandhill Crane: 4-4 Carlos Avery Refuge, Anoka Co, 1, WHL; 4-13 Borup, Clay Co, thousands, BRK; 4-14 Rice Lake Refuge, 2, CEP; 4-24 Agassiz Refuge, 30, DLO; 5-1 Agassiz Refuge, 45, DLO; 5-13 Marshall Co, 2, EBH; 5-16 Agassiz Refuge, 4, DLO.

Virginia Rail: earliest 4-27 Rice Co, OAR; 5-1 Rochester, JPF; 5-5 Forest Lake, Washington Co WHL; 5-9 Stevens Co, ES.

Sora: earliest 4-23 Hastings, 2, ACR; 5-1 Washington Co, 4, BL, Rochester, JPF, Stearns Co, NMH, Stevens Co, ES, Carlos Avery Refuge, WHL.

Yellow Rail: 5-21 usual spot south of Waubun on the Becker/Mahnomen Co line, BL, RG.

Common Gallinule: 5-14 LaCrescent, 1, EMB; 5-31 Goodhue Co, 1, EHH.

Semipalmated Plover: earliest 4-6 Dakota Co, ACR; 4-13 Goodhue Co, ACR; 4-23 Minneapolis, EMB; latest 5-18 Sauk Centre, RPR; 5-19 Lyon Co, NMH; 5-26 Washington Co, BL.

Piping Plover: 5-5 (2, JCG) and 5-28 (1, DB) Duluth, St. Louis Co.

American Golden Plover: earliest 5-8 Nobles So, HSH; 5-14 Stevens Co, 80, ES; 5-19 Jackson Co, 571, NMH; latest 5-24 Renville Co, DB, EHH; 5-29 Traverse Co, EMB; 5-30 Nobles Co, HSH.

Black-bellied Plover: earliest 5-16 Duluth, JCG; 5-19 Mille Lacs Lake, NMH; 5-21 Norman Co, BL; latest 5-24 Lac Qui Parle, DB, EHH; 5-29 Lake Traverse, EMB.

Ruddy Turnstone: earliest 5-10 Carver Co, MHM, VL; 5-16 Duluth, JCG; 5-21 Norman and Lac Qui Parle Co's, BL; latest 5-24 Salt Lake, EHH; 5-26 Agassiz Refuge, DLO; 5-29 Lake Traverse, EMB.

American Woodcock: earliest 3-19 Goodhue Co, BL; 3-26 Stearns Co, NMH; 3-29 Washington Co, WHL.

Upland Plover: earliest 5-7 Nobles Co, HSH; 5-11 Wright Co, EGC; 5-17 Polk Co, GSM.

Spotted Sandpiper: earliest 4-8 Washington Co, ACR; 4-24 Washington Co, WWL; 4-28 Knife River, RK.

Solitary Sandpiper: earliest 4-8 Washington Co, ACR; 4-30 Minneapolis, EMB and Collegeville, RPR; 5-5 St. Paul, BL; latest 5-10 Goodhue Co, EHH; 5-10 Wabasha Co GD, GG, FV; 5-17 Bemidji, EBH; 5-19 Dakota Co, ACR.

Willet: 4-30 Dakota Co, DB; 5-5 Duluth, JCG; 5-14 Frontenac, MIG.

Greater Yellowlegs: earliest 4-11 Rock Co, RO; 4-13 Norman Co, BRK and Agassiz Refuge, DLO; 4-16 Dakota and Washington Co's, BL and Lac Qui Parle Co, EHH; latest 5-4 Douglas Co, MVS; 5-9 Rice Lake Refuge, CEP; 5-26 Agassiz Refuge, DLO.

Lesser Yellowlegs: earliest 4-9 Minneapolis, EMB; 4-9 Goodhue Co, DB; 4-13 Rice Lake Refuge, CEP; 4-16 Washington and Dakota Co's, BL and Lac Qui Parle Co, EHH; latest 5-8 Winona Co, GD, GG, FV; Kanabec Co, RHJ and Rochester, JPF; 5-19 Douglas Co, MVS and Jackson Co, NMH; 5-21 Washington Co, VL.

Pectoral Sandpiper: earliest 4-9 Stevens Co, JAH; 4-16 Washington and Dakota Co's, BL and Hennepin Co, EMB; latest 5-17 Wright Co, EGC; 5-18 Sauk Centre, RPR; 5-19 Jackson Co, NMH and Dakota Co, ACR.

White-rumped Sandpiper: earliest 4-29 Agassiz Refuge DLO (early!); 5-15 Carver Co, VL; 5-17 Dakota Co, EMB; latest 5-19 Dakota Co, ACR and Jackson Co,

NMH; 5-21 Carver Co, EHH and Lac Qui Parle Co, BL; 5-24 Carver Co, DB.

Baird's Sandpiper: earliest 4-16 Salt Lake, EHH; 4-19 Dakota Co, ACR; 5-5 Lac Qui Parle Co, DB; latest 5-14 Frontenac, MIG; 5-15 Washington Co, EMB; 5-19 Jackson Co, NMH.

Least Sandpiper: earliest 4-8 Dakota Co, ACR; 4-24 Washington Co, WWL; 5-5 Washington Co, BL; latest 5-19 Jackson Co, NMH; 5-24 Lac Qui Parle Co, DB; 5-26 Dakota Co, BL.

Dunlin: earliest 5-11 Washington Co, EMB; 5-14 Carver Co, EHH; 5-15 Washington Co, DB and Scott Co, JRR; latest 5-18 Sauk Centre, 42, RPR; 5-19 Jackson Co, NMH; 5-22 Carver Co, MHM.

Long-billed Dowitcher: 5-7 Carver Co, RBJ and 5-11 Washington Co, 2, EMB; both records based on call-notes.

Short-billed Dowitcher: 5-13 (15, BL) and 5-15 (DB, EMB, 4) Washington Co; both records based on call-notes.

Dowitcher, species?: this is the catch-all where I am forced to place all Dowitcher observations that are not accompanied by call-note data. Bill length and flank-barring are not reliable field marks; 4-29 Carver Co, 2, EHH, DB; 4-30 Ada, Norman Co, 4, BRK; 5-10 Carver Co, 6, VL; 5-14 Carver Co, 4, EHH; 5-18 Sauk Centre, 3, RPR; 5-19 Jackson Co, 10, NMH; 5-21 Ramsey Co, ACR.

Stilt Sandpiper: 5-13 Dakota and Washington Co's, BL; 5-19 Jackson Co, NMH; 5-24 Swift Co, DB, EHH; 5-28 Lac Qui Parle, EMB.

Semipalmated Sandpiper: earliest 4-29 Dakota Co, DB; 5-5 Dakota and Washington Co's, BL; 5-10 Carver Co, MHM, VL; latest 5-19 Lyon Co, NMH; 5-21 Ramsey Co, ACR; 5-26 Dakota and Washington Co's, BL.

WESTERN SANDPIPER: one of our rarest shorebirds; 5-17 Minneapolis, 1, EHH (no details).

Marbled Godwit: earliest 4-11 Rock Co, RO; 4-17 Wilkin Co, EHH; 4-21 Polk Co, GSM.

Hudsonian Godwit: 5-5 Washington Co, BL; 5-15 Washington, DB; 5-18 Sauk Centre, 18, RPR; 5-19 Jackson Co, NMH and Douglas Co, 10, MVS; 5-20 Roscoe,

Stearns Co, JIM; 5-29 Traverse Co, EMB.

Sanderling: earliest 5-13 Hennepin Co, DB; 5-15 Dakota Co, EMB and Washington Co, ACR; 5-16 Duluth, 50, JCG; latest 5-17 Wright Co, EGC and Washington Co, EHH; 5-21 Ramsey Co, ACR and Duluth, JCG.

American Avocet: 5-24 Salt Lake, EHH, DB; 5-29 Lake Traverse, EMB.

Wilson's Phalarope: earliest 4-20 Carver Co, DB; 4-23 Stevens Co, JAH; 4-25 Big Stone Co, ES.

Northern Phalarope: 5-19 Jackson Co, NMH; 5-24 Salt Lake, EHH, DB and Stevens Co, JAH; 5-25 Dakota Co, RG.

Glaucous Gull: latest 3-6 Clifton, St. Louis Co, JKB; 4-22 Willmar, Kandiyohi Co, 1, RG (exceptional; good details); 4-27 Duluth, St. Louis Co, JPP.

Ring-billed Gull: earliest 3-14 Dakota Co, RBJ; 3-16 Hennepin Co, EMB; 3-22 Hennepin Co, FN/MAS.

Franklin's Gull: earliest 3-15 Stearns Co, RPR; 3-19 Kandiyohi Co, RG; both very early records; 3-30 Nobles Co, HSH.

Bonaparte's Gull: earliest 4-15 Minneapolis, RBJ; 4-16 Minneapolis, EMB; 4-17 St. Paul, BL; latest 5-17 French River, St. Louis Co, JGH; 5-25 Stearns Co, NMH; 5-28 Duluth, JCG.

Forster's Tern: earliest 4-16 Minneapolis, EMB; 4-17 Wabasha Co, DGM; 4-18 Minneapolis, RBJ.

Common Tern: earliest 4-16 Washington Co, WWL; 4-17 Hennepin Co, VL; 4-28 Hennepin Co, MHM.

Caspian Tern: 5-11 Minneapolis, EHH, DB; 5-21 Mille Lacs Lake, RLH; 5-25 Stearns Co, NMH; 5-30 Forest Lake, WHL.

Black Tern: earliest 4-29 Ramsey Co, ACR; 4-30 St. Paul, BL; 5-2 Ramsey Co, ACR, RLH; 5-7 Frontenac, EHH, Ramsey Co, TKS and Hennepin Co, RBJ.

Mourning Dove: earliest 3-4 Ramsey Co, ACR; 3-6 Hennepin Co, RBJ; 3-10 Wabasha Co, DGM.

Yellow-billed Cuckoo: earliest 5-10 Rochester, JPF; 5-31 Nobles Co, HSH and Winona Co, EHH.

Black-billed Cuckoo: earliest 5-10 Rochester, JPF; 5-25 Minneapolis, VL, EMB; 5-28 Minneapolis, EHH.

Screech Owl: 3-1 Washington Co, DS; 4-17 Wabasha Co, GD, GG, FV; 4-30 Collegeville, RPR; 5-7 Minneapolis, DB.

Snowy Owl: latest 3-1 Rice Co, OAR; 3-7 Duluth, JKB; 3-11 Hibbing, HM; 3-26 Morris, RAG; 4-14 Collegeville, RPR.

Hawk-Owl: 3-1 (DB, EHH) and 3-12 (BL) Meadowlands, St. Louis Co; only report.

Great Gray Owl: 5-23 Gunflint Lake, Cook Co, one captured HH's pet Woodchuck; only report.

Long-eared Owl: 4-24 Cook Co, MOP; only report.

Short-eared Owl: 3-12 Pine Co, BL; 3-20 Eyota, FGD; 4-2 Hennepin Co, DB; 4-4 Hennepin Co, EMB, EHH.

Boreal Owl: 4-6 Duluth, 1 found dead, KS.

Saw-whet Owl: 3-26 Duluth, 1 found dead, JCG; 4-14 Duluth, 1 found dead, JCG; 4-22 Duluth, 1 heard on territory, JCG.

Whip-poor-will: earliest 5-7 Hennepin Co, DB; 5-8 Winona, GD, GG, FV; 5-12 Olmsted Co, 1 banded, JPF.

Common Nighthawk: earliest 4-23 St. Cloud, NMH (early); 5-7 Frontenac, EHH; 5-8 Winona, GD, GG, FV.

Chimney Swift: earliest 4-16 Morris, JAH; 4-23 Red Wing, MIG; 4-25 Minneapolis, RBJ.

Ruby-throated Hummingbird: earliest 5-5 Winona, GD, GG, FV; 5-8 Nobles Co, HSH; 5-9 Olmsted Co, JPF.

Yellow-shafted Flicker: earliest 3-14 Olmsted Co, JPF and Pope Co, WH; 3-17 Rice Co, OAR; 3-18 Washington Co, BL.

Red-bellied Woodpecker: usual records from southeastern Minnesota plus one record from Mora, Kanabec Co on 5-9 by RHJ.

Red-headed Woodpecker: earliest 4-2 Goodhue Co, EMB; 4-9 Minneapolis, EMB; 4-23 St. Paul, MIG.

Yellow-bellied Sapsucker: earliest 3-22

Washington Co, DH; 3-29 Minneapolis, FN/MAS.

Eastern Kingbird: earliest 4-22 Hennepin Co, CKS; 4-23 Dakota Co, MIG; 4-26 Hastings, ACR.

Western Kingbird: earliest 5-5 Polk Co, GSM; 5-17 St. Cloud, NMH; 5-18 Stevens Co, JAH.

Great Crested Flycatcher: earliest 4-23 Hastings, MIG; 5-3 Stearns Co, RPR; 5-7 Goodhue Co, BL; 5-7 Nobles Co, HSH.

Eastern Phoebe: earliest 3-13 Collegeville, RPR; 3-27 Wright Co, EGC; 4-2 Rice Lake Refuge, CEP.

Yellow-bellied Flycatcher: earliest 5-7 Nobles Co, HSH; 5-8 Stevens Co, JAH; 5-15 Mora, RHJ; 5-15 Frontenac, MIG.

Traill's Flycatcher: earliest 5-4 Olmsted Co, JPF; 5-8 Wright Co, EGC; 5-12 Morrison Co, LSR.

Least Flycatcher: earliest 5-4 Olmsted Co, JPF; Minneapolis, EHH and Morris, JAH; 5-5 Wabasha Co, GD, GG, FV and Minneapolis, EMB; 5-6 Polk Co, GSM, Minneapolis, DB and Hennepin Co, MHM.

Eastern Wood Pewee: earliest 4-10 Bemidji, EBH and 4-14 Douglas Co, MVS, both records almost certainly Eastern Phoebes; next record 5-4 Hennepin Co, MHM; any April record for the Wood Pewee would be unusual.

Olive-sided Flycatcher: earliest 5-9 Minneapolis, EHH; 5-10 Olmsted Co, JPF; 5-10 Minneapolis, VL, MHM; 5-13 Collegeville, RPR.

Tree Swallow: 3-22 Dakota Co, FN/MAS (early!); 4-9 Winona, FGD; 4-10 Winona, GD, GG, FV.

Bank Swallow: earliest 4-20 Crow Wing Co, MSB; 4-22 Wabasha, DGM; 4-23 Dakota Co, MIG, Goodhue Co, RBJ, Minneapolis, EMB and Scott Co, JRR.

Rough-winged Swallow: earliest 4-20 Winona, GD, GG, FV; 4-23 Minneapolis, EMB and Goodhue Co, RBJ; 4-29 Scott Co, EHH, Hennepin Co, DB.

Barn Swallow: earliest 4-14 Bemidji, JAM; 4-23 Goodhue Co, RBJ, BL, EMB, Hastings, MIG; 4-24 Wright Co, EGC.

Cliff Swallow: earliest 4-6 Wabasha Co, 24, DGM; 4-14 Bemidji, JAM; 4-23 Hast-

ings, MIG.

Purple Martin: earliest 3-29 Collegeville, RPR; 3-31 Minneapolis, MHM; 4-3 Fari-bault, OAR.

Gray Jay: 3-28 Rice Lake Refuge, CEP; 4-9 Two Harbors, RK; 4-9 Cook Co, MOP.

Black-billed Magpie: latest 3-11 Polk Co, GSM; 3-16 Rice Lake Refuge, CEP.

Boreal Chickadee: 4-30 Lake Co, 1, RK; 5-21 Lake Co, 2, RK; 5-31 Cook Co, HH.

Tufted Titmouse: scarcer than usual; 3-1 Minneapolis, EWJ; 3-10 Wabasha, DGM; 3-26 Hennepin Co, BL; 5-15 Winona Co, JRR; 5-20 Winona Co, GD, GG, FV.

Red-breasted Nuthatch: five reports in Twin Cities area from 3-17 to 4-6; northward movement noted from 4-30 to 5-22; on latter date seen in St. Cloud by NMH, latest date for southern part of state this spring; reached Cook Co on 5-25, HH.

Brown Creeper: five March records for southern part of state; first northward movement noted 4-3 Douglas Co, MVS and 4-16 Beltrami Co, EBH; reached Cook Co on 4-19, MOP; vast majority of the May records were from northern part of state; latest date for southern part of state this spring: 5-18 Hennepin Co, MHM and 5-19 Washington Co, ACR.

House Wren: earliest 4-8 Rochester, CMJ (early!); 4-17 Nobles Co, HSH; 4-29 Washington Co, DS, BL.

Winter Wren: 3-24 Washington Co, JO; 4-3 Washington Co, DH; 4-6 Goodhue Co, ACR, BL.

Long-billed Marsh Wren: earliest 3-26 Morris, RAG (early!); 4-23 Dakota Co, MIG; 5-10 Rochester, JPF and Ramsey Co, ACR.

Short-billed Marsh Wren: earliest 4-27 Rice Co, OAR; 5-10 Frontenac, EHH, DB and Rochester, JPF; 5-13 Agassiz Refuge, DLO.

Mockingbird: reported in May from Long Lake in New Brighton by Mrs. Carlson; she said one had spent the previous summer in the same area; 5-2 Cyrus, Pope Co, WH (details?); 5-2 Bloomington, 1, H. M. Wynne; 5-10 Sholley, Beltrami Co, MG (details?) (very

northern record); 5-21 Duluth, PBH and Dakota Co, MRL; 5-22 Dakota Co, DB; more reports than we've had in a long time.

Catbird: earliest 4-23 Dakota Co, MIG; 4-24 Cass Lake, EBH; 5-2 Rice Lake Refuge, CEP.

Brown Thrasher: earliest 4-17 Rochester, JPF; 4-21 St. Cloud, NMH; 4-22 Wabasha, DGM.

VARIED THRUSH: 5-24 Grand Lake, Stearns Co, 1 seen at close range, face pattern noted, NMH; only May record for state; all previous records from Oct to March.

Wood Thrush: earliest 4-19 Washington Co, WWL (Hermit Thrush? quite early); 4-28 Duluth, JGH (early up there); 5-8 Minneapolis, DB; 5-26 Collegeville, 1, RPR; there is some uncertainty as to northern limits of this species in Minnesota.

Hermit Thrush: earliest 3-17 Morris, RAG (ties earliest date on record for state); 4-10 Minneapolis, EMB; 4-11 Morris, JAH.

Swainson's Thrush: earliest 4-13 Norman Co, BRK (Hermit Thrush? Very early up there); 4-21 Minneapolis, VL (early!); 4-30 Minneapolis, ACR.

Gray-cheeked Thrush: earliest 5-1 Minneapolis, EMB; 5-4 Pope Co, WH; 5-5 Hennepin Co, MHM; 5-5 St. Cloud, NMH; latest 5-24 St. Louis Co, PBH; 5-25 Norman Co, BRK; 5-28 Beltrami Co, JAM.

Veery: earliest 5-4 Rochester, JPF; 5-5 St. Louis Co, PBH; 5-7 Hennepin Co, DB and St. Cloud, NMH.

Eastern Bluebird: earliest 3-12 Washington Co, DH and Houston Co, MM; 3-13 Jackson Co, HSH; 3-14 Rochester, JPF and Northfield, GNR; one northerly record, 5-16 Superior National Forest, Lake Co, 4, JGH.

Blue-gray Gnatcatcher: 5-7 Hennepin and Dakota Co's, EMB and Goodhue Co, BL; 5-10 Goodhue Co, DB, EHH; 5-11 Winona Co, GD, GG, FV; 5-15 Winona Co, JRR; 5-17 Goodhue and Chisago Co's, EMB.

Golden-crowned Kinglet: earliest 3-17

Hennepin Co, RBJ; 3-20 Rochester, JPF; 3-22 Minneapolis, VL.

Ruby-crowned Kinglet: earliest 4-3 Nobles Co, HSH; 4-17 Hennepin Co, EMB; 4-18 Hennepin Co, MHM.

Water Pipit: 4-29 Washington Co, ACR; 5-7 Dakota Co, HFH, RLH; 5-10 Carver Co, VL; 5-11 Dakota and Washington Co's, EMB; 5-15 Washington Co, DB, BL; only reports.

Bohemian Waxwing: latest 3-20 Virginia, St. Louis Co, NJH and 3-30 Duluth, PBH; one very exceptional record: 5-12 Faribault, Rice Co, 10, OAR (details?); this species has usually departed northward from our state by mid-April.

Northern Shrike: latest 4-5 Rice Lake Refuge, CEP; 4-6 Hibbing, HM; 4-15 Cook Co, MOP; one exceptional record: 5-21 St. Louis Co, 5 miles N. of Chisholm, RLH; same remarks as for Bohemian Waxwing above.

Loggerhead Shrike: earliest 3-20 Nobles Co, HSH; 3-24 Pope Co, WH; 3-27 Polk Co, GSM.

Bell's Vireo: 5-23 Winona, GD, GG, FV; 5-23 Rochester, 1 banded by JPF, CMJ, excellent details; 5-31 Dorer Pools, Wabasha/Winona Co line, EHH, RG.

Yellow-throated Vireo: earliest 4-23 Dakota Co, MIG; 5-5 Hennepin Co, VL; 5-6 Wabasha, DGM and Hennepin Co, CKS.

Solitary Vireo: earliest 4-23 Dakota Co, MIG; 5-4 Rochester, JPF, Morris, JAH and Minneapolis, EMB, DB; 5-5 Hennepin Co, MHM.

Red-eyed Vireo: earliest 5-5 Winona, GD, GG, FV; 5-14 Frontenac, MIG; 5-16 Ramsey Co, ACR and Faribault, OAR.

Philadelphia Vireo: earliest 5-8 Minneapolis, JAJ; 5-12 Goodhue Co, EWJ; 5-16 Hennepin Co, MHM.

Warbling Vireo: earliest 4-23 Hastings, MIG; 5-7 Northfield, EHH, Vasa, BL, Minneapolis, EMB; 5-8 Wabasha, DGM and Hennepin Co, MHM.

Black-and-white Warbler: earliest 4-23 Dakota Co, MIG; 5-1 Nobles Co, HSH; 5-3 Rochester, JPF and Washington Co, WWL.

Prothonotary Warbler: 5-7 Frontenac, BL, Houston, Wabasha, Chisago Co's, EMB; 5-8 Wabasha, DGM and Frontenac, GD, GG, FV; 5-10 Frontenac, EHH, DB; 5-13 Agassiz Refuge, Marshall Co, 2, DLO (awaiting details; extremely northern record); 5-15 Washington Co, DS; 5-15 Frontenac, MIG and Winona, GD, GG, FV; 5-17 Duluth, good description, ME; 5-18 Goodhue Co, EWJ and Washington Co, WWL; two northern records are most interesting.

Golden-winged Warbler: 5-7 Vasa, BL; 5-8 Frontenac, GD, GG, FV; 5-8 Wabasha, DGM; 5-14 St. Cloud, RPR and Dakota Co, MIG; 5-15 Minneapolis, RBJ; 5-17 Rochester, JPF and Morrison Co, LSR; 5-20 Minneapolis, EHH and Carlos Avery Refuge, WHL; 5-21 Dakota Co, MRL; 5-22 Goodhue Co, EMB; 5-28 St. Louis Co, DB.

Blue-winged Warbler: 4-30 St. Cloud, NMH (details?); 5-7 Vasa, BL; 5-15 Winona, GD, GG, FV; 5-21 Rochester, JPF; 5-21 Goodhue Co, EMB; 5-22 Vasa, DB; 5-26 Ada, Norman Co, BRK (details? very northerly record); 5-30 Nerstrand, JRR.

Tennessee Warbler: earliest 4-23 St. Paul, MIG; 5-6 St. Paul, MIG; 5-6 St. Paul, ACR; 5-7 Carver Co, EHH, Vasa, BL and Winona, GG, GD, FV; a few were still singing in the Twin Cities area during the first week of June due, no doubt, to the late season.

Orange-crowned Warbler: earliest 4-22 Minneapolis, EMB; 4-23 Dakota Co, MIG; 4-28 White Bear, ACR; latest 5-21 Scott Co, JRR and St. Louis Co, PBH; 5-24 Crow Wing Co, MSB; 5-27 Hennepin Co, VL.

Nashville Warbler: earliest 4-23 Hastings, MIG; 5-4 Rochester, JPF, Washington Co, DS and Minneapolis, DB, EMB; 5-5 Wabasha Co, DGM, St. Paul, BL and Minneapolis, VL; as with the Tennessee, a few were still singing in the Twin Cities during the first week of June.

Parula Warbler: earliest 5-7 Vasa, BL and St. Cloud, NMH; 5-8 Hennepin, Dakota and Chisago Co's, EMB, Rochester, GD, GG, FV and Minneapolis, RBJ; 5-9 Mora, RHJ.

Yellow Warbler: earliest 4-23 Hastings, ACR and Red Wing, MIG; 5-4 St. Cloud,

NMH; 5-5 Winona, GD, GG, FV, Kanabec Co, RHJ and Traverse Co, DB.

Magnolia Warbler: earliest 4-23 Dakota Co, MIG; 5-1 Nobles Co, HSH; 5-4 Washington Co, WWL; 5-7 Minneapolis, CKS and Goodhue Co, BL.

Cape May Warbler: earliest 5-7 Goodhue Co, BL and Hennepin Co, MHM; 5-8 Minneapolis, DB; 5-9 Morris, JAH.

Black-throated Blue Warbler: 5-3 Washington Co, WWL; 5-14 Frontenac, MIG; 5-21 St. Louis Co, KS; 5-21 Washington Co, DS; no details on any of these observations; the female is difficult to identify; the adult male is unmistakable; evaluation of these reports would therefore be much easier if observers would indicate which sex they saw.

Myrtle Warbler: earliest 4-11 Morris, JAH; 4-15 Washington Co, DH; 4-16 Mora, RHJ and Washington Co, BL.

Black-throated Green Warbler: earliest 5-5 St. Paul, BL and Hennepin Co, MHM; 5-6 Wabasha Co, DGM and Minneapolis, VL; 5-7 Frontenac, EHH, Hennepin and Chisago Co's, EMB.

Cerulean Warbler: 5-16 Washington Co, WWL; 5-18 Stearns Co, NMH; 5-21 Collegeville, RPR; 5-22 Stearns Co, NMH; 5-22 Goodhue Co, DB, EMB; 5-25 Collegeville, 16, RPR; 5-30 Vasa, EHH.

Blackburnian Warbler: earliest 4-14 Douglas Co, MVS (extraordinary; error in transcription?); 5-5 Duluth, JCG; 5-7 Nobles Co, HSH; 5-7 Vasa, BL; 5-8 Hennepin Co, JAJ, RBJ.

Chestnut-sided Warbler: earliest 5-7 Vasa, BL and Minneapolis, VL; 5-8 Frontenac, GD, GG, FV and Stevens Co, JAH; 5-11 Washington Co, WWL.

Bay-breasted Warbler: earliest 5-12 Goodhue Co, EWJ; 5-14 Minneapolis, EMB; 5-15 Frontenac, MIG; 5-15 Mora, RHJ.

Blackpoll Warbler: earliest 4-23 Hastings, MIG; 5-1 Nobles Co, HSH; 5-3 Washington Co, WWL; latest 5-29 Norman Co, BRK; 5-30 Stearns Co, NMH; 5-31 Hennepin Co, MHM.

Pine Warbler: 5-1 Washington Co, DS; 5-3 Washington Co, WWL; 5-7 Nobles Co, HSH; 5-8 Chisago co, ACR; 5-13

Hennepin Co, BL; 5-16 Ramsey Co, ACR; 5-17 Collegeville, RPR; 5-20 Polk Co, CCE; 5-21 Washington Co, DS, WWL; 5-22 St. Cloud, NMH; 5-24 Cook Co, MOP; 5-28 Morrison Co, LSR; more re-

Palm Warbler: 4-23 Hastings, MIG; 4-29 Scott Co, EHH, Carver Co, DB; 5-1 Minneapolis, EMB, JAJ.

Ovenbird: earliest 5-2 Minneapolis, DB; 5-4 Morris, JAH and Minneapolis, VL; 5-6 Hennepin Co, MHM; 5-7 Vasa, BL.

Northern Waterthrush: earliest 4-23 Dakota Co, MIG; 4-26 Minneapolis, DB; 4-27 Minneapolis, EHH, EMB; 5-2 Hennepin Co, MHM.

Louisiana Waterthrush: 5-3 Washington Co, DS; 5-7 Douglas Co, MVS (very northerly record; almost certainly the Northern Waterthrush); 5-7 Goodhue Co, BL; 5-9 Washington Co, DS; 5-16 St. Paul, ACR; 5-26 St. Paul, ACR; 5-31 White-water Park, Winona Co, EHH.

Connecticut Warbler: 5-17 Morris, JAH; 5-21 Hennepin and Goodhue Co's, EMB; 5-22 Stearns Co, NMH; 5-26 Carlos Avery Refuge, WHL; 5-29 Collegeville, RPR; 5-31 Minneapolis, VL.

Mourning Warbler: earliest 5-13 Hennepin Co, BL; 5-14 Hennepin Co, EMB, Faribault, OAR, Douglas Co, MVS; 5-15 Washington Co, DH, Frontenac, MIG, Stockton, GD, GG, FV, Morris, JAH.

Yellowthroat: earliest 4-23 Dakota Co, MIG; 5-4 Crow Wing Co, MSB; 5-5 Minneapolis, VL and Winona, GD, GG, FV.

Yellow-breasted Chat: 5-30 Dorer Pools, Winona/Wabasha Co, RG, only report.

Wilson's Warbler: earliest 4-23 St. Paul, MIG; 5-4 Rochester, JPF and Washington Co, WWL; 5-5 Wabasha Co, DGM; latest 5-24 Bemidji, EBH; 5-25 Hennepin Co, TKS and Kanabec Co, RHJ; 5-30 Hennepin Co, VL and Hibbing, SM.

Canada Warbler: earliest 5-6 Hennepin Co, CKS; 5-11 Washington Co, WWL; 5-16 Ramsey Co, ACR, BL.

American Redstart: earliest 5-4 Rochester, JPF and Washington Co, DH; 5-6 Minneapolis, DB; 5-7 Carver Co, EHH, St. Cloud, NMH, Hennepin Co, JAJ, Goodhue Co, RLH, Polk Co, GSM.

Bobolink: earliest 5-3 St. Paul, ACR; 5-5 Kanabec Co, RHJ; 5-6 Rice Lake Refuge, CEP.

Eastern Meadowlark: earliest 3-2 Northfield, GNR; 3-10 Nobles Co, EHW; 3-12 Wabasha Co, GD, GG, FV.

Western Meadowlark: earliest 3-3 Nobles Co, HSH; 3-3 Wabasha Co, DGM; 3-5 Ramsey Co, ACR; 3-6 Wright Co, EGC.

Yellow-headed Blackbird: earliest 4-13 Stevens Co, ES, JAH; 4-13 Douglas Co, MVS; 4-14 Agassiz Refuge, DLO; northerly records: 5-11 Two Harbors, RK; 5-22 Cook Co, MAF; May, male and female, Taconite Harbor, Cook Co, MOP.

Red-winged Blackbird: earliest 3-2 Washington Co, BL and Northfield, GNR; 3-5 Rice Co, OAR; 3-6 Nobles Co, HSH.

Orchard Oriole: 5-15 Winona, GD, GG, FV; 5-15 Bemidji, EBH (details? northerly); 5-20 Duluth, KS (good details); 5-21 Lac Qui Parle Co, BL; 5-22 St. Paul, ACR; 5-23 Duluth, PBH and Nobles Co, HSH; 5-24 Stevens Co, ES; 5-25 Douglas Co, MVS; 5-28 Rock Co, EMB; 5-31 Winona Co, EHH.

Baltimore Oriole: earliest 4-16 Watonwan Co, LAF (details? earliest date on record!); next 5-4 St. Paul, MIG; 5-5 Washington Co, BL, Wabasha Co, DGM and Winona Co, GD, GG, FV.

Rusty Blackbird: latest 5-12 St. Paul, MIG; 5-16 Polk Co, CCE; 5-18 Sauk Centre, RPR.

Brewer's Blackbird: earliest 3-10 Washington Co, DS; 3-12 Collegeville, RPR; 3-19 Dakota Co, RBJ, EMB.

Common Grackle: earliest 3-2 Minneapolis, MHM; 3-6 Hennepin Co, FN/MAS; 3-6 Nobles Co, HSH; 3-10 Wabasha Co, DGM.

Brown-headed Cowbird: earliest 3-13 Minneapolis, EMB; 3-19 Dakota Co, BL; 3-23 Rice Co, OAR.

WESTERN Tanager: 5-12 to 5-17 one young male, almost in full breeding plumage, at the feeder of MEH in Bloomington, Hennepin Co, seen by many observers. Appears to be the fourth Minnesota record.

Scarlet Tanager: earliest 5-7 Dakota Co, MRL; 5-10 Goodhue Co, DB; 5-14 Frontenac, MIG.

Cardinal: the usual reports from south-eastern Minnesota; northerly records: April, pair at Duluth feeder, AKA; 4-30 Crow Wing Co, MSB; 5-17 Bemidji, EBH; 5-28 Duluth, 1 male, RG.

Rose-breasted Grosbeak: earliest 4-23 Hastings, MIG; 5-4 Rochester, JPF; 5-5 Washington Co, DH, DS, Minneapolis, VL, Winona, GD, GG, FV, Wabasha Co, DGM.

Indigo Bunting: earliest 5-12 Winona, GD, GG, FV, Rochester, JPF; 5-14 Frontenac, MIG, Hennepin Co, PE; 5-15 Winona Co, MHM.

Dickcissel: earliest 5-4 Wabasha Co, EMB; 5-15 Faribault, OAR; 5-17 Rochester, JPF.

Evening Grosbeak: latest dates in southern Minnesota: 5-2 St. Joseph, RPR; 5-4 Wabasha Co, DGM; 5-10 Winona Co, GD, GG, FV.

Purple Finch: latest in southern Minnesota: 5-5 Winona Co, GD, GG, FV; 5-7 Ramsey Co, TKS; 5-8 Hennepin Co, MHM and Wabasha Co, DGM; 5-10 Washington Co, DS; 5-16 Washington Co, WWL; 5-19 Rochester, JPF; 5-25 St. Paul, MIG.

Pine Grosbeak: latest 3-16 Morris, JAH; 3-31 Morrison Co, LSR; 4-22 Agassiz Refuge, DLO.

Hoary Redpoll: latest 3-19 Minneapolis, EWJ; 3-24 Stearns Co, NMH; 3-31 Hennepin Co, FN/MAS.

Common Redpoll: latest 4-30 Cook Co, MOP; 5-3 Duluth, JCG; 5-26 Agassiz Refuge, DLO (details? exceptionally late!).

Pine Siskin: except for one Duluth record on 3-4 (AKA), confined to southern part of state in March; slight movement northward to Mille Lacs Lake and Duluth in April; good movement northward in late May to Polk Co (5-24, GSM), Beltrami Co (5-20, MG), St. Louis Co, Virginia (5-22, NJH) and Cook Co (5-22, MOP); still present in Rochester and the Twin Cities at the end of May.

Red Crossbill: 3-5 Washington Co, BL; 5-5 Bemidji, EBH; only reports.

White-winged Crossbill: 4-28 Hennepin Co, TKS; 5-1 and 5-5 St. Cloud, 1 female, RPR, only reports.

Rufous-sided Towhee: earliest 4-25 Faribault, OAR; 4-26 Minneapolis, DB; 4-29 Stevens Co, JAH, ES.

LARK BUNTING: 5-23 Mille Lacs Co, S. of Onamia, 1 male, ELC, TRC, good details; 5-24 Lac Qui Parle Co, 1, DB, EHH; 5-24 Cook Co, Tofte, 2, MOP (details?); 5-31 Duluth, JCG; also on 5-19 DGM saw a bird in Wabasha Co which he felt may have been this species.

Savannah Sparrow earliest 4-5 Mille Lacs Co, WJH; 4-22 Agassiz Refuge, DLO; 4-28 Two Harbors, RK, Hibbing, SM and Cook Co, MAF.

Grasshopper Sparrow: 5-6 Kanabec Co, RHJ; 5-16 Faribault, OAR; 5-17 Hennepin Co, MHM; 5-21 Dakota Co, JRR; 5-28 Rock Co, EMB; 5-30 Washington Co, WWL, EMB; 5-31 Wabasha Co, EHH.

Le Conte's Sparrow: 4-24 Sherburne So, NMH; 4-29 Two Harbors, RK; 5-17 Minneapolis, VL, Hennepin Co, MHM, Nobles Co, HSH; 5-28 Rock Co, EMB.

Henslow's Sparrow: 5-14 Dakota, Winona Co, GD, GG, FV; 5-28 Winona, Winona Co, GD, GG, FV.

Vesper Sparrow: earliest 3-28 Collegeville, RPR; 3-29 Stevens Co, ES; 4-2 Nicollet Co, ELC, RLH.

Lark Sparrow: 4-18 Nobles Co, HSH (details? very early); 4-29 Agassiz Refuge, DLO (details? very northerly record); 4-29 Carver Co, DB; 4-29 Scott Co, EHH; 5-1 Hennepin Co, MHM; 5-7 Sibley Co, RBJ; 5-13 Scott Co, BL; 5-14 Goodhue and Wabasha Co's, EMB; 5-18 Sherburne Co, RPR; 5-30 Polk Co, GSM (details? very northerly record).

Oregon Junco: latest 4-28 Cook Co, HH; 4-29 Agassiz Refuge, DLO; 4-30 Collegeville, RPR.

Tree Sparrow: latest 5-15 Cook Co, MOP; 5-20 Cook Co, MAF; 5-23 Cook Co, HH.

Chipping Sparrow: earliest 3-29 Rice Co, OAR; 4-2 Dakota Co, MRL; 4-9 Bemidji, EBH.

Clay-colored Sparrow: earliest 4-23

Hastings, MIG, ACR; 4-24 Northfield, OAR; 5-4 Rochester, JPF.

Field Sparrow: earliest 4-2 Goodhue Co, DB; 4-3 Eyota, FGD; 4-10 Wabasha Co, DGM; one very northerly record; 4-12 Ada, **Norman Co, BRK** (details? Tree Sparrow?).

Harris' Sparrow: earliest 3-19 Willmar, RG; 3-20 Sibley Co, 2, HFH; 3-26 Northfield, GNR; 3-27 Nobles Co, HSH; latest 5-23 Cook Co, MOP; 5-24 Kanabec Co, RHJ; 5-25 Shotley, Beltrami Co, MG; 5-26 Two Harbors, RK.

White-crowned Sparrow: earliest 4-28 Norman Co, BRK; 5-1 Cook Co, HH; 5-2 Cook Co, MAF; 5-2 Two Harbors, RK; 5-2 Winona, GD, GG, FV; latest 5-18 Hibbing, SM; 5-21 Duluth, PBH; 5-23 Duluth, JCG.

White-throated Sparrow: earliest 3-7 Collegeville, RPR wintering?; 3-22 Rochester, JPF and Dakota Co, FN/MAS; 4-9 Eyota, FGD.

Fox Sparrow: earliest 3-16 Wabasha, DGM, St. Paul, RLH and Minneapolis, HFH; 3-17 Rice Co, OAR, Morrison Co, LSR, Washington Co, JO, Hennepin Co, RBJ, MHM; 3-19 Stearns Co, NMH, Winona Co, GD, Washington Co, ACR; latest 5-11 Two Harbors, RK; 5-12 Duluth, PBH; 5-15 Duluth, JCG.

Lincoln's Sparrow: earliest 4-21 Hennepin Co, MHM; 4-27 Cook Co, MAF; 4-29 Goodhue Co, DB, EHH, Morris, JAH, Crow Wing Co, MSB.

Swamp Sparrow: earliest 3-28 Collegeville, 4-2 Minneapolis, JAJ, EMB, BL; 4-17 Rochester, JPF, Nobles Co, HSH.

Song Sparrow: earliest 3-11 Rochester, JPF; 3-15 Rice Co, OAR; 3-16 Northfield, GNR, Minneapolis, FN/MAS.

Lapland Longspur: earliest 3-24 Sherburne Co, NMH; 3-4, 3-8, 3-14 Nobles Co, HSH; latest 4-28 Rice Lake Refuge, CEP; 4-29 Duluth, JCG; 5-28 Cook Co, MOP (late!).

SMITH'S LONGSPUR: 4-10 Rock Co, near Luverne, adult male, attaining breeding plumage, collected for Minnesota Museum of Natural History; probably first or second specimen taken in Minnesota.

Chestnut-collared Longspur: 5-21, Clay

Co, SE of Felton at the usual spot, 5, BL, RG.

Snow Bunting: latest 4-28, 4-29 Two Harbors, RK, JCG; 5-10 Duluth, 6, PBH.

Summary: the spring migration was split into very early and very late waves, but even more noticeable was the lack of any particular concentration of migrants. Avifaunal Club members were surprised to visit Vasa, Goodhue County on May 7 and find 24 species of warblers and vireos, but seldom more than 2 or 3 of any given species! Most of the usual shorebird haunts had **too much** water, but the 92 observers who contributed to this report managed to locate some new spots with the result that we accumulated a pretty fair shorebird list. A total of 283 species were reported, or approximately 10 fewer species than in the spring of 1965.

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Feil; LSR, L. S. Ryan; LS, Lloyd Scherer; LTM, Lester T. Magnus; MAF, Marie Af-treith; ME, Marge Enroth; MEH, Mrs. Ed Harms; MG, Mabel Goranson; MHM, Mary H. Muehlhausen; MIG, Maury & Isabel Goldberg; MK, Maria Krogseng; ML, M. Lammers; MM, Maurius Morse; MMM, Mrs. Milford Mattison; MOP, Mrs. Oliver Peterson; MRL, Mrs. Robert Leach; MSB, Mrs. Steve Blamich; MVS, Mrs. Vernon Serenius; NJH, Nels J. Hervi; NMH, Nestor M. Hiemenz; OAR, Orwin A. Rustad; PBH, P. B. Hofslund;

PE, Paul Egeland; PH, Mrs. Philip Hig-hum; RAG, Richard A. Grant; RBJ, Rob-ert B. Janssen; RG, Ray Glassel; RHJ, Rev. & Mrs. R. H. Jackson; RK, Ruth Kuchta; RLH, Ronald L. Huber; RPR, Robert P. Russell; SM, Selena McCrack-en; TKS, Thomas K. Soulen; TRC, T. Rex Campbell; VFB, Vera F. Barrows; VL, Violet Lender; WH, Mr. & Mrs. Wayne Hawkinson; WHL William H. Longley; WJH, W. J. Hansen; WWL, Mrs. W. W. Lundgren. 480 State Office Bldg., St. Paul, Minnesota 55101.

AUDUBON BOOK SERVICE

The Minneapolis Audubon Society conducts a Book Service, the profits of which are used for civic and conservation projects. All bird watchers will find material useful in their activity including Peterson's Eastern, Western and Texas Field Guides, "A Guide to Field Identification Birds of North America" by Chandler Robbins, and various pamphlets on local birds, how to attract birds to your garden and our Minnesota state bird "The Loon."

We also have different lines of stationery, notes, cards and calendars. We will have a new line of Christmas cards of interest to birders.

Contact the following for orders and if there is something we do not have, we will be glad to try to get it for you.

Mrs. M. S. Stutsman, Chairman
4105 Beard Ave. So.
Minneapolis, Minn. 55410
Tel: 922-1711

Mrs. E. F. Muehlhausen
4428 Dundee Road
Minneapolis, Minn. 55424
Tel: 929-8283

SURVEY

OSPREY NESTING SUCCESS

WISCONSIN - MINNESOTA - MICHIGAN

- Cooperating Organizations -
Detroit Audubon Society - Sergej Postupalsky
Michigan Chairman
2926 W. 13 Mile Road,
Royal Oak, Michigan

Minnesota Ornithologists Union -
Rev. Forrest Strnad,
Minnesota Chairman
21 W. Third Street
Chisholm, Minnesota

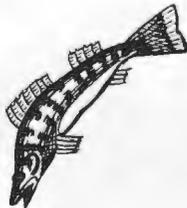
Inland Bird Banding Association
Northeastern Wisconsin Audubon Society
Minnesota Museum of Natural History



American
Bald
Eagle



Osprey



Coordinating Agency - North Central Audubon Council
Coordinating Chairman - Terry N. Ingram, 21 Morris St.
Mauston, Wisconsin
Secretary and Wisconsin Chairman - Mrs. Paul Romig,
201 W. Whitney Street
Green Bay, Wisconsin
Technical Advisor - Dr. Walter J. Breckenridge, Dir.
Museum of Natural History, University of Minnesota, Mpls.



Osprey
Nest

VOLUNTEERS NEEDED

We are requesting your help in determining the nesting success for as many pairs of Osprey as possible. Individuals and Clubs are asked to check the nests in their area and send the results to the state chairmen so that a comparison for the region can be made.

Volunteers are asked to return the enclosed "volunteer registration card" by April 25. Additional material required will be mailed to you.

Mail the registration card to the Michigan, Wisconsin, or Minnesota Chairman indicated on the first page of this article.

Objectives

1. To determine the nesting success of the Osprey in the Midwest.
2. To interest and alert organizations and individuals to the need for protection of vanishing species. To stimulate research and suggest techniques and projects for study of other forms of wild life.

Scope

The general plan is to check as many Osprey nests as possible, determining and recording the nesting success. Some observers may have records on specific nests for past years which would be of much value. The survey is designed for participation on a voluntary basis by professionals as well as amateur observers.

At the end of the season information will be correlated and made available for distribution. A follow-up survey the following year is being contemplated.

The Forest service is checking nests in the Federal Forests of the area and duplicate checking is not necessary in these locations. Volunteers in the National Forest areas should contact the local Ranger who will be pleased to cooperate.

History and Explanation of the Project

In the Eastern United States the Osprey is declining in many areas and has disappeared in others. The Bald Eagle population is also declining steadily. The reasons for the decline

of either of these large fish eating raptors has not been proven.

Sergej Postupalsky has been working in Michigan for several summers for the National Audubon Society in checking the nesting success of Bald Eagles. In 1965 his study was extended to include the Osprey in Michigan. At the end of the summer after checking about 50 nests he determined that in Michigan the Osprey has a nesting success of only about 20%. This is very close to the Bald Eagle's nesting success.

Since the Osprey's prime food source is live fish, the presence of pesticides in the food source is suspected as affecting reproduction. Unless some participating organization in the Lake States can develop a program for obtaining the technical information needed for proving the presence and effects of pesticides on the reproduction of the Osprey, this factor would remain a prime "suspect." However, if as believed, a low success is determined by the survey the need for sharpening up on pesticides control, the prime "suspect," becomes obvious. The lowering of nesting success would also point to the highly probable presence of pesticides in the fish eaten by the Osprey. This in turn would create an interest of related outdoor people such as fishermen and resorters.

It is hoped that a wide participation in this nesting success survey may stimulate sufficient interest within some organizations, or individuals, who have the technical knowledge and funds to carry the study further into a determination of the effects of pesticides on Osprey nesting and fish, their prime food source.

The North Central Audubon Council's Project Committee has decided to try to check the Osprey nesting success throughout the upper Midwest. This study is not intended to prove that the Ospreys and eagles are being killed from poisoned fish (one possibility) but it should help strengthen Mr. Postupalsky's Michigan report of 1965. Or was 1965 just a poor year for raising Ospreys in Michigan?

Once the nesting success is determin-

THE LOON

ed then future plans can be made. If the nesting success is poor, research should be conducted soon to determine the reason.

Osprey (Fish Hawk)—Family Pandionidae

Identification: These large birds, length 23", wingspread 68", weight 3½ pounds, are unmistakable if seen well. In flight the wings appear quite long and the outer half usually has a characteristic backward sweep. Young birds differ only in being flecked with white above and washed with buffy below. The Osprey differs from the Bald Eagle by having a dark line through the eye and a white breast whereas a Bald Eagle has a dark breast and a completely white head. The young Bald Eagle has a bronze-brown head like the rest of his body color.

Habits: (Age 21 years) Provided they are not molested, Ospreys will nest where ever reasonably extensive bodies of clear water and some sort of elevated nest site exists. Seacoasts, bays, large lakes, or rivers and groups of small ponds are all acceptable. The birds have little fear of man and are excellent "watch-dogs" cheeping loudly at intruders and driving off Common Crows and other birds of prey. For this reason platforms on tall poles are often erected to encourage them to nest about homes and farmyards.

Diet: Their food consists entirely of fish. These they spot from heights of 30 to 100 feet; hover a moment to get into position, half close their wings and plunge into the water. The fish is seized in their talons, the toes of which are used in pairs, 2 to a side; this and the rough surface of the foot give them a firm grip on the slipperiest prey. After a catch they rise quickly, shake off the water, arrange the fish headfirst, and set out for their nest or feeding perch. If a Bald Eagle sees the catch from overhead it may dive down and force the Osprey to drop the fish. For successful fishing, Ospreys must have clear water and fish that feed or swim near the surface. In salt water menhaden, mullet, sea cat, and in spring alewives and other herring provide the bulk of their food. In fresh water, suckers, perch and gizzard shad are common prey.

Ospreys take some carp when the carp are spawning in shallow water, but these introduced fish often drastically reduce the bird's potential feeding grounds by roiling the water so badly that it cannot see its prey.

Voice: Distinctive in tone, although the notes vary considerably. Common calls are a long series of loud, sharp, high-pitched whistled notes that vary from a rising whew, whew to a rich cheep, cheep. From a distance they sometimes suggest the liquid notes of a Purple Martin.

Nest: Singly or in loose colonies scattered over a considerable area. Nests may be any height above ground and are built in trees, living or dead, on man-made structures of all kinds, on rocky canyonside pinnacles and sometimes on the ground along the upper beach. Year after year material is added until the nest becomes an enormous mass of sticks and any other trash the birds can carry, much of it gleaned from the wrack along the upper beach. The three eggs (2.4 x 1.8) are white to cinnamon, heavily blotched with browns.

Young: Easy to see in the nest by use of a scope or binoculars. Have a habit of crouching low in the nest when disturbed.

Locating the Nest

Locating new nests is not as easy as checking old ones. If you know there are Ospreys in an area there is a chance that there maybe a nest nearby. By spending some time near these locations you will usually be able to locate the nest. If the birds do not think you are going to bother them they will fly directly to the nest. Just by watching the birds as they move around the area will usually reveal the next location.

If you do locate a nest late in the season, and you can determine how many young were raised, send a report on the nest.

Bald Eagle Information

Information on locations of Bald Eagle nest sites should be sent to your state chairmen for forwarding to the National Audubon Society.

Reports

On the next page is a copy of the report we need for the study. More of these report forms may be obtained by writing to your state chairman. Reports when completed should be mailed to your state chairman with a copy retained for your files. If possible send a map showing location of nest and how to reach it.

First Report: Mail soon as check is completed. This check should be made about the middle of May to determine if the parents are present and eggs are being incubated. Most volunteer observers will do this by observation with scope or binoculars.

Suggestions on Checking: It is not recommended that amateurs climb to the nest. However information on the number of eggs in the nest is valuable. If you have planes in the area, pilots will frequently donate their services if you explain your project. From a plane flying some distance (150 feet is close enough) above a nest the contents can be determined. Checking should be brief so that the parents

are not disturbed for any length of time. Checks should not be made in inclement weather. However Ospreys are quite tolerant of man so minor disturbances will not be harmful. Four copies of Form 101 are needed for each nest to be checked.

Second Report: Mail as soon as check is completed. This check should be made during the last part of June or early July to determine the number of young if any. More checks can be made if you have the time and the nest is easily observed. On this check one can usually see the young with binoculars from some distance. However if you have been fortunate in interesting a local pilot he may want to help you on your second check.

* * *

Line Drawings Bernard Chartier
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**NORTH CENTRAL AUDUBON COUNCIL
OSPREY NESTING SUCCESS SURVEY**

Date check made _____ Observers _____

Nest no. _____ Address _____

Location _____

First check (____) Second check (____) Phone _____

Nest location, what species of tree? _____ Alive or dead _____

Weather conditions, Clear (____)—Overcast (____)—Storm Clouds (____)—Rain (____)

Temperature _____ Time of day check was made _____

How was nest checked—On foot _____ Other _____

By boat and then by foot _____ By boat and not by foot _____ By plane _____

Was nest studied with binoculars _____ scope _____ What power _____

How long were you present near the nest _____

Was any person other than your party seen near the nest? If so explain _____

One parent present (____) Both parents present (____)

Was one parent present on nest apparently incubating _____

Were you able to check on number of eggs, if so, how many _____

How many young (____) % full grown, 25(____) 50 (____) 75 (____) Full (____)

Did young appear active and alert? _____

Do you plan to check this nest again? _____ If so when _____

Was nest visited before? _____

If so, when? _____

Do you know of a pilot that could fly over this nest? _____

If so, please give name and address _____

Other comments or observations of the nest or birds _____

Are you an amateur (____)—licensed bird bander—Pilot (____) or other _____

Please explain how to get to the nest from nearest town on back of form, or draw a map.

THE CANADIAN LAKEHEAD

A. E. Allin

June, 1966, at the Canadian Lakehead was a fine month with a mean temperature of 58.9°, compared with a normal 57.3°; the precipitation was less than 50 per cent of normal with only 1.49" of rainfall. It was the driest June since 1920. The July mean of 67.4° shared with 1955 the record high since 1921. Rainfall at the Lakehead was again below average with only 1.74". The average is 2.78". Other parts of Northwestern Ontario were wetter and less sunny than was the Lakehead. It rained on August 1, and showers, and rainy periods with cooler weather continued throughout the next two weeks.

The last minimum temperature below freezing, at the Airport, appears to have been on May 17. As a result, there is an excellent crop of fruit on the raspberries, Salmon Berries and blueberries. The Saskatoons have been particularly abundant. There is also an excellent crop of Pin Cherries and Choke Cherries. It appears there will be a good crop of High-bush cranberries. Mountain Ash trees are generally heavily laden with fruit already turning color. This is our most important attraction for several winter visitors. It is to be hoped the crop will not be eaten in the coming weeks by hungry hordes of Starlings.

The overall birding this summer has been most uninteresting. No new breeding records were reported for the District. There was a general impression that there were fewer birds than usual. However, a closer study suggested that this may have been a false surmise. Where a given pair of birds have been observed in an area in previous years we again found them in the same area in 1966. For example, the usual pairs of Yellow Warblers, Least Flycatchers, Red-eyed Vireos, Common Grackles and Robins were again present in our City block and a pair of Common Crows and a pair of Pigeon Hawks returned to Vicker's Park. The regular but uncommon summer residents were again

reported in at least their usual numbers. These included Upland Plovers, Brown Thrashers, Catbirds, Bobolinks, Indigo Buntings, Whip-poor-wills and Mourning Doves.

Some species were unusually common. We could no longer refer to Brewer's Blackbirds as occurring in "this or that" area. They were present where habitat was suitable from west of the Lakehead, northeast at least as far as Geraldton and south to Pigeon River. The Cliff Swallow was probably the commonest swallow to be found at the Lakehead. The late Colonel L. S. Dear never saw a Cliff Swallow prior to 1938 although he had been told of a colony which had been present southwest of the Lakehead about 1900. This year numerous colonies have been present in the local area and colonies have been reported from communities remote from Fort William.

I expect the Tree Swallow suffered grievously from the inclement weather following their arrival on April 24, or possibly earlier. The 2.1" of snow on May 2, and sub-freezing minimum temperatures every night, except one, in the first half of May, must have produced problems of survival for those insect eaters. Bank Swallows which returned later, may be slowly returning to their former numbers. Like the Tree Swallows, the Eastern Phoebes found difficulties in obtaining food when they first arrived and were relatively scarce. However it is ever-dangerous to assume this was due to the cold spring weather. Why were all flycatchers, with the exception of Eastern Kingbirds, generally scarce?

Throughout June, the fields and woods seemed quieter than usual. In fact there seemed to be more bird song in early July than there had been in June. It has indeed been a difficult season to assess in regard to bird populations.

Perhaps because it was so dry in June and July, there were few suitable feeding grounds for waders. Usually yellowlegs are expected in early July. This year we did not see returning shore birds until July 31 and those were in Cook County, Minnesota. Near Mineral Center we saw Semipalmated Sandpipers, Lesser Yellowlegs and one Greater Yellowlegs. It was August 7, before we saw returning waders, a few Greater Yellowlegs, at the Canadian Lakehead. Apart from Killdeers, few shore birds appeared during the remainder of August as the light precipitation was insufficient to form the pools necessary to attract them.

Two items relating to spring migration should be discussed. In the last number of *The Loon* I stated a Sandhill Crane had been seen on May 8 in Sibley Provincial Park. Further investigation proved the report to be erroneous. The bird was actually an American Bittern. This is a further and rather unusual instance of the limited credence which should be given to sight observations.

On May 10, B. Blake carefully observed a strange warbler in Vicker's Park, Fort William. She concluded it was an Audubon's Warbler. Since no one else saw the bird, Mrs. Blake preferred that the observation go unrecorded. However, two weeks later, she saw the same, or a similar bird, in the same area and carefully studied the markings which distinguish this western species from our familiar Myrtle Warbler. In view of the general coloration, the yellow on the throat instead of white, and the rather patchy white on the wings instead of bars, she concluded this was definitely a male Audubon's Warbler. There is one previous sight record of an Audubon's Warbler in Ontario. That was at Point Pelee, on the north shore of Lake Erie.

Although we have no statistics to prove our assumption, we believe that some species of birds had a poor breeding season despite what seemed to be favorable weather conditions in late May, June, and early July. The majority of broods of Robins and Star-

lings able to fly consisted of only one, or occasionally of two young. We have no explanation for this phenomenon but the observation may be important when compared to brood counts in subsequent years.

Loons and Grebes: Common Loons have been common according to most reports. No Red-necked Grebes have been recorded but we were unable to visit their breeding grounds at Whitefish Lake.

Cormorants: No Double-crested Cormorants have been seen this year. After a gradual increase in numbers two decades ago, they have declined in recent years.

Hérons and Bitterns: Several colonies of Great Blue Herons have been reported. Steps are being taken by the Thunder Bay Field Naturalists' Club and the Ontario Department of Lands and Forests to set aside, as wilderness areas, two islands on which there are nesting colonies. Two successful nestings of American Bitterns have been reported.

Swans to Mergansers: No Whistling Swans have been reported this summer. Usually one or more stragglers summer here. On August 10, we were amazed to see nine large Canada Geese in the local Harbor. We then learned thirty-five had been using the lawns at a local beach as resting areas. Some were tagged but none was captured so we do not know where they had been banded. It will be recalled that Canada Geese were reported last summer at Grand Marais and, I believe, off Isle Royale. Although a few Mallards, Black Ducks and Blue-winged Teal have been summer residents, the flock of loafing drakes usually found at the Harbor has been absent. We have seen no Pintails this summer although we now expect them to breed here. A brood of Ring-necked Ducks was seen at Whitefish Lake. Common Goldeneyes evidently had a successful breeding season. Several broods have been seen in a flooded gravel pit and in lakes and streams. Broods of Red-breasted Mergansers have been reported along Lake Superior.

Vultures, Hawks, Eagles and Falcons: There have been no reports of Turkey Vultures locally and they are said to be scarce in the Kenora area. Bald Eagles have been seen occasionally. A nest being studied in the Red Lake area blew down and the one young became a resident of Chippewa Zoo. Red-tailed Hawks and Marsh Hawks have been very scarce. We had one breeding record of the Broad-winged Hawk. The Pigeon Hawk probably again nested in Fort William. We received a belated report of an eyrie of the Peregrine Falcon found in this District in 1965. The Sparrow Hawk was probably the only hawk reported in the usual numbers.

Grouse to American Coot: It is too early to appraise the grouse situation. The dry summer should have been favorable for nesting. We saw three broods, including young on July 17, which could not have been more than a few days old.

Plovers to Terns: Killdeer and Spotted Sandpipers have been relatively common. A few Upland Plover were summer residents as usual. J. Lowcock saw four young American Woodcock on June 21 in Scobie Township. As indicated above, returning waders arrived late and have been scarce. To date (August 23) only a few Greater and Lesser Yellowlegs have been seen. Two Bonaparte Gulls returned to the Harbor on August 10.

Doves to Hummingbirds: We saw 10 Mourning Doves at Paipoonge, Township gravel-pit pool on August 13, an unusual number for this area. Black-billed Cuckoos have been scarce. A Barred Owl, a very uncommon summer resident, was killed by an automobile in Pardee Township on June 2.

The same day, D. Hearn heard a Whip-poor-will in the same area. Common Nighthawks were present, probably in reduced numbers. A pair nested on the tarred roof of a local hospital. Young were raised despite the high temperatures experienced. It was noted that the young, covered by an adult, were in different positions daily. Advantage was taken of the very limited shade present. Even that of a short,

two-inch stand-pipe evidently provided some relief.

Chimney Swifts have been present all summer but in reduced numbers. The Ruby-throated Hummingbird has been very scarce. Dorothy Allin saw one on August 6, and one unable to fly is being fed syrup in Port Arthur.

Kingfishers to Swallows: Whatever harm pesticides have done to other fish-eating birds, the Belted Kingfisher is as conspicuous as ever. The Yellow-shafted Flicker continues to find nesting sites in a busy city, and to find ants on our lawn. Two Red-headed Woodpeckers have been seen. The Eastern Kingbird seems as common as usual, but the other flycatchers are scarce. I have heard only one Eastern Wood Pewee and have yet to see an Olive-sided Flycatcher. Least and Traill's Flycatchers have been uncommon.

As discussed above, the Cliff Swallow is now a common summer resident and several colonies of Bank Swallows once more nested here. Tree Swallows were present in reduced numbers. No Rough-winged Swallows or Purple Martins were reported.

Jays to Brown Creepers: Gray Jays and Blue Jays, Common Crows, and Common Ravens, were present in their usual numbers. Common Crows were feeding on pasture fields in flocks by late July. We again found a nest of a Black-capped Chickadee in a fence post where we had found one in May of 1965 and where a brood of Eastern Bluebirds were raised later that season. The White-breasted Nuthatches nested again in Paipoonge Township. Red-breasted Nuthatches appeared to be scarce and we had no summer records of the Brown Creeper.

Wrens to Thrushes: House Wrens have been very scarce but Winter Wrens are possibly present in greater numbers than usual. Several Brown Thrashers were seen and probably more Catbirds than have been recorded for several years.

Robins have been very common and Eastern Bluebirds are present in satisfactory numbers in at least one area. Veery's are frequently heard in the

evening but Hermit and Swainson's Thrushes seem to be present in reduced numbers.

Kinglets to Starlings: Kinglets were present in suitable areas. Cedar Waxwings are very common. No Loggerhead Shrikes have been reported. Starlings are now present in flocks despite what I consider a poor breeding season.

Vireos and Warblers: If these families were present in their usual numbers, they were quieter than usual, though more were heard in early July. A Red-eyed Vireo was still singing with full vigor in Fort William on August 21.

Bobolinks to Tanagers: Bobolinks now nest in several areas each summer. Some 30 years ago Colonel Dear knew of only one breeding colony. The Western Meadowlark has spread

through the area during the same period. A Baltimore Oriole was seen on August 13, possibly our first summer record. Brewer's Blackbirds have been very abundant as noted earlier. Common Grackles and Brown-headed Cowbirds possibly have been less common than usual. Three Scarlet Tanagers were seen by the Perrons in early August at Shebandowan.

Grosbeaks to Sparrows: The usual number of Rose-breasted Grosbeaks have been seen. On July 23, we saw 2 male Indigo Buntings at Stanley. Evening Grosbeaks have been very scarce, if present at all. Pine Siskins, have been very common all summer. We failed to find the Clay-colored Sparrow this season. The other summer resident finches were probably present in their usual numbers.—*Public Health Laboratory, Box 1100, Fort William, Ontario.*

NOTES OF INTEREST

BLACK BRANT AT RICE LAKE REFUGE—On May 17, 1966 while I was checking water elevations and making a waterfowl inventory, I noted a bird in close company with three Canada Geese about 150 yards away. Its silhouette appeared peculiar so I examined it with my binoculars and telescope. It was obviously a brant. As it moved in closer, it was identified as a Black Brant by the complete collar in front and the dark breast. Since this was an exotic species for the Rice Lake Refuge, I returned to the office and picked up Wildlife Technician, L. A. Thornbloom so that he could also see it. The observation was recorded and reported to our Regional Office in Minneapolis through my weekly field diary. On May 21, Mr. Frank R. Martin, Assistant Regional Supervisor of Wildlife Refuges, Bureau of Sport Fisheries and Wildlife, Minneapolis, was in this area. Being an excellent and experienced photographer, he was able to get a good black and white picture of the bird. (See front cover) The brant was generally shy but could be approached fairly close during the late evening when light conditions were rather poor. Its behavior was usually governed by that of the three Canadas.

On Saturday, May 28, the bird was noted by visitors who asked if it was a wild specimen. I advised them that it was indeed a wild Black Brant. On Sunday, May 29, I showed the brant to several reliable observers, including Mr. Ronald Huber of Minneapolis. The bird was viewed by several other interested persons over the Memorial Day weekend. It was not seen by personnel of the Rice Lake Refuge after May 31, 1966.

During the entire period that the brant was on the refuge it was in constant company with the three Canada Geese, grazing or moving to the water with them. It spent much of its time on the grass or gravel. Its general habits were the same as those of the geese during its stay on this area.—*Carl E. Pospichal, Rice Lake National Wildlife Refuge, McGregor, Minnesota.*

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WESTERN Tanager in Bloomington—On May 12, 1966, Mr. and Mrs. Ed Harms were surprised to find a Western Tanager at their feeder. They immediately telephoned a number of people, the word spread quickly, and within a few hours they had a houseful of people watching the bird. Mrs. Harms managed to shoot some movie film of the bird. From Bent's Life Histories, we gathered that the bird was a sub-adult male, having not yet begun its first nuptial molt. The characteristic black on the lower back, extending from wing to wing, was quite pronounced. The buffy wing-bars were quite prominent though not as sharply defined as in some pictures. The reddish face was clearly evident, though somewhat washed out, as is the case in the sub-adult male. The slow, deliberate actions of the bird at the feeder also allowed us to get good looks at the ivory colored beak, with its definite tanager shape. Minnie Swedenborg happened to be present at the initial gathering and she told us how she and her late husband Ernie had seen the second Minnesota record of this species on May 11, 1926 at the Lake Harriet Bridle Path, now known to all of us as the T. S. Roberts' Bird Sanctuary in Minneapolis. The first record of this species was on May 17, 1924 in Minneapolis by Dr. Roberts. The third record was by Karen and Whitney Eastman on May 30, 1943 at Theodore Wirth Park in west Minneapolis. There have also been one or two reports of females, but this raises some problems. Hybrids between the Scarlet and Western Tanager are known to exist, and Scarlet Tanagers with wing-bars have been reported. In any event, this would appear to be the fourth male reported for our state. Mrs. Harms reports that the bird remained on the premises until May 18. *Ronald L. Huber, 480 State Office Bldg., St. Paul, Minnesota 55101.*

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Spring Bird Mortality—In northern Minnesota, unseasonably cold and wet conditions were experienced this year in late April and early May. Effects of the weather were noticeable on early spring migrants in the Grand Rapids area. Travelling on US Highway #2 from the Pennington Road (County #10) in Cass County to Grand Rapids, a distance of 47 miles, on April 28, 1966, I counted 159 dead songbirds, apparently all car kills. 95% of the birds were juncos, the remainder were Fox and Song Sparrows and Robins. The road was driven around 2 P.M. after three to four inches of new snow fell the night before, so most dead birds seen should have been new kills for that day.

Highway #2 is used heavily as a grain shipment route and the birds were apparently attracted to the spilled grain along the sides of the highway.

Cars and trucks running into flocks of birds were observed many times. The birds appeared to be in a somewhat weakened condition and with their proximity to the highway, they were highly vulnerable.

During this same period, a large number of thrushes, mostly Swainson's, were observed along the Mississippi River shoreline west of Grand Rapids. Most of these birds were in a very weakened condition and several were found dead.—*Jerome J. Janecek, 111 Golf Course Road, Grand Rapids, Minnesota.*

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Observations of a Rookery containing Great Blue Herons, Common Egrets, Black-crowned Night Herons, and Double-crested Cormorants—There is a heron and cormorant rookery on an island in Lake Johanna, Pope County, T. 123, R. 36, S. 17. (The lake is located between Terrace and Brooten. Take highway 104 east and south from Terrace. Turn left onto the first county road south of the West Johanna Lutheran Church. Proceed almost two miles. To get to the lake you must go north through pastureland belonging to Oring Grunseth.) The island is in the lower lake. Lake Johanna is classified as a game lake by the Minnesota Department of Conservation; the lower lake has a maximum depth of seven feet. The island is about 600 feet long and 400 feet wide and is about five acres in size.

On June 25, 1966, I visited the south shore of the lake at about 6:00 p.m. The wind was too strong to attempt rowing to the island, but examination of the island by binoculars revealed trees with nests and Double-crested Cormorants. Double-crested Cormorants, Great Blue Herons, and Common Egrets were ob-

served flying over the lake and at the lake margins. I also saw a couple of birds that appeared to be Black-crowned Night Herons.

On July 24, 1966, we arrived on the south shore of the lake about 12:00 noon. There were at least 27 Common Egrets along the SE shore of the lower lake. There were also some Great Blue Herons there. With a 25x spotting scope we could see Common Egrets, Double-crested Cormorants, and Great Blue Herons on the island. About 2:00 p.m. we rowed over to the island. There were hundreds of nests. It was late in the breeding season, so I don't know how many nests had been used this year. The nests ranged from four to 50 (est.) feet from the ground. There were from one to about 20 nests in a tree. (Many trees had 4 to 8 nests or so.) Some nests had large-sized (looked almost adult-sized to me) Common Egrets and Great Blue Herons in them. The Double-crested Cormorants looked quite large also. I saw some large young cormorants still in black down, and some cormorants that seemed to be young fully-feathered (they looked brownish in color). There were many Double-crested Cormorants flying over the trees, and from the island over the lake. I saw very few adult Black-crowned Night Herons, but there were many, many young Black-crowned Night Herons scrambling about in the trees. (As we had approached the island by boat, we had seen many of these young in the trees and shrubbery along the south shore.) I did not notice any of these young night herons in nests. They all seemed to be scrambling about in the trees.

Dead trees held the largest number of nests per tree, but many of the nests were in live trees, mostly elm, box elder, and a *Populus* (cottonwood?) as far as I could tell. It appeared that all of the species would nest in trees in which any of the other species were nesting. At the west end of the island there was a great deal of poison ivy. Under the nesting trees, there was a great deal of nettles, and shrubs which I could not identify.—Genevieve M. Tvardik, 714 - 14th Ave. S. E., Minneapolis, Minnesota.

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GREAT GRAY OWL SEEN IN JUNE—Date: June 5, 1966, 8 p.m. (I phoned the weather bureau and they state the sun set at 8:56 DST on June 5th). There were clouds in the west, remaining sky partly cloudy.

Location: Bird was in field, just off gravel road on which Mr. David's property is located. Across Lake Lamond from Bagley, Clearwater County.

Sighting: As I turned car onto gravel road from the David's driveway I saw a large bird fly across the road about two blocks ahead. I thought it might be a Marsh Hawk as we had seen a pair south of Bagley in the morning. We drove to where we had seen the bird cross and saw him roosting on a scrubby bush, approximately 3 feet off the ground, some 75 feet from road in a pasture area. The time was 8 p.m. We drove to the side of the road, turned off the motor. The bird saw us, but was much more interested in something he had seen on the ground. He stayed on the scrub bush for about 5 minutes and then flew to the ground, about 4 feet ahead of the bush. He continued to watch the ground and also watch the car. By this time, of course, we knew he was not a hawk but some kind of owl, and a large one, much heavier than a Marsh Hawk and longer. He had no ears so was not a Great Horned Owl. When he looked directly at us we clearly saw the black mustache marking under the white mustache. He remained on the ground for 15 minutes and by this time it was getting quite dusky, so I decided to get out of the car as quietly as possible (the driver's side was away from the bird) as I fully expected him to fly. At this time a car came up the road and two men stopped to ask if we were having car trouble and we told them no. They drove on and the bird remained. I walked out into the field, slowly, crossed the gully and crossed the barbed wire fence which was almost down to the ground, and out into the field. The bird looked at me, and Mrs. Palmer and I were talking softly to each other at this time. When I was about 30 feet from the bird, he flew off in the direction from which we had come. He was never more than 8 or 10 feet off the ground. He landed on a fence post adjacent to the road, approximately 1½ blocks down the road. We clearly saw his head markings, especially his yellow

eyes, his white and black mustaches, the vertical breast markings, his gray coloring. We consulted Peterson's guide while we were sitting in the car, had ample time to read the descriptions of all the owls and there is absolutely no question in our minds but that this was, in fact, the Great Gray Owl. He uttered no discernable sound. We drove on for about ½ mile, turned the car around and drove slowly back. The owl was now on the opposite side of the road, roosting near the top of a rather small tree, and because we were beginning to feel guilty about spoiling his previous hunting, we did not stop the car but drove on. By this time it was nearly 8:30 p.m., and because of the clouds coming out of the west, was quite dusky. The next evening we drove over the same route again at about the same time, but did not sight the owl. Finally, as to the distances we were from the bird. We discussed this at the time and used the car as a measuring rod, as I knew the car was between 17 and 18 feet long. So we feel the distances are as accurate as they could be without actually using a tape. I might add that it's an eerie feeling to look through binoculars at this large bird and have an eyeball-to-eyeball sensation when he gazes at you with those unblinking eyes. —*Ella May Hodnett, 123 S. Lexington, St. Paul, Minnesota.*

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YELLOW-CROWNED NIGHT HERON RECORD—On August 8, 1966 I collected an injured Yellow-crowned Night Heron. The bird was found 3½ miles south of Clements, Redwood County in a deciduous farm-grove about ½ mile from the nearest water. The wing and one leg of the bird were sent to the Museum of Natural History, University of Minnesota where they were identified and placed in the collection by Vincent A. Heig (MMNH 21881).—*James Sogaard, Clements, Minnesota.*

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SCISSOR-TAILED FLYCATCHER—On May 14, 1966 an adult Scissor-tailed Flycatcher was seen near Frontenac, Goodhue County by seven observers. One of the observers, Mrs. Gladys Point of Minneapolis, sent the following details of the observation.

Field Marks:

Red streak on head

Pink sides

Blue-gray on back

when the bird flew, the long forked tail was plainly evident.

The bird was observed at a distance of 20 feet for 10 minutes when first seen. Three of the people in the group had previously seen this species in the South.—*Robert B. Janssen, 1817 West 59th Street, Minneapolis, Minnesota.*

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PINE SISKIN NEST—I would like to report to you the discovery of what I believe to be an instance of a Pine Siskin nesting in Edina. I am told that there is apparently only one other confirmed case of such a nesting in the Minneapolis area. I reside at 5100 Juanita Avenue in Edina. About 5:30 in the evening on May 18, I was standing in the yard of a neighbor who resides at 5044 Juanita Avenue. I noticed some activity around the base of a tall ornamental spruce tree in the yard. I found that there were two fledglings on the ground and apparently a very distracted parent flying around them. I identified the parent as a Pine Siskin. There have been quite a number of this species in our neighborhood this spring. The bird was of the proper size and heavily streaked. I believe that I saw the yellow markings on the wing and on the base of the tail that distinguish this species. It was definitely not any species of sparrow and the only bird that I know of that fits the bill is a Pine Siskin. Needless to say, it was rather hard to get a satisfactory look at the bird while I was trying to find out where the fledglings should go. I located a nest in the spruce tree about 10 feet above the ground. It was not exactly a tiny nest but it was smaller, for example, than a Robin's nest. It was fairly well made but not so well made as a Robin's nest. I succeeded in putting a ladder up to the spruce tree and returned the fledglings to the nest. I cannot be absolutely sure that

the nest I located was the nest they fell from. However, the nest was empty and appeared to be fairly new and one of the fledglings was found on the ground almost directly under the nest. I think I am a fairly competent observer and have in the last few years identified over 100 species of birds in my neighborhood. I thought this information might be of interest to you.—*Charles L. Horn, Jr., 5100 Juanita Avenue, Edina, Minnesota.*

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POSSIBLE NORTHERN SHRIKE IN LATE MAY. On May 21, 1966, Pat Conway, (a lepidopterist friend) and I were enroute to the Ash River Trail, just south of Lake Kabetogama for the purpose of collecting several early-flying boreal butterflies. About five miles north of Chisholm on Highway 73, I started to point out what I thought was a Sparrow Hawk perched atop a small bush along the edge of the highway. As we drew alongside the bird, I could easily see the dark wings and black face-mask of a shrike. The large size (almost Sparrow Hawk size) and the locality (the usual summer shrike, the Loggerhead, is quite rare in northeastern Minnesota) made me think at once that this was a Northern Shrike. Unfortunately, our time schedule forced us to race almost non-stop up to the Ash River Trail and back down to the Twin Cities, so there wasn't time to stop and chase the bird down for a positive identification. Although I had never before seen this species in May (late May at that) and T. S. Roberts lists the late date for the state as the first week of April, I believe that this bird, though fully a month later than it should be, was a Northern Shrike. The extreme lateness of the season (both birds and butterflies seemed to be about two weeks late) may have had something to do with this observation. *Ronald L. Huber, 480 State Office Building, St. Paul, Minnesota 55101.*

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COMMON GALLINULE NEAR GRAND RAPIDS—On July 11, 1966 while working on the Mud-Goose Lake Wildlife Management Area in Cass County just west of Grand Rapids, I was very surprised to see a Common Gallinule. It was a coot-sized bird with the brilliant red bill and white flank stripe. I saw it with Roy D. Nelson, Game Biologist for the State of Minnesota. We approached it in our canoe and were within 20 yards and viewing with 7x50 binoculars.—*Paul Egeland, Cottonwood, Minnesota.*

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YELLOW-CROWNED NIGHT HERON—On July 21, 1966 I was fortunate enough to see a Yellow-crowned Night Heron on the Vermillion River south of Hastings in Dakota County. I first saw it as it flew across in front of our canoe. I then noticed its gray body and long legs. It alighted on shore and we followed it in and I then observed the white face patch, and again noticed its slate-gray body and long legs. It then flew and we went on with our work. After finishing our work we had to pass by the spot of the original sighting and were fortunate to see it had returned and I again got a good look at it using my 7x50 binoculars. *Paul Egeland, Cottonwood, Minnesota.*

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POSSIBLE TURKEY IN STEVENS COUNTY—On Wednesday, April 6, 1966, T. Hart, my brother and I were taking a short canoe jaunt down the Pomme de Terre River, from Lower Pomme de Terre Lake to Morris. Although the outlying area is prairie, the river side is fairly well wooded with oak, willow and several kinds of shrubs. We had been seeing Great Blue Herons, as well as ducks in fairly good numbers. As we rounded one bend of the river I saw a large bird on the wooded shore. Almost at once, the bird flew deeper into the woods. I was in the back of the canoe, and the only thing I saw was at the first impression a fat very dark heron. When the bird spread its wings to fly however I saw right away that the bird could not be a heron. The reason for this conclusion was that this bird had much shorter and wider wings than a heron, and its swift wingbeats differed from the heron's somewhat labored flight.

T. Hart, who was paddling in the front of the canoe, got a much better view

of the bird than I did. This was because he was at an angle where his vision was not obstructed by brush on the river bank. He gave me this description of the bird: (This description coupled with my own observations led me to the conclusion that the bird might be a Turkey). The bird had a large, stubby and very fat, dark colored body with about eight inch yellow legs. It was facing directly away from us, and as it took off, its tail fanned out almost as wide as its body. The markings on the tail could not be distinguished, however, a dark yellow white, and a chestnut brown could be seen as colors.

As the bird flew with its short but wide wings, a loud clacking of the primaries could be heard. Its method of flying was also peculiar. It seemed to have a hard time getting off the ground and when it did, it barely cleared obstructions in its way. Its flapping and method of flying reminded me most of a pheasant flying. This bird was slower and more clumsy in the air than a pheasant however.

The bird's neck, which T. Hart estimated to be about eight inches long, was very thin in proportion to the fat body. It was dark colored and the head and neck joined seemed to be one continuous structure, not like some birds which have heads easily distinguished from their necks.

In comparison with a Black-crowned Night Heron, with which I am familiar, this bird was much fatter, with shorter legs, a thinner and somewhat shorter neck and shorter but wider wings. Of course the colors of the two birds are completely different.

We only had a short view of the bird before it flew and disappeared into the woods. As a result, we were not able to get binoculars on the bird before it moved, however they would not have been necessary since the bird was less than twenty feet away from our canoe, and although a light snow was falling at the time, we could see the bird clearly (even though our observations were of very short duration).

When I returned home I immediately checked several sources, and consulted what they had about wild Turkeys. In both *A Field Guide to the Birds*, by Roger Tory Peterson and *A Natural History of American Birds of Eastern and Central North America* I consulted descriptions of the Turkey and compared these with my notes, which I had taken in the field. I also consulted *Birds of Minnesota*, by T. S. Roberts to find the past and present status of the Turkey in Minnesota. According to Roberts, the Turkey may have formerly bred in southeastern Minnesota. If it ever did however, it was before bird records were ever taken in Minnesota because only a handful of old settlers and Indian reports give evidence that the Turkey was present at all, and these reports leave plenty of room for doubt.

Reading in the paper that there was to be a spring hunting season in the Dakotas (Black Hills region) and that several successful stockings had been made also in the Dakotas, (one stocking area was near the western Minnesota border) I wonder if this bird was a stray. I also discovered that a game farm, not too far north of Stevens County had been raising Turkeys for stocking, and had liberated some in the Little Falls area as an experiment to see if they could withstand Minnesota winters. The experiment, which occurred around a year or two ago was not too successful. (The main problem of this stocking was the predation on the Turkeys during the winter, although a severe winter took its toll too). So the bird, if it was a Turkey, could have been one of the few survivors of this stocking, and could have wandered into Stevens County.

Of course the possibility that the bird was a domestic has to be considered. Domestic Turkeys of the brown colored breed however are not to my knowledge bred anywhere in Stevens County, and no trace of white was seen on the bird's tail, the white being the mark of a domestic turkey.—*John Hart, 309 East 2nd Street, Morris, Minnesota.*

* * *

POSSIBLE SLATE-COLORED JUNCO—WHITE-THROATED SPARROW HYBRID—On May 10, 1966, Mr. and Mrs. Hans A. Feldmann, Belvidere, Illinois, and the Eastmans were observing birds at the Eastman feeder at 7000 Valley

View Road, Edina, when a strange sparrow appeared. It appeared very dark about the head, and our first thought was, "Harris' Sparrow." However, after observing the bird for several minutes at a time several times during the day and also on May 11, with our 9 x 35 Bausch & Lomb binoculars, in excellent light, at about 70' distance, we concluded the bird was a hybrid Slate-colored Junco-White-throated Sparrow. The feeder is a platform type with room for many birds on it, and we had plenty of opportunity to compare its size and markings with House Sparrows and White-throated Sparrows which came and went as did our "hybrid." We made the following notes while observing the bird:

Reddish legs; sooty head, face and half back; entire back streaked; lower back rusty; two faint wing bars; black and gray-rust head stripes, pattern like White-throat; gray bib like junco; darker throat than breast; long tail cocked up; dull gray bill; about White-throated Sparrow size.

Following are several literature references to Junco-White-throated hybrids:

Condor: Vol. 67, No. 5, Page 438, Short & Simon. 1965.

Auk: Vol 78, Pages 627-632, Dickerman. 1961.

Auk: Vol. 74, Page 94, Hamilton. 1957.

—Whitney and Karen Eastman, 7000 Valley View Road, Edina, Minnesota 55435

* * *

BLACK-BILLED CUCKOO—It is not uncommon to hear or see Black-billed Cuckoos around our farmyard. During the evening of July 19, 1966, after I had cleaned and oiled my spincast fishing reel, I went outside to test the action of the reel. After placing the reel on my fishing rod and placing the tip of the hook into a ¼-ounce rubber-core sinker, I cast the sinker about 30 feet toward the garage. When the sinker touched the grass, a Black-billed Cuckoo sitting in a nearby tree, dove at and picked up the sinker and started flying toward me. Frantically I reeled in line to keep the cuckoo from entangling the monofilament line in the tree branches. When the cuckoo was about ten feet from the end of the fishing rod, it dropped the sinker, flew into a nearby tree and then sat gazing at me. I did not try casting the sinker again to see whether the bewildered cuckoo would repeat its action.—*Earl D. Kopischke, Vernon Center, Minnesota.*

* * *

SUMMER OBSERVATIONS IN ROSEAU COUNTY—On the morning of June 15, 1965, several supposed Baird's Sparrows were seen on posts and fence lines in cultivated fields between the village of Pine Creek and Roseau River Wildlife Refuge headquarters, Roseau County. At least three were sighted. This record is somewhat dubious as I am not fully experienced in the identification of sparrows, and the report of such a rarity would need more competent observation. The yellow face, crown stripe and black neck stripes were all definitely seen in one specimen. The very center of the neck lacked the black streaks. The streaks appeared to get thinner and shorter as they approached the center of the neck.

Another bird seen the same day was a Black-billed Magpie. About 2-3 miles south of the Roseau Wildlife Refuge headquarters along the main County road on the west side there is an area containing many dead trees about 15 to 30 feet tall surrounded by a thick shrub-and-brush layer. While driving past an unusual bird was seen in one of the dead trees. When the car was stopped, the Black-billed Magpie flew west, displaying the white wing patches and long streaming tail. This observation was between 10:00 a.m. and noon and was also witnessed by Ted Granovsky.

On July 25, 1965 my wife (Lucy Cutler) and I recorded another supposed Baird's Sparrow in an alfalfa field, 8-11 miles west of Greenbush, Roseau County, on the south side of Highway 11.

During June 16-20, 1966, a pair of Eared Grebes were repeatedly seen in the extreme southeast corner of the lake in the Roseau River Wildlife Refuge along with a male Horned Grebe, Mallards, Blue-winged Teal, Redhead, Ring-

necked Duck and Lesser Scaup.—*Bruce Cutler, Department of Entomology, University of Minnesota, St. Paul, Minnesota.*

Editor's Note: The rarity of the Baird's Sparrow in Minnesota and the proximity of the above report to cultivated fields requires that caution be used in evaluating this sparrow record. Baird's Sparrows notoriously avoid anything plowed or mown. R.L.H.

* * *

KING RAILS NEAR BUFFALO LAKE—When returning to St. Paul in the afternoon of Sunday, July 17, 1966 I was fortunate enough to see two adult King Rails and five young. While traveling on Highway 212 I passed a very small water area two miles east of Buffalo Lake. When I glanced at the area I saw what appeared to be a very large shorebird or rail. I stopped as quickly as possible, turned around and stopped right next to the marsh. It could not be termed a marsh but was just a widening of a creek just before it went under the highway. The area was about 15 yards long and 10 feet wide. I pulled over on the shoulder and got my 7x50 binoculars out of my suitcase. The minute I put my binoculars on the bird I knew it was a King Rail. It was the size of a chicken, had a long bill and was reddish brown. As I watched it, it caught a large water beetle and immediately headed to the edge of the grass. As I watched it walk to the edge, out from the grass came five downy black rails with white bills. The adult rail dropped the water beetle by the closest young and returned to the middle of the water area. As I watched the young go after the beetle I noticed the second adult rail standing on the edge of the grass preening its feathers. I assumed this to be the male because its color was a very rich reddish brown in contrast to the other adult rail. The birds were very tame, I was no more than 15 yards away and the heavy traffic of trucks and cars on highway 212 did not seem to bother them. I returned to the area two weeks later but the area was completely dry and there were no rails in sight.—*Paul Egeland, Cottonwood, Minnesota.*

BOOK REVIEWS

BUTTERFLIES OF COLORADO by F. Martin Brown, Donald Eff and the Reverend Bernard Rotger, 368 pages, approximately 690 black-and-white photographs, published by the Denver Museum of Natural History, Denver, Colorado, 1957, \$5.20.

This superb volume is everything that a state publication on butterflies should be. No other state has a volume of such quality to its credit unless, perhaps, it be Austin Clark's work on the *Butterflies of Virginia*, published by the ever-affluent Smithsonian Institution in 1951.

While the Reverend Rotger and Mr. Eff have contributed widely to the knowledge of Colorado butterflies through their extensive collecting efforts, the high level achieved by this book is due, for the most part, to the scholarly work of the senior author.

For 51 years he has collected and studied lepidoptera and published innumerable papers on them. His sleuthing of early correspondence (and his other biographical investigations) between the first American entomologists have thrilled contemporary lepidopterists in their quest for stabilized nomenclature, type localities, taxonomic entities, etc.

Over 250 species of butterflies are listed, photographed above and below in black-and-white, and discussed taxonomically and ecologically. Only Texas can boast a larger butterfly list. No other volume has been published which deals with the Rocky Mountain butterflies and some of the species presented in this book are photographed for the first time.

Those of us currently working on Minnesota butterflies would be more

than satisfied if we could produce a volume that in any way approximated the stature of the *Butterflies of Colorado*. Ronald L. Huber, 480 State Office Bldg., St. Paul, Minnesota 55101.

BIRDS OF COLORADO by Alfred M. Bailey and Robert J. Niedrach, 2 Volumes, 1175 pages, 124 color plates, over 400 black-and-white photographs, published by the Denver Museum of Natural History, Denver, Colorado, \$35.00.

Although Kansas has been leading the scene in recent years with its many publications on local flora and fauna, the Denver Museum is making a strong bid to put Colorado in the running with this work and other recent books on flowers and butterflies. The two authors have almost half a century each of field experience, most of it from Colorado. Their comments reflect their status as dedicated ornithologists and a great deal of the data they present is new and heretofore unpublished.

Introductory passages on nomenclature, migration, pesticides, nesting, longevity, history of early ornithologists, topography, climate, life-zones and a list of common plants are especially useful to the all-around naturalist. An impressive four hundred and thirty-nine species are treated, probably ranking Colorado fourth in the country for total state list.

For each species is given recognition marks, general range, status in the surrounding states, and Colorado status, including specimen records, nesting, migration dates, habitat, etc. The method of presentation is excellent and the color-plates, instead of being grouped together at the end of each volume, are skillfully spread throughout.

No less than 23 different artists, including Minnesota's own W. J. Breckenridge, have prepared these many color-plates especially for these volumes. The quality of these paintings naturally varies from artist to artist, with some of the plates being outstanding while others are less than average. In spite of this, and in spite of the excellent text and the outstanding black-and-white photographs, these volumes

are destined to fame mostly for their color-plates. The reason for this is immediately evident as one thumbs through the books; the new, fresh, originality of the plates. By far the most outstanding of these is the Lark Bunting plate by Don Eckelberry which also tastefully adorns the outer wrappers on both volumes.

As with most of the recent state-level bird books containing many color-plates, the price seems quite high. However, considering the wealth of information contained in these two volumes, the nearness of Colorado to Minnesota and the similarities of the birdlife of the two states, I would put the work of Messrs. Bailey and Niedrach on a level with Roberts' *Birds of Minnesota*, to be highly recommended for the Minnesota Birder. Ronald L. Huber, 480 State Office Bldg., St. Paul, Minnesota 55101.

THE DESERT by A. Starker Leopold and the Editors of Life. Third volume in the Life Nature Library series. 196 pages, 64 in full color. Published by Time, Inc., New York, 1961, \$3.95.

EVOLUTION by Ruth Moore and the Editors of Life. Eighth volume in the Life Nature Library series. 192 pages, 64 in full color. Published by Times, Inc., New York, 1963, \$3.95.

THE INSECTS by Peter Farb and the Editors of Life. Ninth volume in the Life Nature Library series. 192 pages, 64 in full color. Published by Times, Inc., New York, 1963, \$3.95.

THE LAND AND WILDLIFE OF NORTH AMERICA by Peter Farb and the Editors of Life. Volume 21 in the Life Nature Library series. 200 pages, 72 in full color. Published by Time, Inc., New York, 1965, \$3.95.

A GUIDE TO THE NATURAL WORLD and Index to the Life Nature Library, by the Editors of Life. Volume 25 (final) in the Life Nature Library series. 210 pages, profusely illustrated with color photographs. Published by Time, Inc., New York, 1965, \$3.95.

These five outstanding volumes have a common denominator that is the best of all possible denominators: col-

ored photographs. Until recently, most of us probably felt that *National Geographic* had the "monopoly" on the colorful world of nature. The editors of *Life* have proven beyond any doubt that they are equally capable of such fine work. It would be impossible to improve upon their efforts, except possibly to issue still more volumes. The entire 25-volume series, translated into eight languages, exceeds one million words in length, approaches a total of 4,000 pictures and has been sold in more than 90 countries around the globe.

The five volumes reviewed here offer, as testimony to the workmanship of the series, such names as A. Starker Leopold (*THE DESERT*), son of the famed Wisconsin naturalist Aldo Leopold; Theodosius Dobzhansky (introduction, *EVOLUTION*) of the Rockefeller Institute, world-famous for his work on genetics and the origin of species; Alexander B. Klots (introduction, *THE INSECTS*) famous to most of us for his *Field Guide to the Butterflies*; Stewart L. Udall (introduction, *LAND AND WILDLIFE OF NORTH AMERICA*), Secretary of the Interior, a man to whom we must all be deeply indebted for his sound Conservation values and finally, Peter Farb, an all-around young naturalist who has written four of the Life Nature books plus a 1963 Book-of-the-Month Club selection, *Face of North America: The Natural History of a Continent*.

With such names as these gracing the Life Nature Library volumes, their success around the world is not at all surprising. Freedom from unnecessary technical jargon is one of the highlights of this series and yet each volume is precisely and accurately scientific.

If someone were to ask what the outstanding contributions to the conservation/wildlife cause have been in recent years, most of us would think of Aldo Leopold's *Sand County Almanac*, Roger Tory Peterson's *Field Guide* series and Walt Disney's well-known wildlife movies. To this list must now be added the Life Nature Library. The tremendous value of these volumes (particularly to colored picture advocates such as myself), offer-

ed at such modest prices, makes the acquisition of some, if not all, of these volumes an absolute must for anyone of us who considers himself a serious student of natural history. *Ronald L. Huber, 480 State Office Bldg.; St. Paul, Minnesota 55101.*

BIRDS OF NORTH AMERICA by Chandler S. Robbins, Bertel Bruun and Herbert S. Zim. Illustrated by Arthur Singer. 2000 full color illustrations. 340 pages. Golden Press Inc., 850 Third Avenue, New York, New York. May 1966. Plastic Coated Paperback Field Edition \$2.95. Library Edition \$4.95.

Since the publication of Roger Tory Peterson's "A Field Guide to the Birds" in 1947 many people have tried to duplicate or better his work. None have succeeded until Golden Press published "Birds of North America" this year. This is an excellent field guide which every bird watcher should have. In 340 pages 699 North American species are treated in a small field edition. Most of these species are illustrated in full color by Arthur Singer. The illustrations are superb and true to life. The illustrations contain many habitat situations, characteristic poses of the birds and comparisons with similar species to help in their identification. Accompanying the illustrations are maps showing breeding distribution, migration routes, wintering ranges, extension of ranges during winter or summer, etc. Also included are song charts called sonograms which give a "picture" of the birds song. The authors are to be congratulated on a very fine work and the illustrator is to be commended for his most excellent illustrations, the best in any present field guide. They have certainly accomplished their purpose in the Guide which was "to improve the ease and accuracy of field identification for the amateur as a first step toward behavioral ecological and other studies of birds.

Editor

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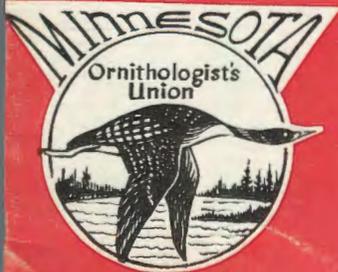
the Loon

Formerly The Flicker



RED-TAILED
HAWK
NEST

YOUNG RED-
TAILED HAWKS
3 WEEKS OLD



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THE LOON

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FRONT COVER

Photos of Red-tailed Hawk nest by Earl D. Kopischke.
Taken near Vernon Center, Blue Earth County, 1960.

Dedication

This issue of The Loon is dedicated to the memory of Albert Ellis Allin. A naturalist of the old school, intrigued by every aspect of the outdoors, his deep interest in migration routes along Lake Superior shores led to many friendships among Gopher State Birders and eventually to the joint Winter Field Trips to the North Shore. A loyal member of the Minnesota Ornithologists' Union, he wrote the column "The Canadian Lakehead" for The Loon. Many Cook County references were entered in his notebooks. Those who knew Al well admired his competence in the field, his thoroughness in identifying species, his knowledge of the literature, and his carefully kept records. Many of us benefited greatly through the example set by Dr. A. E. Allin.



THE PASSING OF A NATURALIST

*As quietly as the night-wings of an owl,
He came, he searched, he passed
A humble man throughout his years
The world has lost a loyal friend.*

*With watchful eyes and smiling lips
He hailed the birds, the trees,
The sun-swept grass, a thousand
Living things otherwise unobserved.*

*Each blossom knew his touch and
He in turn its name and scent.
The distant call of hawk and thrush
Rang familiar to his windswept ear.*

*He saw the blazing colors of a
Wing, inflating butterfly, freshly
Unimprisoned from its chrysalis - just
To fly at last its mating flight.*

*My friend is gone, but wait, he
Lingers still in every flower and
Tree and blade of grass. The far-off
Voices of frogs and birds still sing his name.*

*A friend of Life and all organic things,
He still lives on beyond his passing,
Sharpening my senses and teaching me
His ever-invulnerable reverence.*

RON HUBER

THE PRESIDENT'S PAGE

If you know where to find birds in your area, why not compile the information and send it to the editor of *The Loon*? Some of the information in *Where to Find Birds in Minnesota*, last published in 1955, is out of date. The MOU must take the initiative to offer directions to birding areas in and even out of state. This information, published quarterly in *The Loon* would have the merit of being current. Perhaps the directions and information could follow the organization of *Where to Find Birds*: Directions; Terrain; Vantage points; Species; Records; Hazards; General Comments.

For example: "The Mississippi River, Brownsville to Reno."

Directions: From LaCrescent (U. S. Highway 61 from the Twin Cities), take U.S. Highway 16 south toward Hokah. Two miles south of the LaCrescent stoplight, leave 16 and turn south on State Highway 26.

Terrain: On your left as you travel south are Mississippi bottomlands, cattail swamps, and the large pool formed by Lock and Dam 8 at Reno. On your right as you travel south are steep bluffs covered with dense hardwood timber. At Reno, park near the entrance to the causeway of Lock and Dam 8. If the spillway is dry, the causeway may be hiked its entire length, about 2 miles.

Vantage Points: There are no roadside rest areas, but shoulders on both sides of the road are wide enough in most places to provide safe parking. You may scan the water and marshes or leave the car and hike accessible ravines and in places the old roadbed. An excellent vantage point for viewing ducks, geese and swans in the Upper Mississippi Valley Wildlife Refuge is located 14 miles south of the LaCrescent stoplight, near a group of homes called "Twin Coves."

Species: Of course the hardwood timber is good for passerines, hawks, owls, and woodpeckers. But the big attraction in spring and fall is the waterfowl. Species to be seen include the following: Common Loon, Pied-billed Grebe, Horned Grebe, Great Blue Heron, Green Heron, Common Egret, both bitterns, Whistling Swans in early April and early November, Canada, Snow and Blue Geese, all regularly occurring ducks, and all three mergansers. Raptors recorded by the writer: Sharp-shinned, Cooper's, Red-tailed, Red-shouldered, Rough-legged, Golden Eagle, Bald Eagle, Marsh Hawk, Osprey, Pigeon Hawk and Sparrow Hawk.

Records: Whistling Swans, April 8, 1966 and November 5, 1966; Golden Eagle (two immature birds), November 5 and 6, 1966; Long-eared Owl, November 8, 1966; Tufted Titmouse, November 8, 1966.

Hazards: State police will not allow you to park on the shoulder facing traffic. When parked on a shoulder, take pains to get as far from the highway as possible. Traffic is light but fast. Ownership of the timber is private.

Fred Leshner

In Memoriam

ALBERT ELLIS ALLIN

1906 - 1966

NATURALIST - CONSERVATIONIST - SPORTSMAN

Dr. A. E. Allin, director and pathologist at the Regional Laboratory, Fort William, Ontario, since 1937; and widely known throughout Canada and United States as an outstanding naturalist, died suddenly on Sunday, November 6th, 1966. He was laid to rest in Hampton, Ontario.

Boyhood days in Darlington township resulted in Albert Allin becoming an enthusiastic naturalist. He wrote the first of many articles on natural history when nine—a report on “The Black Swallow-tail Butterfly” published in the Toronto Star Weekly. For a few years he had a column in the Port Arthur News Chronicle “Bird Life in Thunder Bay District.” Migration studies developed an interest in the north shore of Lake Superior and soon he became acquainted with members of the Duluth Bird Club. Inter-club visits became frequent and he was instrumental in the organization of the Winter Field Days first at Pigeon River and later at Grand Marais. The Allins often drove down the Highway 61 to Cascade River or Duluth. His first contribution to *The Flicker* was in 1946. In 1951 the column “The Canadian Lakehead” appeared in *The Flicker* and later, in *The Loon*.

The extensive field work undertaken by Albert Allin and his scientific love of accuracy in recording made his written observations valuable. He was made an elective member of the American Ornithologists' Union in 1955. He was a member of many organizations specializing in various aspects of natural history and the results of his observations were published in numerous journals, including *The Wilson Bulletin*, *Canadian Field Naturalist*, *The Auk*, *Transactions of the Royal Canadian Institute*, *Copeia*, *Journal of Mammalogy*, etc. His collections included birds nests, and eggs, fish, and plants. He forwarded many specimens to the Royal Ontario Museum and the National Museum. He served as a director and vice-president of the Federation of Ontario Naturalists and was elected president of the Thunder Bay Field Naturalists' Club on five occasions.

He was an ardent conservationist and worked for the prevention of pollution, better administration of our parklands, and for scientifically-based fish and game regulations. He was a trustee of the Ontario Waterfowl Research Foundation and served on the Advisory Board to the Lakehead Region Conservation Authority. A past-president of the Thunder Bay Fish and Game Association, he was presented with the Reg Windsor trophy by that club in 1958 “for outstanding service” and the same year was named “Sportsman of the Year,” the result of a poll conducted by the West Fort Kiwanis Club.

Dr. Allin is survived by his wife, Dorothy and a son, David. He will be missed by many who enjoyed his humor, his encouragement, and his friendship.

Keith Denis

THE SUMMER SEASON

Ronald L. Huber

Weatherwise, this summer was quite normal. The usual heat and drought in July and August probably stifled some earnest efforts on the part of some observers. Extremely high water in some areas no doubt affected the local waterfowl populations. Most prairie species fared quite well, while warblers and some of the other boreal nesters were reported less frequently than usual. The latter situation is probably due to a decrease in birding activity in the north-eastern portion of the state this summer. The format used here will be the same as was used for the last Summer Season: nesting evidence will be listed and then any county records will follow.

Common Loon: nested in Crow Wing, Swift, Hubbard Co's; also reported from Lake, Beltrami, St. Louis, Mille Lacs, Cook, Ottertail, Wright, and Morrison Co's.

Red-throated Loon: 6-7 Duluth one found dead, Don Higgins fide JCG.

Red-necked Grebe: 6-23 Mille Lacs Lake, 2 nests, NMH; 7-17 Sugar Lake, Wright County, ad-ly MAS; 7-23 Carver Co. 2ad 2y. BL; 7-30 Middle Lake, Nicollet Co, ad ly, RBJ; 8-15 Swan Lake, Nicollet Co, 4ad 8y, PE; also reported from Hennepin and Becker Co's. One found dead on Minnesota Point, St. Louis Co, 6-27, PBH.

Horned Grebe: 8-11 Twin Lakes, Kittson Co, ad ly, PE; also reported from Lake, Hubbard, Mahnomen, St. Louis, Marshall and Roseau Co's.

Eared Grebe: reported from Marshall and Roseau Co's, but no nests.

Western Grebe: 7-23 Swan Lake, Nicollet Co, ad y, BL; 7-23 Carver Co, DB, RG; 8-15 Swan Lake, 150 PE; one unusual record, 6-2 Wilson Lake, Lake Co, 1 bird captured, examined in hand by JGH and 6 other biologists, good details.

Pied-billed Grebe: nested in Stearns, Ramsey, Hennepin and Dakota Co's; also reported from Carver, Lincoln, Lac Qui Parle, Dakota, Nicollet, Faribault, LeSueur, Crow Wing, Carver, Beltrami, Rice, Wright and Nobles Co's.

White Pelican: 6-25 Agassiz Refuge, Marshall Co, 90, DLO; 7-6 Traverse Co, 75, RG.

Double-crested Cormorant: nested in Pope Co (see Notes of Interest in previous issue); also reported from Rice, Lac Qui Parle, Mille Lacs, Traverse and St. Louis Co's.

Great Blue Heron: nested in Rice, Dakota, Stearns Co's; also reported from Ramsey, Morrison, Roseau, Itasca, Beltrami, Wabasha, Lake, St. Louis, Cass, Nicollet, Blue Earth, Faribault, Waseca, Pope, Washington, Hennepin, Goodhue, Hubbard, Winona, Houston, Wright, Wabasha and Cottonwood Co's.

Green Heron: nested in Washington Co; reported also from Ramsey, Dakota, Rice, Nobles, Stevens, Hennepin, Wright, Wabasha, Waseca, Stearns, Isanti, Crow Wing and Morrison Co's; two northerly records not accompanied by details: 6-3 and 6-24 Marshall Co, DLO; 6-23 Itasca Co, ACR.

Common Egret: nested in Rice and Stearns Co's; also reported from Ramsey, Marshall, Becker, Dakota, LeSueur, Goodhue, Wabasha, Winona, Grant, Ottertail, Swift, Pope Co's.

SNOWY EGRET: 7-4 and 7-15 Agassiz Refuge, Marshall Co, 1, DLO, good details. This would probably be fifth Minnesota record. (See Notes of Interest).

Black-crowned Night Heron: nested in Hennepin and Stearns Co's; also reported from Washington, Swift, Stevens, Dakota, Goodhue, Grant, Ramsey, Blue Earth, Jackson, Nicollet and Pope Co's.

Yellow-crowned Night Heron: 6-20 South St. Paul, Dakota Co, ELC, RLH; 7-21 Hastings, Dakota Co, PE (see Notes of Interest in previous issue); 8-8 Redwood Co, specimen, (see Notes of Interest in previous issue); 8-13 La Crescent, Houston Co, RG.

Least Bittern: 6-7 Rice Co, OAR; 6-8 Washington Co, WWL; 7-23 Nicollet Co, 12, RG; 8-11 Twin Lakes, Kittson Co, 2, PE (northernmost state record); more reports of this species than we've had in some time.

American Bittern: no nests reported; reported from Ramsey, Rice, Wright, Aitkin, Hennepin, Anoka, Big Stone, Nobles, Swift, Morrison, Crow Wing, Roseau, Stearns, Carver, Norman, Cook, St. Louis and Lake Co's.

WHISTLING SWAN: 6-17 and all summer, Agassiz Refuge, Marshall Co, 1, DLO; 7-8 Lyon Co, near Florence, 1, apparently had injured wing, PE; still there one week later; can any of these summer records in recent years be Trumpeter Swans? (See Notes of Interest)

Canada Goose: Nested in Stearns Co; also reported from Nicollet, Jackson and Carver Co's.

Mallard: Nested in Hennepin, Dakota, Rice, Stearns, Sherburne, Itasca, Ramsey, Morrison, Lake and St. Louis Co's; also reported from Crow Wing, Roseau, Beltrami, Wabasha Co's.

Black Duck: 6-18 Lake Co, pair, JNG; 7-14 Itasca Co, 2 ad, PE; 8-15 Swan Lake, Nicollet Co, 7, probably migrants, PE; also reported present in Ramsey, Cook, and Hubbard Co's.

Gadwall: 7-14 Cass Co, ad-7y, PE; 7-14 Lac Qui Parle Co, RBJ.

Pintail: nested in Washington Co; also reported from Lac Qui Parle, Benton and Nobles Co's.

Green-winged Teal: 6-5 Pope Co, WH; 6-28 Lac Qui Parle Co, JAH; 7-16 Dakota Co, RBJ; 7-19 Grant Co, JAH; 8-15 Nicollet Co, 2, probably migrants, PE.

Blue-winged Teal: nesting in Rice, Morrison, Ottertail and Stearns Co's; also reported from Crow Wing, Roseau, Wabasha, Lac Qui Parle, Sibley, Nicollet, Waseca, Ramsey, Sherburne, Wright and Itasca Co's.

American Widgeon: 7-14 Itasca Co, ad-3y, PE; July, Lyon Co, ad-5y, PE; also reported from Hubbard, Beltrami, Ottertail, Traverse and Nicollet Co's.

Shoveler: 7-13 Hennepin Co, ad-3y, VL; also reported from Sibley, Stevens, Mille Lacs and Dakota Co's.

Wood Duck: nested in Ramsey, Washington, Hennepin, Rice, Stearns, Carver and Stevens Co's; also reported from Morrison, Roseau, Marshall, Wabasha,

Dakota, Grant and Itasca Co's; may be spreading northward as a nester?

Redhead: nested in Lincoln and Lyon Co's; also reported from Lac Qui Parle Co.

Ring-necked Duck: nested in Nicollet and St. Louis Co's; also reported from Roseau, Stearns, Carver, Hennepin, Dakota, Beltrami and Lac Qui Parle Co's.

Canvasback: 7-26 Stevens Co, 10, JAH; 8-6 Mahanomen Co, 1, RBJ, RG, FL.

Lesser Scaup: 6-4 Split Rock Lake, Pipestone Co, 1 male, BL; 6-5 Dakota Co, RBJ; 6-27 Minnesota Point, St. Louis Co, PBH; 7-8 Lyon Co, 3 pair, PE; 7-14 Salt Lake, Lac Qui Parle Co, RBJ.

Common Goldeneye: nested in Cook, St. Louis and Itasca Co's; also reported from Lake and Becker Co's.

BUFFLEHEAD: 6-23 (3 males) and 7-7 (2 males), Diamond Point, Lake Bemidji, Beltrami Co, ME; very few summer records; good details submitted.

Surf Scoter: 5-30 through 6-3 Lake Co, pair, JGH.

Ruddy Duck: nested in Stearns Co; also reported from Carver, Nicollet, Murray, Hennepin, Stevens and Lac Qui Parle Co's.

Hooded Merganser: reported from Lac Qui Parle, Carver and St. Louis Co's.

Common Merganser: several nestings reported in Cook and St. Louis Co's.

Red-breasted Merganser: nested in St. Louis Co; also reported from Lake Co; two broods of 9 and 4 young seen on July 31 at Grand Marais, Cook Co, AEA.

Turkey Vulture: reported from Dakota, Marshall, Wabasha, St. Louis, Goodhue, Beltrami, Lake, Itasca Co's.

Sharp-shinned Hawk: reported from Roseau, Beltrami, St. Louis Co's.

Cooper's Hawk: nested in Swift and Grant Co's; also reported from Ramsey, Wright, Beltrami, Wabasha, Roseau, Marshall, Washington, Rice, Lake, Winona, Itasca, Goodhue, Hennepin and Dakota Co's.

Red-tailed Hawk: reported from Goodhue, Winona, Wright, Hennepin, Rice Da-

kota, Wabasha, Beltrami, Crow Wing, Stevens, Lake, Ramsey, Morrison, Roseau, Benton, Wabasha, Nobles, Cass, Scott, Clay, Mahnomen, Becker, Norman Co's.

Red-shouldered Hawk: 6-3 Goodhue Co, 1, EWJ; 7-17 Ottertail Co, JAH (details ?); only two reports.

Broad-winged Hawk: reported from Crow Wing, Goodhue, Hennepin, Marshall, St. Louis, Koochiching Co's.

Swainson's Hawk: 6-5 Windom, Cottonwood Co, BL; 7-9 Dakota Co, EWJ, FN/MAS, awaiting details.

FERRUGINOUS HAWK: 7-28 Traverse Co, 2, EHH (awaiting details).

ROUGH-LEGGED HAWK: 7-30 Ramsey Co, 1, MIG; details? There are probably no acceptable summer records for this species in Minnesota to date.

Bald Eagle: nested in Cass Co; also reported from Itasca and Washington Co's.

Marsh Hawk: reported from Morrison, Roseau, Sherburne, Lake, Rock, Cass, Wadena, Nobles, Dakota, Rice, Cook, Wright, and Crow Wing Co's.

Osprey: 6-1 St. Louis Co, NJH; 6-12 Clearwater Co, Itasca State Park, ad on nest, ELC; 6-16, Duluth, PBH; 6-26 Itasca Co, ME; 7-6 St. Louis Co, RBJ; 7-28 Crow Wing Co, nest fide NR; 8-5 Beltrami Co, ME; 8-20 St. Louis Co, RG; 8-28 Cook Co, RG.

Pigeon Hawk: 7-6 Becker Co, RG; only report.

Sparrow Hawk: nested in Hennepin Co; also reported from Morrison, Roseau, Stearns, Lake, Benton, Wabasha, Carver, St. Louis, Nobles, Kandiyohi, Meeker, McLeod, Wadena, Cass, Crow Wing, Nicollet, Faribault, Le Sueur, Ramsey, Rice, Wright, Clay, Dakota, Goodhue, and Watonwan Co's.

Spruce Grouse: 7-20 Cook Co, ad female 3y, DS; 8-20 Fernberg Tower, Lake Co, ad female-1y, DB, RG, BL.

Ruffed Grouse: nested in Marshall, Cook and Lake Co's; also reported from Roseau, Morrison, Itasca and Winona Co's.

Greater Prairie Chicken: 6-11 Clay Co, 7, RG, DB; 7-6 Clay Co, 1, RG; 7-27 Ogema, Mahnomen Co, ad-5y, EHH.

Sharp-tailed Grouse: present all summer in Roseau Co, PEB.

Bobwhite: 7-3 Houston Co, HFH, RLH; present in Wabasha Co, DGM.

Ring-necked Pheasant: nested in Hennepin, Washington Co's; also reported from Ramsey, Nicollet, Faribault, Wabasha and Nobles Co's.

Chukar: 8-20 Ely, St. Louis Co, 2 ad-2ly, RG, DB, BL.

Gray Partridge: reported from Rock, Stevens, Roseau Co's.

Sandhill Crane: 8-4 Carlos Avery Refuge, Anoka Co, usual nesting pair had 2y, RG; 8-12 Roseau Co, 2 ad-2 sub-adults, perhaps family group, PEB; good details. (See Notes of Interest)

Sora: nested in Stearns Co; also reported from Benton, Rice, Wright, Washington, St. Louis and Carver Co's.

King Rail: 7-17 Buffalo Lake, Wright Co, 2 ad-5y, PE (see Notes of Interest in previous issue); La Crescent, Houston Co, 1, RG. (See Notes of Interest)

Virginia Rail: reported from Hennepin, Nicollet, Faribault, Wright and Benton Co's; one seen at Island Lake, St. Louis Co, on 6-20 PBH.

Common Gallinule: 6-8 Goodhue Co, 2, RPR; 6-21 through 7-9 Hennepin Co, EWJ, VL, RL, FN/MAS; 7-11 Cass Co, nr Grand Rapids, PE, see Notes of Interest in previous issue; 7-23 Swan Lake, Nicollet Co, ad-7y, RG, DB, BL; 8-2 Hennepin Co, ad-5y, VL, SW; 8-13 La Crescent, Houston Co, 6 ad, many y, RG; most reports we've had in years.

American Coot: nested in Washington and Stearns Co's; also reported from Lincoln, Nicollet, Faribault, Dakota, Rice, Hennepin, Wright, Roseau and Ramsey Co's.

Semipalmated Plover: 7-14 Salt Lake, Lac Qui Parle Co, 2 RBJ; 7-16 Dakota Co, 3, RBJ; 7-30 Carver Co, 4, VL.

Piping Plover: 6-4 Duluth, St. Louis Co, RG; 6-8 Agassiz Refuge, Marshall Co, 1, DLO; 7-9 Duluth, St. Louis Co, RG, BL.

Killdeer: nested in Lake, Washington, Crow Wing, Cook and Wright Co's; also

reported from Rice, Cass, Ramsey, Hennepin, Itasca, Goodhue, Carver, Dakota, Rock, Lincoln, Lyon, Clay, Mahnommen, Norman, Becker, Sherburne, Houston, Winona, Wabasha Co's.

American Golden Plover: 7-6 Salt Lake, Lac Qui Parle Co, RG; good details.

Black-bellied Plover: 6-25 Duluth, St. Louis Co, 1, BL, possibly latest spring date on record for Minnesota?

Ruddy Turnstone: 7-6 Lac Qui Parle Co, earliest fall date on record; 6-8 Agassiz Refuge, Marshall Co, 3, DLO, late spring migrants.

American Woodcock: 6-5 Lake Co, 4e, RK; 7-31 Crow Wing Co, MSB.

Upland Plover: 7-10 Wright Co, ad-y, EC; also reported from Hennepin, Rock and Nobles Co's.

Spotted Sandpiper: nested in Clay and St. Louis Co's; also reported from Lake, Hubbard, Roseau, Morrison, Ramsey, Rice, Wabasha and Itasca Co's.

Solitary Sandpiper: 7-21 Hennepin Co, EWJ; early fall migrant.

Willet: 6-11 Clay Co, DB, RG; few summer records in the past two or three years.

Greater Yellowlegs: 7-1 (7) and 7-8 (12) Agassiz Refuge, Marshall Co, DLO; 7-17 Hennepin Co, VL.

Lesser Yellowlegs: 7-6 Lac Qui Parle Co, RG; 7-12 Hennepin Co, VL; 7-14 Cottonwood Co, RBJ.

Knot: 8-27 (5) and 8-29 (2) Duluth, St. Louis Co, RG.

Pectoral Sandpiper: 7-12 Hennepin Co, VL; 7-14 Cottonwood Co, RBJ; 7-23 Carver Co, FN/MAS; 7-30 Dakota Co, FN/MAS.

White-rumped Sandpiper: 7-6 Traverse Co, 6, RG; rare as a fall migrant here.

Baird's Sandpiper. 6-8 Agassiz Refuge, Marshall Co, 4, DLO.

Least Sandpiper: 7-14 Lac Qui Parle Co, RBJ.

Dunlin: 6-5 Dakota Co, RBJ; 7-6 Traverse Co, 1, RG, may be earliest fall date on record?

Short-billed Dowitcher: 7-14 Lac Qui Parle Co, RBJ.

Long-billed Dowitcher: 7-14 Cottonwood Co, RBJ.

Dowitcher, species: 7-8 Agassiz refuge, Marshall Co, 1, DLO; 7-30 Carver Co, 2, VL.

Stilt Sandpiper: 7-6 Lac Qui Parle Co, 3, RG; 7-14 Cottonwood Co, RBJ; 7-28 Traverse Co, 1, EHH.

Semipalmated Sandpiper: 7-14 Lac Qui Parle Co, RBJ.

WESTERN SANDPIPER: 8-27 Duluth, St. Louis Co, 1, RG, good details.

Buff-breasted Sandpiper: 8-20 (1) and 8-27 (8) Duluth, St. Louis Co, RG.

Marbled Godwit: 6-1 Jackson Co, HSH, spring migrant usual summering birds reported from Stearns, Becker, Mahnommen, Traverse and Clay Co's.

American Avocet: 6-11 Salt Lake, Lac Qui Parle Co, 1, ELC, RLH.

Wilson's Phalarope: reported from Benton, Stearns and Becker Co's; 7-14 Lac Qui Parle and Cottonwood Co's, RBJ, probably early fall migrants.

Northern Phalarope: 6-12 Salt Lake Lac Qui Parle Co, ELC, RLH, late migrants.

Herring Gull: nested in Mille Lacs, Stearns and St. Louis Co's; also reported from Roseau, Lake, Cook, Murray and Crow Wing Co's.

Ring-billed Gull: 6-9 Hennepin Island, Mille Lacs Lake, Mille Lacs Co, one egg found in Herring Gull nest by NMH; also reported from Duluth, St. Louis Co, PBH and Grand Marais, Cook Co. The latter record on July 10 by AEA of a single bird.

Franklin's Gull: nested in Stearns Co; also reported from Lac Qui Parle, Stevens, Pope, Wright, Carver, Blue Earth, Nobles, and Roseau Co's.

Bonaparte's Gull: 6-7 Cass Co, 4, RPR; 6-25 Duluth, St. Louis Co, 1 imm, BL; 7-23 Nicollet Co, 1, DB, RG; 7-26 Crow Wing Co, 20 and Mille Lacs Co, 5, RBJ.

Forster's Tern: nested in Hennepin Co; also reported from Stearns, Nobles, Ramsey, Grant and Stevens Co's.

Common Tern: nested in usual colonies at Duluth and Mille Lacs Lake; also reported from Crow Wing, Morrison, Dakota, Beltrami, Wright and Hennepin Co's; confusion between this and the preceding species should open the door for nesting studies throughout the state.

Caspian Tern: 6-4 Isanti Co, RG; 6-7 Cass Co, 18, RPR; 6-8 Goodhue Co, 10, RPR; 7-6 Traverse Co, RG; 7-7 Agassiz Refuge, Marshall Co, DLO.

Black Tern: nested in Stearns, Washington Co's; also reported from Stevens, Grant, Nobles, Itasca, Dakota, Crow Wing, Ramsey, Roseau, Marshall, Beltrami, Hennepin, St. Louis, Wright and Carver Co's.

Mourning Dove: nested in Stearns, Rock, Stevens, Itasca and Ramsey Co's; also reported from Crow Wing, Morrison, Roseau, Beltrami, Goodhue, Winona and Hennepin Co's.

Yellow-billed Cuckoo: reported from Wright, Nobles, Rice, Goodhue, Stearns, Morrison and Itasca (details?) Co's.

Black-billed Cuckoo: nested in Nobles and Washington Co's; also reported from Dakota, Pope, Crow Wing, Morrison, Marshall, Lake, St. Louis, Watonwan, Cass, Blue Earth, Hennepin, Clay, Ottertail, Pine Co's.

Screech Owl: 6-29 Cottonwood, Lyon Co, 2 ad-5y, PE; also reported from Washington, Nobles and Ramsey Co's.

Great Horned Owl: reported from Marshall, Becker, Washington, Dakota and Itasca Co's.

GREAT GRAY OWL: 6-5 Bagley, Clearwater Co, see Notes of Interest in previous issue.

Barred Owl: reported from Washington, St. Louis and Crow Wing Co's.

Short-eared Owl: 7-6 Lac Qui Parle Co, RG; 7-21 Grant Co, JAH; 8-22 Stevens Co, JAH.

Whip-poor-will: 6-4 Pine Co, RG; 6-10 to 6-12 Washington Co, WWL; present in Wabasha Co, DGM. Reported heard from Greenbush, Roseau County during June and July, Mrs. Stanley.

Common Nighthawk: nested in Stearns

Co; also reported from Wabasha, Lake, Roseau, Crow Wing, Morrison, Ramsey, Hennepin, Rice, Cook, Winona, Clay, Beltrami, Cottonwood and Wright Co's.

Chimney Swift: reported from Wabasha, Lake, Stearns, Morrison, Crow Wing, Ramsey, St. Louis, Rice, Beltrami, Wright and Hubbard Co's.

Ruby-throated Hummingbird: nested in Stearns and Rice Co's; also reported from Cass, St. Louis, Goodhue, Wabasha, Lake, Roseau, Morrison, Crow Wing, Ramsey, Cook, Clay and Cottonwood Co's.

Belted Kingfisher: reported from Washington, Wright, St. Louis, Watonwan, Goodhue, Mille Lacs, Crow Wing, Wabasha, Lake, Beltrami, Hubbard, Stearns, Roseau, Ramsey, Dakota, Winona, Clay, Morrison, Itasca, Hennepin, Goodhue, Carver, and Nicollet Co's.

Yellow-shafted Flicker: nesting in Beltrami, Sherburne, Wright, Cook and Cottonwood Co's; also reported from Rice, Wabasha, Lake, Aitkin, Itasca, Roseau, Ramsey, Morrison, Crow Wing, Hennepin, Clay, Dakota and St. Louis Co's.

RED-SHAFTED FLICKER: 6-13 Lincoln Co, just west of Verdi, 1 adult seen by Ruth Andberg and Brother Theodore; red wing and tail linings noted, red "whisker" mark noted on each side of face; reverse head-coloring not mentioned; although most of our records for the state are undoubtedly hybrids, this report comes closest to an actual Red-shaft.

Pileated Woodpecker: nested in Washington and Stearns Co's; also reported from Pope, Rice, Wright, Cook, St. Louis, Wabasha, Lake and Roseau Co's.

Red-bellied Woodpecker: nested in Stearns Co; also reported from Wabasha, Goodhue, Winona, Ramsey and Rice Co's; two northerly reports, awaiting details: 6-24 Itasca Co, ACR and Roseau Co, no date, PEB.

Red-headed Woodpecker: nested in Wright Co; also reported from Wabasha, Stearns, Benton, Ramsey, Morrison, Crow Wing, Beltrami, Nobles, Stevens, Lac Qui Parle, Dakota, Rice, Pope, St. Louis (NJH, comes to feeder), Winona, Washington, Hennepin, Cottonwood and Cook Co (MOP, at feeder).

Yellow-bellied Sapsucker: nested in Crow Wing and Hubbard Co's; also reported from Stearns, Clearwater, Goodhue, Winona, Wabasha, Itasca, Roseau and St. Louis Co's.

Hairy Woodpecker: nested in Cook Co; also reported from Wabasha, Lake, Hubbard, Stearns, Morrison, Crow Wing, Ramsey, Cottonwood, Itasca, Nobles, Wright, Stevens, Washington, Clay, Hennepin and Goodhue Co's.

Downy Woodpecker: nested in Hennepin Co; also reported from Wabasha, Lake, Beltrami, Sherburne, Morrison, Hubbard, Stearns, Crow Wing, Nobles, Wright, Stevens, Ramsey, Cottonwood, Clay Co's.

Eastern Kingbird: nested in Morrison, Stevens, Dakota and Hennepin Co's; also reported from Wabasha, Lake, Beltrami, Sherburne, Roseau, Crow Wing, Wright, Cook, Clearwater, Rice, Clay, Carver and St. Louis Co's.

Western Kingbird: 6-10 Hennepin Co, 2 nests, VL; 7-29 Park Rapids, Hubbard Co, nest with y, LWJ; also nested in Lyon Co, PE; reported from Rock, Lincoln, Yellow Medicine, Sherburne, Marshall, Clay, Anoka, Roseau, Nobles and Stevens Co's; one northeasterly record, 6-8 Duluth, St. Louis Co, BT.

Great Crested Flycatcher: nested in Hennepin, Wright and Clay Co's; also reported from Murray, Pope, Goodhue, Crow Wing, Faribault, Waseca, Wabasha, Lake, Beltrami, Ramsey, Stearns, Morrison, Dakota, Winona, St. Louis and Rice Co's.

Eastern Phoebe: nested in St. Louis and Rice Co's; also reported from Lake, Beltrami, Stearns, Roseau, Ramsey, Morrison, Crow Wing, Clay, Winona, Goodhue, Stevens, Grant, Murray and Washington Co's.

Yellow-bellied Flycatcher: 6-3 Hennepin Co, VL and 6-6 Rice Co, OAR, belated migrants; 6-24 Itasca Co, ACR; 7-11, St. Louis Co, RBJ; 7-23 Lake Co, RLH; 7-28 Beltrami Co, ME.

Traill's Flycatcher: reported from Goodhue, Marshall, Morrison, Rice, Hubbard, Clearwater, Winona, Lac Qui Parle, St. Louis and Ottertail Co's.

Least Flycatcher: nested in Clay, Morri-

son and Rice Co's; also reported from Hennepin, St. Louis, Wabasha, Lake, Itasca, Sherburne, Roseau, Morrison, Crow Wing, Clearwater, Goodhue Co's.

Eastern Wood Pewee: nested in Winona, Clay and St. Louis Co's; also reported from Goodhue, Mille Lacs, Wabasha, Lake, Aitkin, Beltrami, Itasca, Sherburne, Marshall, Ramsey, Morrison, Crow Wing, Grant, Ottertail, Murray, Clearwater, Hubbard, Dakota, Cook, Rice Co's.

Olive-sided Flycatcher: 6-3 Hennepin Co, VL; 6-4 Wright Co, Mpls Bird Club and 6-18 Dakota Co, DB, all late migrants; reported from Cook, Lake, Hubbard and Itasca Co's; 7-28 Clay Co, LWJ, probably early fall migrant?

Horned Lark: 6-3 Pope Co, ad feeding y, WH; also reported from Jackson, Nobles, Rock, Lincoln, Lyon, Lac Qui Parle, Wabasha, Sherburne, Ramsey, Morrison, Stevens, Hennepin, Rice, Winona, Mille Lacs, St. Louis, Dakota Co's; 7-10 Lac Qui Parle Co, 50-60 birds, MIG, early fall migrants?

Tree Swallow: nested in Roseau, Cook, St. Louis, Hennepin, Rice and Ramsey Co's; also reported from Crow Wing, Wabasha, Lake, Aitkin, Beltrami, Itasca, Stearns, Clay, Dakota, Carver, Clearwater and Nobles Co's.

Bank Swallow: nested in Swift Co, colony of 200; also reported from Jackson, Nobles, Goodhue, Crow Wing, Morrison, Nicollet, Faribault, Wabasha, Stearns, Roseau, Ramsey, Carver, Rice, Stevens, Wright, St. Louis and Hennepin Co's.

Rough-winged Swallow: reported from Jackson, Goodhue, Faribault, Stearns, Marshall, Ramsey, Pope, St. Louis, Clearwater, Stearns, Rice, Grant, Dakota, Carver and Wright Co's.

Barn Swallow: nested in Washington, Clay, Itasca, Rock Co's; also reported from Wabasha, Lake, Sherburne, Roseau, Ramsey, Morrison, Crow Wing, Stevens, Cottonwood, Beltrami, Hennepin, Rice, Cook, Nobles, Stearns and Carver Co's.

Cliff Swallow: nested in Itasca, Swift and St. Louis Co's; also reported from Faribault, Wabasha, Lake, Beltrami, Hubbard, Mille Lacs, Roseau, Crow Wing, Rice, Nobles, Cass and Winona Co's.

Purple Martin: nested in Wabasha, Washington and Cottonwood Co's; also reported from Lake, Beltrami, Hubbard, Stearns, Roseau, Ramsey, Morrison, Crow Wing, Goodhue. St. Louis, Pope, Wright Hennepin, Stevens, Clay, Rice and Nobles Co's.

Gray Jay: 6-4 St. Louis Co, 2y out of nest, RK; 6-4 Lake Co, RG; 6-24 Itasca Co, 2, ACR; Cook Co, no date, 7 birds, DS.

Blue Jay: nested in Nobles, Hennepin, Ramsey Co's; also reported from 22 other counties.

Common Raven: 6-1 Lake Co, 4 new y, JCG; also reported from St. Louis and Clearwater Co's.

Common Crow: nested in Stearns, Morrison and Clay Co's; also reported from 18 other counties around the state.

Black-billed Magpie: 6-15 Split Rock Lighthouse, Lake Co, good details, Oliver C. Peterson. (See Notes of Interest)

Black-capped Chickadee: nested in Nobles, Wright, Washington and Hennepin Co's; also reported from 26 other counties.

Boreal Chickadee: 6-4 Lake Co, RG; 7-11 St. Louis Co, RBJ; 7-23 Lake Co, RLH; 8-20 Lake Co, RG; 8-28 Cook Co, RG.

Tufted Titmouse: 6-26 Hennepin Co, RBJ; 7-7 Hennepin Co, family group, RG; scarce this year; ELC; Ramsey Co and WWL, Washington Co both reported this species absent for the first time in several years.

White-breasted Nuthatch: nested in Washington and Wright Co's; also reported from 20 other counties scattered around the state.

Red-breasted Nuthatch: reported from Itasca and St. Louis Co's.

Brown Creeper: 6-24 Itasca Co, ACR; Beltrami Co, no date, MK.

House Wren: nested in Pope, Washington, Beltrami, Cottonwood, St. Louis, Roseau, Cook, Wright, Clay, Sherburne and Wabasha Co's; also reported from 17 other counties.

Winter Wren: 7-3 (JCG, NJH) and 7-11 (RBJ) St. Louis Co.

Long-billed Marsh Wren: reported from Dakota, Nicollet, Faribault, Ramsey, Morrison, Carver, Grant, Ottertail, Itasca, Anoka and Clay Co's.

Short-billed Marsh Wren: reported from Cass, Wadena, Crow Wing, Morrison, Faribault, Waseca, Sherburne, Stearns, Ramsey, Clay, Ottertail, Grant, Hennepin, Itasca, Becker, and Mahnommen Co's.

Catbird: nested in Washington and Clay Co's; also reported from 24 other counties.

Brown Thrasher: nested in Ramsey, Dakota, Wright and Nobles Co's; also reported from 23 other counties.

Wood Thrush: reported from Goodhue, Rice and Ramsey Co's; two northerly reports awaiting details: **Roseau Co**, PEB and Crow Wing Co, MSB.

Hermit Thrush: 7-3 St. Louis Co, JCG.

Swainson's Thrush: 6-7 Clearwater Co, RPR; 6-18 Lake Co, JCG; 6-25 St. Louis Co, JCG.

Veery: nested in St. Louis Co; also reported from Crow Wing, Clay, Itasca, Lake, Stearns, Morrison, Cook, Beltrami, Clearwater, Ramsey, Rice and Wabasha Co's.

Eastern Bluebird: nested in Wabasha, Crow Wing, Morrison, Pope, Hennepin, Washington, Wright Co's; also reported from 18 other counties; an encouraging comeback.

Blue-gray Gnatcatcher: 6-7, Cass County, 3 mi S. Nisswa, BT, good details, undoubtedly the northernmost Minnesota record; 6-12 Sherburne Co, nest with small y, NMH (northernmost nesting record?); 7-16 Goodhue Co, RG, RBJ; 8-13 Houston Co, 6, RG (a good late date since this species departs early).

Golden-crowned Kinglet: 7-11 St. Louis Co, RBJ.

Ruby-crowned Kinglet: 6-18 Lake and Cook Co's, JCG; 8-2 St. Louis Co, DS.

Cedar Waxwing: nested in Hennepin and Rice Co's; also reported from Crow Wing, Morrison, Roseau, Marshall, Stearns, Sherburne, Aitkin, Itasca, Hubbard, Lake, Wabasha, St. Louis, Goodhue, Mille Laes,

Cass, Waseca, Clay, Stevens, Pope, Nobles, Beltrami, Cook, Cottonwood and Washington Co's.

Northern Shrike: 8-16 Agassiz Refuge, Marshall Co, DLO (two months early! details?)

Loggerhead Shrike: nested in Stearns Co; also reported from Morrison, Ramsey, Sherburne, Beltrami, Rock, Dakota, Winona, Lac Qui Parle and **St. Louis Co's.**

Bell's Vireo: reported from Winona Co; 6-5 to 7-5 **Dakota Co**, 3 mi SE of Nicols, RG, BL, RBJ, DB, ELC, RLH; northernmost record in recent years.

Yellow-throated Vireo: 7-3 Clay Co, nest with y, LWJ; also reported from Crow Wing, Clearwater, Goodhue, Ramsey, Morrison and Stearns Co's.

Solitary Vireo: 6-18 Lake and Cook Co's, JCG; 6-25 Itasca Co, ACR; 7-10 St. Louis Co, RBJ; 7-23 Lake Co, RLH.

Red-eyed Vireo: nested in Hubbard and Wright Co's; also reported from Crow Wing, Mille Lacs, Morrison, Ramsey, Stearns, Sherburne, Beltrami, Lake, Wabasha, Goodhue, St. Louis, Washington, Hennepin, Rice, Murray, Swift, Cass, Clay, Hubbard, Wabasha, Cook Co's. Many observers reported it very scarce this year.

Philadelphia Vireo: 6-16 Morrison Co, LSR, banded, good details, very late migrant? (See Notes of Interest)

Warbling Vireo: nested in Hubbard and Wright Co's; also reported from Dakota, Pope, Rice, Washington, Murray, Crow Wing, Itasca, Morrison, Ramsey, Marshall, Stearns, Sherburne, Beltrami, Wabasha, Goodhue, Cass, St. Louis and Faribault Co's.

Black-and-white Warbler: 6-18 Cook Co, JCG; 6-24 Itasca Co, ACR; 7-3 St. Louis Co, JCG.

Prothonotary Warbler: reported from Wabasha, Goodhue and Dakota Co's.

Golden-winged Warbler: nested in Crow Wing Co; also reported from Hubbard, Carlton, Clearwater and Becker Co's.

Blue-winged Warbler: seen all summer at Vasa, Goodhue Co by many observers.

Blue-winged x Golden-winged Warbler

hybrid: 6-12 Vasa, Goodhue Co, VL reports "Bird singing in tree top, saw it briefly, head and underparts all yellow, black markings of the golden-winged; wing bars; song three short buzzes, one longer and on different pitch;" on 6-25 DB saw what was apparently the same bird in the same place; description fits the phenotype commonly known as the "Lawrence's Warbler."

Tennessee Warbler: reported from Cook, Lake, St. Louis and Itasca Co's; 7-19 Morrison Co, 4, LSR, undoubtedly early fall migrants? (See Notes of Interest)

Nashville Warbler: nested in Crow Wing Co; also reported from Cook, Lake, St. Louis, Itasca, Hubbard and Morrison Co's. (See Notes of Interest)

Parula Warbler: reported from St. Louis, Clearwater and Hubbard Co's.

Yellow Warbler: nested in Roseau, Sherburne, Morrison, Murray and Hubbard; also reported from Itasca, Goodhue, Stevens, Beltrami, St. Louis, Pope, Rice, Washington, Clay, Crow Wing, Winona, Clearwater, Hubbard, Ramsey, Stearns, Wabasha, Goodhue, Mille Lacs and Cass Co's.

Magnolia Warbler. reported from Cook, Lake, St. Louis and Itasca Co's.

Cape May Warbler: reported from Lake and St. Louis Co's.

Black-throated Blue Warbler: 6-19 Cook Co, near Tofte, pair and one male, two adjacent territories, JCG.

Myrtle Warbler. nested in St. Louis Co; also reported from Roseau, Lake and Itasca Co's.

Black-throated Green Warbler: reported from Cook, St. Louis and Clearwater Co's.

Cerulean Warbler: nested at Vasa, Goodhue Co, as usual; also reported from Rice, Stearns and **Crow Wing** (6-14 to 6-27, MSB; 7-11, NR) Co's. (See Notes of Interest)

Blackburnian Warbler: reported from Cook, Lake, St. Louis, Itasca, and Clearwater Co's.

Chestnut-sided Warbler: reported from Cook, Lake, St. Louis, Itasca, Crow Wing, Rice and Winona Co's.

Bay-breasted Warbler: reported from Cook, Lake and St. Louis Co's.

Pine Warbler: reported from St. Louis, Itasca, Crow Wing, Clearwater and Becker Co's.

Ovenbird: reported from Lake, St. Louis, Itasca, Beltrami, Roseau, Crow Wing, Hubbard, Winona, Rice and Goodhue Co's.

Northern Waterthrush: reported from Lake and St. Louis Co's.

Louisiana Waterthrush: 6-6 Indian Mounds Park, Ramsey Co, ACR; 6-18 Whitewater State Park, Winona Co, 2, DB.

Mourning Warbler: nested in Crow Wing Co; also reported from Cook, Lake, St. Louis, Itasca, Hubbard and Becker Co's.

Canada Warbler: reported from Cook, Lake, St. Louis and Itasca Co's.

American Redstart: nested in Goodhue Co; also reported from Cook, Lake, St. Louis, Crow Wing, Stearns, Clay, Dakota, Wabasha and Rice Co's.

Bobolink: nested in Washington Co; also reported from Beltrami, St. Louis, Pope, Cass, Wright, Stevens, Nobles, Dakota, Sherburne, Hennepin, Wadena, Morrison, Waseca, Aitkin, Wabasha, Stearns, Marshall, Roseau, Ramsey and Crow Wing Co's.

Eastern Meadowlark: nested in Wabasha and Washington Co's; also reported from Lake, Stearns, Ramsey, Crow Wing, Rice, Wright, Isanti, Wabasha, Winona and Beltrami Co's.

Western Meadowlark: nested in Wabasha, Pope, Wright, Washington and Hubbard Co's; also reported from Cottonwood, Dakota, St. Louis, Stevens, Nobles, Lac Qui Parle, Dakota, Hennepin, Rice, Crow Wing, Sherburne, Morrison, Stearns, Ramsey, and Goodhue Co's.

Yellow-headed Blackbird: reported from Carver, Hennepin, Wright, Ramsey, Cottonwood, Stevens, Nobles, Lac Qui Parle, Rice, Goodhue, Clearwater, Cass, Watonwan, Dakota, Mille Lacs, Faribault, Waseca, Wabasha, Ramsey, Morrison, Beltrami and Roseau Co's; one northeasterly record: 6-13 Two Harbors, Lake Co, 1 male, RK.

Red-winged Blackbird: nested in Stearns, Sherburne, Clay, Mahnomen, Becker, Hennepin, Beltrami and Washington Co's; also reported from 17 other counties.

Orchard Oriole: nested at Cottonwood, Lyon Co, PE and Wacouta, Goodhue Co, MIG; also reported from Wabasha and Nobles Co's.

Baltimore Oriole: nested in Stearns, Murray, Roseau, Wright, Clay, Hennepin and Washington Co's; also reported from 23 other counties.

Brewer's Blackbird: nested in Lake and St. Louis Co's; also reported from Carver, Stevens, Crow Wing, Jackson, Dakota, Cass, Scott, Itasca, Benton and Beltrami Co's.

Common Grackle: nested in Washington, Wright and Stearns Co's; also reported from 16 other counties.

Brown-headed Cowbird: Goodhue Co, hosted by American Redstart, MIG; Hennepin Co, hosted by Rose-breasted Grosbeak, MHM; reported from many other counties all around the state; most unusual report was from EC in Wright Co who said she knocked down 3 Cowbird nests; since the Cowbird apparently only builds nests under experimental conditions, she must have meant host-nests?

Scarlet Tanager: reported from Becker, Itasca, Ramsey, Washington, Goodhue, Stearns, Rice, Morrison, Crow Wing, Dakota and Cook (6-1 Schroeder, MOP) Co's.

Cardinal: nested in Hennepin and Ramsey Co's; also reported from Blue Earth, Wright, Murray, Stevens, Winona, Washington, Rice, Nicollet, Goodhue, Scott, Wabasha, and Stearns Co's.

Rose-breasted Grosbeak: nested in Hennepin, Dakota and Rice Co's; also reported from 17 other counties.

BLUE GROSBEEK: 6-4 Rock Co, Martin Township and Beaver Creek Township, BL; 7-16 Rock Co, DB; 8-9 and 8-10 Nobles Co, 1, HSH; apparently expanding its range northward and eastward from Rock County? (See Notes of Interest)

Indigo Bunting: nested in Goodhue and Wright Co's; also reported from Clay, St. Louis, Crow Wing, Pope, Rice, Henne-

pin, Cook, Grant, Kandiyohi, Ramsey, Washington, Winona, Clearwater, Rock, Dakota, Mille Lacs, Cass, Morrison, Nicollet, Blue Earth, Le Sueur, Wabasha, Lake, Stearns Co's.

Dickcissel: truly a good year; nested in Pope Co; also reported from Norman, Mahnomen, Goodhue, Winona, Anoka, Stevens, Wright, Carver, Rice, Hennepin, Dakota, Hubbard, Nobles, McLeod, Nicollet, Faribault, Waseca, Rock, Pipestone, Lincoln, Lyon, Murray and Yellow Medicine Co's.

Evening Grosbeak: reported from Cook, Lake, St. Louis, Beltrami, Crow Wing and Clearwater Co's; no actual nests, but a number of definite pairs were reported.

Purple Finch: nested in Clay Co; also reported from Itasca, Crow Wing, Clearwater, Stearns, Beltrami, St. Louis, Cook, Roseau, Marshall and Lake Co's.

Pine Siskin: 5-18 Hennepin Co, apparent nesting, see Notes of Interest in previous issue; also reported from Stearns, Cook, Hubbard, Pope, Itasca, Lake, St. Louis, Roseau and Morrison Co's.

American Goldfinch: reported from Cottonwood, Washington, Beltrami, Stevens, Wright, Hennepin, Goodhue, Rice, Clay, Crow Wing, Cook, Clearwater, Stearns, Pope, Itasca Lake, St. Louis, Morrison, Ramsey, Roseau, Marshall, Hubbard, Aitkin and Wabasha Co's.

RED CROSSBILL: 6-27 Minnesota Point, St. Louis Co, 4, PBH; 7-6 Kellogg, Wabasha Co, 1 female, DGM; 7-26 Hennepin Co, Minneapolis, VH; 8-19 Hennepin Co, 1, Sam Robbins; 8-10 and 8-19, 5 and 2 seen, Duluth, PBH; 8-20 Lake Co, 30, RG; 8-24 Winona, Winona Co, TST; 8-28 Cook Co, RG; Sam Robbins of Roberts, Wisconsin reports that this species was common in northwestern Wisconsin all summer; this species is noted for its erratic wanderings.

Rufous-sided Towhee: reported from Rice, Winona, Hubbard, Hennepin, Crow Wing, Cass and Wadena Co's.

LARK BUNTING: 6-4 Rock Co, 1 male in each of 2 different townships, BL; 6-6 Indian Lake Township, 1 male, Nobles Co, HSH; 6-11 Salt Lake, Lac Qui Parle Co, 3, ELC; 6-19 Nobles Co, Hersey

Township, 3 males, HSH; 7-14 Yellow Medicine Co, 3 males and Lac Qui Parle Co, 3 males, RG, RLH.

Savannah Sparrow: reported from Goodhue, Carver, Lac Qui Parle, Dakota, Pope, St. Louis, Sherburne, Nobles, Stearns, Lake, Hubbard, Mille Lacs and Cass Co's.

Grasshopper Sparrow: reported from Nobles, Dakota, Wabasha, Clay, Rice, Hennepin, Ramsey, Carver, Grant, Stevens, Winona, Stearns, Sherburne, Morrison, Yellow Medicine, Murray, Lyon and Cottonwood Co's.

LeConte's Sparrow: reported from Benton, Stearns, Mahnomen, Becker, and Clay Co's.

Henslow's Sparrow: 6-12 Winona, Winona Co, 2, DB; also reported from Dakota Co.

Sharp-tailed Sparrow: reported from Becker, Mahnomen and Clay Co's.

Vesper Sparrow: nested in Hennepin, Washington, Beltrami and Wright Co's; also reported from Crow Wing, Pope, Nobles, Dakota, Clay, Rice, Anoka, Aitkin, Carver, Stevens, Goodhue, Morrison, Ramsey, Roseau, Sherburne, Cass, Wadena, Nicollet, Blue Earth and Faribault Co's.

Lark Sparrow: reported from Anoka, Stearns, Sherburne, Carver, Wright, Fillmore and Scott Co's.

Slate-colored Junco: reported from Lake, St. Louis, Marshall and Clearwater Co's.

Chipping Sparrow: nested in Stearns, Cottonwood, Hennepin, Ramsey, St. Louis and Wright Co's; also reported from 22 other counties.

Clay-colored Sparrow: reported from Washington, Beltrami, Clay, Stevens, St. Louis, Crow Wing, Stearns, Lake, Dakota, Cass, and Wadena Co's.

Field Sparrow: reported from Hennepin, Wabasha, Rice, Dakota, Yellow Medicine, Winona and Houston Co's; one northerly report: 6-24 Itasca Co, singing, ACR.

White-throated Sparrow: reported from Cook, Lake, St. Louis, Itasca, Cass, Beltrami, and Clearwater Co's.

HARRIS' SPARROW: 6-19 Wabasha, Wa-

basha Co, 1 bathing in yard, DGM; probably third June record for Minnesota and probably latest spring migrant on record here.

Lincoln's Sparrow: 7-29 Crow Wing Co, "one at very close range seen from all angles," NR; this species can be confused with bird-of-the-year Swamp Sparrow, but date also suggests possibility of early migrant? (See Notes of Interest)

Swamp Sparrow: reported from Hennepin, Anoka, Rice, Grant, Lake, St. Louis, Ramsey, Crow Wing, Morrison, Stearns, Hubbard, Lincoln, Mille Lacs, Cass, Nicollet, Faribault and Waseca Co's.

Song Sparrow: nested in Washington, St. Louis, Cook, Goodhue, and Wright Co's; also reported from 18 other counties.

Chestnut-collared Longspur: usual area in Clay Co, SE of Felton; on 6-19 RG and RLH noted hundreds in that area in less than half a square mile. Probably heaviest population we've seen there yet.

CORRIGENDA: Summer Season, March issue: Western Kingbird by VL, date should be 7-13 not 7-30; Fall Season, June issue: American Redstart by JCG on 10-12 should be 1 female, not 12.

ADDENDA ET CORRIGENDA:

Fall Season, 1965:

Black-billed Cuckoo: MIG's date should be 10-2 not 10-22; my error, not theirs. Spring Season, 1966:

Common Loon: 4-29, 115 seen at once on Minn Pt, Duluth and 4-30, 186 seen at once at Clifton, JCG; largest aggregations reported for state.

Green Heron: 5-5 Lester River and 5-16 Minn Pt, Duluth, JCG; first records for Duluth area.

Wood Thrush: 4-28 Duluth, JGH was transcription error; he meant **Hermit Thrush**.

Blue-winged Warbler: 4-30, NMH—he submitted good details in response to a request-for-details sheet.

LeConte's Sparrow: 4-29, Two Harbors, should be JCG not RK.

Lark Bunting: Duluth record should be 5-25 (not 5-31) fide JCG, who received good verbal details from Mary Elwell and Mary Fulton.

Also, the MIG's were kind enough to inform me of an error in transferring

their data; the following species were seen at Frontenac, Goodhue Co on 5-7-66 but were listed in the Spring Season as 4-23, Hastings (or Dakota Co): Great Crested Flycatcher; Yellow-throated Vireo, Solitary Vireo, Warbling Vireo. Black-and-white Warbler, Nashville Warbler, Magnolia Warbler, Blackpoll Warbler, Palm Warbler and Northern Waterthrush.

SUMMARY: Fifty-four observers turned up 241 species, which is a pretty fair summer list. However, only 116 of these were actually noted as breeding here. This is a rather scant list, granted that many of the species recorded are only early summer or early fall migrants. Perhaps one of these years, with some good hard work and coordinated effort, a network of diligent searchers across our state will seek out those elusive species and bring our breeding total close to two hundred species in a single summer. Some outstanding transient shorebird dates were accumulated this summer, Eastern Bluebirds were scattered across most of the state and, of special interest, the Blue Grosbeak may be extending its range in southwestern Minnesota, hopefully in a "measurable" fashion.

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THE PIGEON HAWK IN MINNESOTA

James R. Beer

The Pigeon Hawk or merlin is a small falcon with a very wide distribution. It is a breeding bird in the northern forested regions of North America, Europe and Asia. (Grossman & Hamlet, 1964). In North America it is a breeding bird north to the arctic tree line and south to New England states, along the northern border of the Great Lakes and along the Canadian border west to the Rocky Mountains where it is found south into Colorado and Oregon (Bent, 1938). It winters primarily south of its breeding range going as far south as northern South America (Bent, 1938). It has been observed wintering as far north as southern British Columbia, northern Idaho, southern Ontario and the New England States.

Hatch (1892) in his *Notes on the Birds of Minnesota* states: "I am not a little disappointed to find them (Pigeon hawks) so extremely rare here, although I have long known them to be accounted only subcommon in the Mississippi Valley. In 1862 I found a specimen of this species in the mounted collection of a gentleman who was an expert in the identification of game birds, and was making a study of their predatory enemies on wings. He obtained it in the fall of the previous year while it was in the act of seizing another bird and was so impressed with its unfamiliar appearance enough to have it mounted without having known its specific identity until I named it for him. In 1867 I found a representative of each sex in Mr. Howlings collection, since which I have seen but two individuals of the species, and these had already been mounted. I pronounce it a rare species in Minnesota. I have never yet seen a specimen of them alive, much as I have been alert for them. Of course occasional individ-

uals pass through the country in migration or those mentioned could not have been obtained, for they were all killed within our borders.

They reached this latitude early in April, sometimes not until the middle, when they remain but a very short time. From statements of persons familiar with birds in general, one individual has been met with in November, but the next latest date that I have learned of was the twenty-fifth of October."

He also recorded two specimens which were taken near the head of Lake Superior in 1875.

As late as in 1932 when Roberts published his *The Birds of Minnesota* he says that the Pigeon Hawk is "Mainly a migrant, spring and fall. There are several summer dates and it is probable that it breeds in the state, but there is no positive evidence of it so far." He further states: "The authors acquaintance with the Pigeon Hawk in life is limited to seeing it not over half a dozen times during fifty years."

These two publications are the only ones that attempt to bring together the known information on the Pigeon Hawk in Minnesota. The first was published over 70 and the second over 30 years ago and neither gives us a very good idea as to the status of the species in Minnesota. During the past 30 years there have been enough observations published to allow us to piece together a more complete picture of the status of the species in Minnesota.

The records listed are primarily from notes published in *The Flicker* 1929-

1963 and *The Loon* 1964-1966. Only major papers will be listed fully in the Literature Cited section.

The Spring Migration

The spring migration appears to start in Minnesota in late March with the main flight occurring in April and an occasional bird coming through in early May. The only March records that I have are from St. Louis, Rice and Lac Qui Parle Counties. The record from St. Louis county may well be that of a bird that stayed in the area over winter. However since we have no winter or summer record of the Pigeon Hawk from the other two counties these records (March 27 at Marietta, Lac Qui Parle County and March 30 at Northfield, Rice County) represent the beginning of the spring migration. The heavy part of the spring flight comes during mid-April though this is somewhat modified by weather conditions. The spring migration ends in early May. I have found but a single record for this month outside of what may be considered its breeding range in Minnesota (May 16, Ramsey County). This probably represents a straggler in the spring migration.

The spring records, while few in number are scattered over the state suggesting a rather scattered distribution rather than a well-defined migration route through Minnesota.

The Summer

The first record of nests of the Pigeon Hawk in Minnesota appears to be for those found by John and Frank Craighead (1940) in 1935. Between July 5 and July 9 they found seven nests on Gunflint Lake, one of the border lakes in Cook County. It is assumed that at least part of these were in Minnesota waters. The next record appears to be for a nest found by D. Struthers on Canadian Trout Lake in 1937 (Rysgaard, 1937). Nests have been reported on Saganaga by Breckenridge and Errington (1938) in 1937; and Struthers (1939) in 1939. Hofslund and others have reported Pigeon Hawks nesting on Minnesota Point at Duluth regularly since at least 1952. To date, all of the nesting records are from St. Louis, Lake and Cook Counties.

Oehlenschlager (1963) lists the Pigeon Hawk as an unconfirmed breeding bird in Wadena County and summer records from Kittson, Roseau, Lake of the Woods, and Morrison Counties suggest that the breeding range in Minnesota may extend throughout the coniferous region of Minnesota.

In the period from 1950 to 1966 I have observed Pigeon Hawks regularly on Basswood Lake in Lake County during July. During this period, I have found nests at four different sites. One of these was in a small balsam on the mainland but within 50 feet of the lake shore. The nest was about 20 feet from the ground and near the top of the tree. This nest was used only in 1952. Four young were raised to fledging in this nest. The other nests were found in mature red pines on islands. One of these nests was observed to have defending Pigeon Hawks around it in 1950, 1952, 1953, 1956, 1962 and 1964. This nest was placed about 60 feet above the ground. A second island nesting site was about 50 feet up in a mature red pine. Defending adults were seen about it in 1956, 1959, 1960, 1962 and 1963. Young were seen in 1959. A third island site was observed to have defending adults in 1952. Pigeon Hawks were seen to frequent this island in 1953, 1954, and 1964 but did not show defensive reactions.

All of the nests described for Minnesota have two things in common. First they are all placed in conifers and second are all placed in trees near the edge of a large lake.

Fall Migration

The fall migration appears to reach its peak during the second and third weeks in September. Hofslund (1966) shows that a few birds pass Duluth during the first week in September with the peak coming during the second week and only slightly smaller numbers during the third week. The numbers passing through then decrease rapidly with none being reported after the third week in October. The bulk of the casual observations throughout the state are for the middle of September.

It appears that the Pigeon Hawk may not follow the migration route which takes so many hawks by the Duluth observation point as only 319 of the 195,397 hawks reported by Hofslund are of this species. The migration probably starts in August since Allin (1954) states that on August 15 "unexpected numbers of Pigeon Hawks were seen at the Lakehead."

Allin (1961) in relation to the small number of Pigeon Hawks observed at Duluth comments: "This is a common hawk at the Lakehead, why are relatively few seen at Duluth." Based on the casual observations from the rest of the state we find that it can be considered an uncommon migrant. During September and October it has been recorded from Cook, Lake, Roseau, Marshall, Washington, Dakota, Scott, Hennepin and Pipestone counties.

The Winter Season

During the winter, here considered to include the period from November through March, the Pigeon Hawk has been observed in Cook, St. Louis, Stearns, Sherburne, Ramsey, Hennepin, Rice and Lac Qui Parle counties. In one place or another it has been reported for each of these months.

Dr. A. E. Allin and others in the Fort William, Ontario area have made repeated observations of Pigeon Hawks nesting and wintering in the area. Their winter observations are of such a nature that they establish the fact that Pigeon Hawks spend the entire winter in the area. Using this as a base, we may assume that the birds recorded in winter in Minnesota are winter residents.

Discussion

The Pigeon Hawk is a small rather inconspicuous raptor which may be found in Minnesota at any time of the year. It is a breeding bird in the north-eastern portion of the state and undoubtedly along the Canadian border as far west as Lake-of-the-Woods. Our limited information suggests that it prefers to nest in the vicinity of water, especially on islands in our larger lakes. Further observations will undoubtedly extend the present known nesting area in Minnesota, but it is doubtful if this

will include areas outside of the original coniferous forest area. It does not appear to follow definite migration routes in either spring or fall and may be looked for during these periods any place in Minnesota. It has been observed at various times through the winter in several localities including some of the counties along the Canadian border.

Notes should be taken on this interesting and little known falcon whenever it is observed. Since it is never abundant this is the only way that we will be able to obtain a complete picture of its status in Minnesota.

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50; (4): 119, 126; 34(3): 89, 92; (4): 125; 35(2): 43, 48, 52; (3): 87; (4): 123, 136.

The Loon 36(1): 12, 16, 18, 31; (2): 41-42, 49; (3): 84, 100; (4) 121; 37 (1): 40, (2): 89; (4) 129, 137; 38 (1): 11, 22; (2): 49, 61, 76.—*Department of Entomology, Fisheries and Wildlife, University of Minnesota, St. Paul, Minnesota.*

THE OBITUARY OF "OLD GRAY-TAIL"

Gordon W. Gullion

Sometime about April 22, 1966, in a mixed boreal forest stand consisting of picturesque, white-barked, paper birches, aspen, and scattered, stately, 150 year-old red pines, on the Cloquet Research Forest, a predator (probably either a Goshawk or a Great Horned Owl) successfully attacked a big, grey phased, male Ruffed Grouse during a moment when his guard was down. This was not a noteworthy attack, except that the male grouse taken—bird number 1297 in our research records—had previously eluded such predatory efforts for nearly 94 months.

First trapped and banded on April 21, 1959, as a 10 month-old immature, male 1297, "old gray-tail," unwittingly participated in several phases of the University of Minnesota's Ruffed Grouse research project on the Cloquet Forest Research Center, in Carlton County. His survival record in itself provided an interesting story, since he established himself in a perennial drumming activity center noted for the rapid turnover of its occupants. His two known predecessors each failed to survive from one breeding season to the next, and over the years the average longevity of other male Ruffed Grouse living in this type of mixed conifer-hardwood forest was only about 11 months.

Although not recognized at the time, his response to a logging operation which cut-over his activity center in the winter of 1959-60 was an early indication of the importance of mature male aspen as an essential source of food for these birds in northern Min-

nesota. His drumming log, and its immediate environs was not disturbed in the process of clear-cutting all the merchantable aspen in the vicinity, and in fact his security should have been enhanced by the removal of all the jack pine in the area. But this cutting of aspen left him about 700 feet from a stand of 25 to 40 year-old aspen, so over the winter of 1959-60 he shifted his activity center 300 feet to the east, to be nearer an adequate winter food supply.

In his new activity center he found two logs equally satisfactory, so his attention shifted back and forth, using first one, then the other, in the spring and fall of 1960.

In the spring of 1961 he became interested in a fine big, wind-thrown spruce, with a place for his drumming stage over two feet above the ground, well protected by the flared roots at one end, and dense hazel along both sides of the log. He still used the same logs occupied in 1960, but showed increasing interest in this new site, finally shifting his full attention to it in the fall of 1961, where he persisted until his death in April 1966. He seldom returned to the logs he used in 1960, but he did use an alternate drumming site, a log known to have been used as long ago as 1933.

Defense of his territorial integrity was a major occupation, both spring and fall. The intensity and duration of this activity is best indicated by the accumulations of droppings which he

deposited at his drumming stage. In the spring of 1960, with four other males occupying logs within a radius of 800 feet of his activity center, he spent on the order of 185 hours standing on the drumming stages of his two chosen logs, ready to advertise his dominance over the area by drumming.

In the spring seasons of both 1962 and 1963 "old gray-tail" carried miniature radio transmitters, and assisted significantly in the development of the radio telemetry technique for tracking animal movements and studying behavior. However, he wasn't too happy in his role as an experimental animal and his normal drumming behavior was upset by this intrusion into his privacy.

By 1964, the effects of three unfavorable winters in succession, plus continued removal of mature aspen in the general area, had reduced the grouse population to such a low level that he was all alone in his activity center, and without the challenge of other males his territorial interest was minimal, spending only about 32 hours at his drumming site. What time he spent there may have been almost entirely in an effort to entice to him whatever hens may have been within hearing distance.

In 1965 another adult male moved into an activity center about 600 feet northwest of the area occupied by "old gray-tail," and the drumming duels between the two birds stimulated more intense defense efforts. However, he still spent only about 38 hours on his drumming stage.

In 1966 the presence of a young male on a log close to 1297's original drumming site, and 460 feet from the primary log he had occupied since 1961, stirred intense activity and log attendance reached a high level of persistence while snow still lay deep on the ground, and even covered the drumming log.

Perhaps due to this intense interest, or maybe just old-age was catching up, "old gray-tail" was not as alert as he should have been. Shortly before April 8, a raptor evidently knocked him off his log, but he escaped, leaving

December, 1966

numerous body and tail feathers as evidence of his encounter. In spite of this close-call he quickly resumed active drumming on his log, only to fall prey two weeks later, to a predator elsewhere in his activity center.

During the 7 years after becoming associated with a drumming activity center, bird 1297 remained in fairly close proximity to his drumming logs. Most of our contacts with him occurred while he was on one of his chosen logs, but we also retrapped him several times in a corn-baited "lily-pad" trap set about 260 feet from his primary log. Once he even ventured out far enough to be taken in a corn-baited trap set 660 feet from his logs.

"Old gray-tail" selected an activity center that had within a radius of 300 feet all the food and cover needed to sustain and protect a Ruffed Grouse in northern Minnesota. He evidently knew his area well, and for 7 years successfully eluded the continued searching by hungry hawks, owls, foxes and bobcats—until one instance when he was not quite alert enough.

Here at Cloquet we feel a sense of remorse in having lost an old "friend," but we recognize his loss was inevitable. On the other hand his life-span was remarkable, for during the period he lived we know that 262 other males which we banded have died. Among the 36 males of his age class, only 15 were alive after 12 months as drummers; 7 after 2 years as drummers; 4 after 3 years; and he alone survived longer than 4 years. Heredity played a role too, for his good fortune in being a gray-phased grouse gave him a probability of longer life than had he been a red-phased bird, in a boreal forest environment.

There is another gray-tailed male, number 970, who is in his sixth year now, and he may outlive 1297, if he is lucky. We know he has already had some mighty "feather-raising" experiences which should make him a bit more cautious and alert to the dangers which attend the normal life of a Ruffed Grouse in northern Minnesota's forested areas. Also, he is living in a

spruce-fir forest, where there is ample mature aspen, a forest combination which has proven somewhat more secure for Ruffed Grouse than the mixed conifer-hardwood habitat long oc-

cupied by "old gray-tail."—*Department of Entomology, Fisheries and Wildlife, University of Minnesota, at the Forest Research Center Cloquet, Minnesota.*

M.O.U. FEBRUARY FIELD TRIP

The annual February field meeting of the M.O.U. and the Thunder Bay Field Naturalists Club will be held on the weekend of the 18-19th in Grand Marais.

There will be a smorgasbord dinner from 5-7 p.m. on the 18th in the dining room of the East Bay Hotel. Reservations are necessary for the dinner. Make dinner reservations through your club or by writing directly to the East Bay Hotel. The cost of the dinner will be \$2.25. After the dinner there will be an evening program provided by the M.O.U. in the social room of the

Grand Marais High School at 8:00 p.m.

It is necessary to make reservations for over-night accommodations as early as possible because the number of rooms in Grand Marais is limited and we compete with skiers and other winter sports enthusiasts for the available space. Reservations should be made individually or through your designated club representative. The following hotels and motels in Grand Marais are open in the winter: East Bay Hotel, Arrowhead Hotel, Shoreline Hotel, The Hub Motel, Seawall Motel, Fenstad's Motel, and Sandgren's Motel.

BALD EAGLE STATUS REPORT, 1966 CHIPPEWA NATIONAL FOREST

John E. Mathisen

Studies to determine the magnitude of the Bald Eagle population and to evaluate reproductive success on the Chippewa continued for the fourth consecutive year. Field personnel at all levels continued to demonstrate their interest in the Bald Eagle project by reporting new nests and aiding in the determination of nesting success. A reported nest was not considered au-

thentic unless observed by the Forest Biologist or some other qualified observer.

An attempt was made to observe as many nests as possible in early spring to determine activity status. Active nests were, in most cases, observed again in July 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 July, the nesting attempt was considered successful.

New Nests and Nest Losses

An aerial survey designed to locate additional eagle nests was conducted in cooperation with the Bureau of Sport Fisheries and Wildlife during the week of March 21-25, 1966. Observers included Ranger District personnel and the Forest Biologist. Weather conditions and the time element did not permit a survey of the entire Forest. A total of 8 hours flying time was utilized in the nest search (not including dead-heading). Records were kept of new nest locations, presence of adult birds, and nesting activity around known nest sites. The survey was very successful, with 21 new eagle nests and 5 new Osprey nests being located, or about 3 new nests for each hour of searching. In addition, about 25 known nests were checked for activity status. Consideration should be given to further aerial searches.

A total of 31 additional nests were authenticated in 1966. This brought the total number of known eagle nests on the Chippewa to 107, with many other suspected locations to be checked out. A severe windstorm in July destroyed at least 3 nest trees and probably more. This loss will not be fully evaluated until next spring.

Nesting Success

Seventy of the 107 nests were observed at least once in 1966. Fifty-two, or 74% were considered to be active. Only 31 of the active nests were examined in July for success. Nineteen of the 31 nests were successful, for a nesting success of 61%. The outcome of the other 21 active nests is not known, but this can be estimated by projecting the data for known-outcome nests. The 19 successful nests produced 28 young, or 1.5 young per nest.

The following table summarizes the the results of the 1966 breeding season and shows the observed totals, and the projected totals for the Forest:

District	Known Nests	Observed Nests	Active Nests *	Successful Nests	No. of Young
Bena	26	16	11 (6)	5	7
Blackduck	6	4	3 (3)	1	2
Walker	9	8	3 (1)	1	2
Remer	4	4	4 (0)	?	?
Marcell	11	5	5 (2)	2	3
Dora Lake	2	1	1 (0)	?	?
Cass Lake	23	18	12 (9)	3	4
Cut Foot Sioux ...	26	14	13 (10)	7	10
FOREST TOTAL ..	107	70	52 (31)	19	28
percent		65%	74%	61%	1.5/nest
PROJECTED FOREST TOTAL			79	48	72

* () indicates number of active nests observed in summer, used for calculating % of successful nests

The following table compares eagle nesting data on the Chippewa for the past four years:

Year	Known Nests	Observed Nests	Nests No.	Nests %	Successful No.	Nests %	Young Nests
1963	48	31	20	64	6	30	1.7
1964	55	46	30	65	12	40	1.2
1965	76	58	39	67	22	56	1.3
1966	107	70	52*	74	19	61	1.5

* Only 31 active nests were used for calculating nesting success.

The data for 1966 indicate a greater proportion of active nests and the highest nesting success recorded during the four year period.

Other Observations

It is now quite evident that a pair of eagles will often maintain more than one nest within their breeding territory. Sometimes these nests are located in adjacent trees, and some are one-half mile or more apart. Two cases are known where one tree contains two nests, one over the other. Although absolute identification of pairs is necessary to determine if they maintain more than one nest, fairly safe assumptions can be made based on their proximity and our occupancy observations through the years. It appears that there are at least 13 pairs

of eagles on the Chippewa that maintain two nest sites.

Only one adult mortality was reported in 1966, this due to being caught in a steel trap. Two nestlings were banded by Dr. Al Grewe.

Osprey Nests

Ten additional Osprey nests were located in 1966 bringing the total known nests to 31. Fifteen of these were observed in the spring, of which 13 were active. Time did not permit an appraisal of nesting success on these nests. Some nests were undoubtedly destroyed in the July wind storm.—*Cass Lake, Minnesota.*

PHEASANT BROOD OBSERVATIONS

Earl D. Kopschke

Each fall, personnel of the Minnesota Division of Game and Fish count pheasants along roadsides in each county of the pheasant range. This census is conducted each year during the period August 1-16 on two or three 25-mile census routes in each county. The census begins at sunrise on mornings when the dew on the grass is heavy, there is little or no wind, and the sky is clear and sunny. Under these weather conditions, pheasants usually gather on the roadway, presumably to avoid the wet grass and keep reasonably dry. The observers drive their cars along the routes at about 20 miles per hour and tally all pheasants observed. They also flush all broods to obtain an accurate count of chicks. In this manner, an index to the number of pheasants present is obtained each year.

While driving along ten miles of gravel roads to my office each morning, I noted that the number of pheasants I observed each morning would vary. Therefore, I tabulated my observations each week-day morning during July 25 to August 19, 1966, in an attempt to determine how many pheasants would be observed under various weather conditions. I usually started for the office at about 7:40 a.m. My observations are presented in Table 1 and Figure 1.

Questions might arise as to how I could tell individual broods and cocks apart. Since the broods were hatched at different dates, it was fairly easy to distinguish individual broods and determine if there were actually 15 different broods on the route. Although the adult cocks were more difficult to separate, I believe that my observations actually contained 11 different adult cock pheasants; this I based on various observations made during the period.

The broods were never flushed or counted to determine the total number of chicks, as is normally done in the statewide pheasant census, so I have no category for total pheasants observed in my data. I merely tabulated the number of broods and the number of cocks observed each morning.

It is interesting to note that some broods (as numbers 1, 9, 13, 14 and 15) were seen only one morning. Brood No. 1 was seen July 27 but never again during these morning counts. However, I did see this brood several times on my way home in the evening, so it did not "disappear." On the other hand, broods 3, 5, and 6 were seen quite regularly. During the week of August 8-12, brood No. 3 was seen every morning. However, only one or two chicks,

rather than the entire brood, were seen with an adult cock. This was also true for some of the other broods. This brood "breakup" always occurred with broods that were at least 8 weeks old. This peculiar behavior demonstrates a need for further research of pheasant brood behavior.

Although not shown by my recorded data, the observed broods were always close to small grain fields in the federal land retirement program. The exception was that two of the fourteen broods were associated with a 10-acre grassy wasteland area. I noted this same association between broods and small grain fields while doing the roadside pheasant census in Faribault County this fall. This suggests that land in the federal land retirement programs and in small grains provided safe nesting cover for pheasants. Previous studies of pheasant nesting behavior at Madelia have shown that pheasant nests in small grains were more successful than nests in other cover types.

There does not appear to be a good correlation between weather conditions

and the number of pheasant broods observed by me. I observed as many broods on mornings with adverse weather such as fog, light dew, or cloudiness, as I did on most mornings with excellent weather conditions. However, this does not demonstrate that no correlation exists. In fact, a study by E. D. Klonglan in Iowa (1955. Factor influencing the fall roadside pheasant census in Iowa. *J. Wild. Mgmt.* 19(2): 254-262) demonstrated that weather greatly influenced the number of pheasants observed on roadside census.

Of the 15 individual broods I observed, a maximum of only six were observed on the same morning, July 25, although five were seen on August 15 and 17. Thus, our statewide August roadside pheasant counts probably represent only about 1/5 to 1/3 of the actual number of pheasants present along a given stretch of roadside during the period of census. However, it does serve as a reasonable reliable index of pheasant population trends.—*Game Research Center, Madelia, Minnesota.*

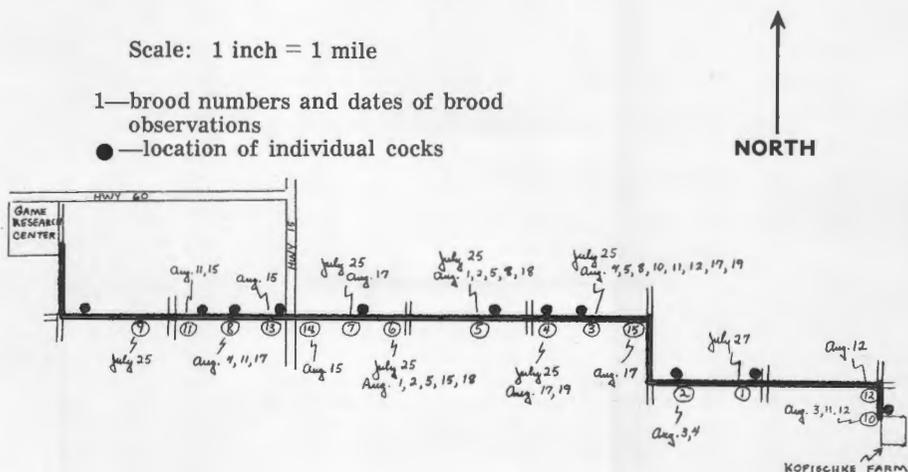


Figure 1. Approximate locations of broods and adult cock pheasants observed during July 25 and August 19, 1966, on roadway between Kopsichke farm and the Madelia Game Research Center.

Table 1. Pheasants observed on ten miles of roadside between Kopischke farm and the Madelia Game Research Center during period of July 25 to August 19, 1966.

DATE	WEATHER CONDITIONS			SKY	NO. OF BROODS SEEN	TOTAL BROODS SEEN	ADULT COCK PHEASANTS SEEN
	DEW	TEMPERATURE	WIND				
July 25	heavy	80°	calm	Sunny and clear	3, 4, 5, 6, 7, 9	6	4
26	heavy	80°	calm	overcast and cloudy		0	0
27	heavy	78°	calm	foggy and cloudy	1	1	5
28	— no count made —						
29	moderate	68°	calm	partially cloudy		0	1
Aug. 1	none	?	windy	partially cloudy	5, 6	2	0
2	heavy	58°	5-10 mph	clear and sunny	5, 6	2	4
3	heavy	60°	calm	clear and sunny	2, 10	2	3
4	light	64°	0-5 mph	clear and sunny	2, 3, 8	3	5
5	moderate	74°	calm	clear and sunny	3, 5, 6	3	3
8	heavy	59°	calm	cloudy	3, 5	2	3
9	— no count made —						
10	heavy	64°	calm	clear and sunny	3	1	1
11	heavy	56°	calm	foggy	3, 8, 10, 11	4	5
12	heavy	56°	calm	clear and sunny	3, 10, 12	3	2
15	heavy	60°	calm	partially cloudy	6, 8, 11, 13, 14	5	3
16	— no count made —						
17	heavy	59°	calm	clear and sunny	3, 4, 7, 8, 15	5	2
18	heavy	60°	calm	clear and sunny	5, 6,	2	2
19	heavy	60°	calm	partially cloudy	3, 4	2	2

NOTES OF INTEREST

POSSIBLE SANDHILL CRANE BREEDING—On August 12, 1966 I observed a "family group" of Sandhill Cranes several miles southwest of Warroad (Sec. 19 T162N R37W Roseau Co.). There were two definitely adult birds and two which I took to be young of the year. These two were slightly smaller and neither of them had the bare red patch on the head, whereas the adults both did. The adults and one of the young were gray and the other young bird was an overall rusty brown. They all flew about one-half mile when flushed. These birds were observed with a 25X Bushnell spotting scope at a distance of about 200 yards. They were in an unmowed hay field. Possibly they were feeding on frogs which were abundant in the field. As I am not positive of the age at which Sandhills develop their mature plumage, I may be mistaken in calling these birds young of the year. I do not think these were migrants since no evidence of a general migration has yet been reported.—*Paul E. Bremer, Warroad, Minnesota.*

UNUSUAL NUTHATCH SEEN AT RED LAKE—It was May 14, 1966 and we were still putting out feed for the birds which frequent our yard. There were Slate-colored Juncos, Black-capped Chickadees, Purple Finches, Evening Grosbeaks, and an assortment of migrating sparrows. The flock of Common Redpolls had, only recently, headed back to the Arctic, as had the Snow Bunting which occasionally visited our feeder. I had been complaining about the absence of White-breasted Nuthatches—which are common in the woods along Red Lake—when I noticed a very small nuthatch sitting on a branch of the boxelder tree. Although his breast was white, he was much too small to be a White-breasted Nuthatch, and what I could see of his back was not such a bluish grey. I decided he must be a Brown-headed Nuthatch until he flew to the ground, some six or eight feet from my window. I could then see that he had the exact markings of a Red-breasted Nuthatch, the black streak through his eye, the light streak over his eye, and the same back and head coloring. But **his breast was white**, with no sign of color. The little nuthatch stayed around all week end, and was last seen on the afternoon of May 19th.—*Mabel Goranson, Kelliher, Minnesota.*

CENTRAL MINNESOTA SUMMER OBSERVATIONS OF NASHVILLE AND TENNESSEE WARBLERS AND PHILADELPHIA VIREO—These birds were banded 8 miles east of Little Falls, Morrison County, exactly on the 46th parallel. The location is a large open cattail swamp, over a peat base, ringed by small willows which in turn are ringed by alders mixed with ash and birch; about 50 tamarack are also present. The land rises sharply from the swamp edge into a primarily red oak woods. The birds were caught in the willow-alder edge area. On June 16, 1966 a vireo was noted in the net. I assumed it was a Warbling Vireo until I approached more closely and noted its smaller size and more yellow appearance. The bird was identified as a Philadelphia Vireo by its dark lores, yellow breast and under tail coverts and finally by the absence of the short outer primary of the Warbling Vireo. The bird was not seen again and no other Philadelphias were banded until September 13. While the bird was definitely late for the area, I think it is much more likely to have been a late migrant or an unattached wanderer rather than a nesting bird. On June 27, 1966 an adult Nashville Warbler was banded. This bird repeated again on July 27 and thus apparently spent the summer in or around this swamp. However, no other bird or young was seen. This record would indicate only the possibility of a nesting here. The first fall Nashville was not banded until August 23. On July 19, 1966, 3 Tennessee Warblers were banded—one of which was an adult male. One of these birds repeated on July 27. Another adult male was banded on July 21 and 3 more birds on July 27; again one of these 3 was clearly an adult male. This July 27th male repeated on August 9 and again on August 23. More Tennessee's were banded on August 9 and later. Did these

July birds actually nest in the area or did they merely start south extra early? If observers keep watch for these birds in south-central Minnesota perhaps nests can be found, thus definitely extending their summer breeding range farther south. It is interesting to me that none of these birds were seen, except in the nets, in spite of quite intensive concurrent observations. Those of us who band should make a special effort to report our "unusual" observations to the MOU so that this by-product of our banding program is not wasted.—L. S. Ryan, *Little Falls, Minnesota*.

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WESTERN GREBE IN MINNEAPOLIS—On October 3, 1966, Emmett Hermanson called me to say there was a Western Grebe on Lake Calhoun. My wife Shirley, daughter Susan, and I met Emmett at the Thomas Avenue beach on the south end of Lake Calhoun. Upon alighting from the car, we could see without binoculars a large grebe like bird with a long, white neck. When I focused my binoculars on the bird, it was immediately evident that this was a Western Grebe. The long, white neck, upper half of head black, and straight sharp bill together with the dark back was strongly in favor of this being what we first identified. We observed this bird for a period of 15 to 20 minutes while it swam and dived from a distance of 75 yards to 200 yards away. When it surfaced, Susan, without the aid of binoculars would immediately bring it to our attention and remark on the clear white neck. At one time it surfaced in line with Horned Grebes in fall plumage. The contrast in color and size was clearly evident. It dived several times while we watched it. I used a 10x40 binocular; Emmett used 9x40 BL; Shirley used a 7x35mm. We used a *Field Guide to Eastern Birds*, by R. T. Peterson for a reference. My wife and I have seen dozens of Western Grebes in the western part of North Dakota on previous occasions. Emmett Hermanson has birded over the entire United States for many years. The temperature was around 40°; wind 5-10 m.p.h.; and the skies were clear while the bird was being observed.—Donald Bolduc, 4211 Blaisdell Ave., *Minneapolis, Minnesota*.

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SNOWY EGRET AT AGASSIZ REFUGE—A Snowy Egret was observed on two different occasions at Agassiz Refuge, July 11 and July 15, 1966. The first sighting was by Student Assistant Eric G. Dornfeld. The second by Mr. Dornfeld and David R. Cline, Asst. Refuge Manager. A description was kept of the first observation only. Length of observation: 15 minutes. Distance: Varying from 50 to 150 yards. Light conditions: Excellent; clear sky at mid-morning. Optical equipment: Tasco 7x35 wide angle binoculars. Pentax 35mm camera with 65mm. short range telephoto lens. Reference books: Peterson, *A Field Guide To the Birds*. Used while the bird was in view. Previous experience with species: Ornithology class, U. of Minn. 1965. Other observer: David R. Cline, B.S.U. of Minn. Duluth 1959. M.S. U. of Minn. 1965. Description: Refuge Student Assistant Eric G. Dornfeld flushed a small egret from below the judicial ditch 11 control structure. It flew to a dead tree and perched. Positive identification was then made at a distance of 50 yards. The bird was relatively small, had black bill and yellow feet. As the observer moved closer for a photograph, the bird again took off and flew several hundred yards to the southwest and landed in another dead tree.—Eric G. Dornfeld, *Agassiz Refuge, Middle River, Minnesota*.

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SUMMER WHISTLING SWAN—A color marked Whistling Swan has been seen on the refuge periodically all summer. Since the molt, the bird has been identified by the yellow neck collar it wears. The bird is believed to have been marked at Shiawasee Refuge, Michigan. The first observation was made by Asst. Manager David R. Cline and Student Assistant Eric G. Dornfeld on June 17, 1966. The bird first seen loafing on a small island near the West Gate road one-fourth mile N. of the ditch 11 control structure. As approach was made to within approximately 200 yards, the pink dye marked neck and breast and bright yellow neck collar became evident. As the bird arose and swam out away from

shore, a yellow plastic leg band was noted on the left leg and what appeared to be a bureau aluminum band on the right. Although the bird did not take wing, it appeared to be healthy and capable of flight. The swan was observed again at 7:00 p.m. at the same location. Since then the bird has been a frequent visitor at one of the refuge feeding sites and has been observed by several refuge personnel.—*Eric G. Dornfeld, Agassiz Refuge, Middle River, Minnesota.*

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DEATH BY BATTLE—It is not uncommon for wild animals to fight among themselves, especially during the mating season. This particular report concerns White-tailed Deer bucks which had fought during the mating season and died as a result of their battle. About November 16, 1965, we were informed by a local resident that two deer had locked antlers near Good Thunder, Minnesota. Robert Chesness and I decided to check further on this report. We inquired about the deer at Good Thunder on November 18. We were told to check the Harold Kruggel farm located about two miles northwest of town. Mr. Kruggel informed us that he had found the deer "about four weeks ago" (about October 20), and that they had been dead at that time for "several weeks." He showed us where the bucks had apparently fought before and after becoming locked. The area of the battle was adjacent to the Blue Earth River where the vegetation (primarily sumac) had been trampled. In the struggle one of the bucks had fallen over the bank, while the other remained on top. However, when we checked the area, both carcasses had fallen over the river bank. The actual cause of death could not be determined but it appeared that one of the bucks was decayed to a greater extent than the other. This may have been due to the following: one deer broke its neck either before or after falling over the cliff, and the second deer, unable to eat, finally starved to death. We photographed the dead deer and then cut both heads off, keeping the antlers locked. Later, at Madelia, the skulls were cleaned for display purposes. The skulls are currently on display at the Madelia Game Research Center. When the teeth were examined for age characteristics it was noted that one deer had only five cheek teeth on each side of its lower jaw. The teeth and entire jaws were otherwise normal in all respects. No swelling or diastema was noted. By comparison with several other deer jaws in our collection, it appeared that the first premolars were missing. The six teeth on each upper jaw appeared normal in all respects. This dental abbreviation is believed to be quite rare. However, missing second premolars believed to be the result of injury have been previously reported for two White-tailed Deer by D. A. Benson (1957 Abnormal dentition in White-tailed Deer. *J. Mammal*, Vol. 38, p. 140) and for a Mule Deer by H. L. Short and C. P. Short (1964. Abnormal dentition in a Colorado Mule Deer. *J. Mammal*, Vol. 45, p. 315). It is also interesting to note that in 1963 two deer also locked antlers in section 29 of this same township, not more than one mile northeast of the Kruggel farm. However, in this case, one deer was still alive when found and was unlocked with the aid of a saw. Although the majority of deer dying as a result of locked antlers are not found, it is believed that this occurs quite often in nature. I also observed two dead deer during the fall of 1962 which had died in this same way near Blue Earth.—*Earl D. Kopischke, Madelia Game Research Center, Madelia, Minnesota.*

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BLUE GROSBEAKS AND LARK BUNTINGS IN NOBLES COUNTY—On August 9, 1966, Orpha Barnes, Carrie Schafer and I were on our way to a new county park near Kinbrae, Nobles County. At 6:45 p.m. the temperature was 72, partly cloudy. As we turned the corner off the black top county road I stopped short to take a look through my binoculars at a small dark-appearing bird on the wire. It was what I suspected—a Blue Grosbeak—way over in eastern Nobles County. We watched this male for a time as he flew back and forth from cornfield to wires, frequently giving alarm notes. Then he sat on the wires and sang. We saw only the one bird. The next evening we went back up to see if we could see it again. We waited for sometime and saw much bird activity

but no grosbeaks. We had to return home and had just gone a quarter of a mile down the road when we saw a male Blue Grosbeak on the wires, near a cornfield. On three different occasions in June we saw Lark Buntings in eastern Nobles County. On June 3, 1966 three males and one female were seen in Graham Lakes Township, on June 6, one male was seen in Indian Township south of Round Lake and on June 19, 1966 three males were seen in Hersey Township north of Brewster. No Lark Buntings were noted after this date.—*Mrs. Helen Hatlelid, Worthington, Minnesota.*

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TOWNSEND'S SOLITAIRE IN DULUTH—Observed October 11, 1966 between 6:00 and 6:30 p.m. D.S.T. at 2nd Street East and 6th Ave., Duluth, a Catbird size bird which was lighter grey with white outer tail feathers. The bird was the same light grey on head, neck, belly, breast and under tail coverts. The tail was slightly darker grey with the outer tail feathers white. There were narrow white marks on the upper wings, but these were not placed right for wing bars. No white wing patches. The bill and feet were black. Bill was narrow or slender. There was a faint ring around a black eye. Bird was observed about 15 minutes, was flushed repeatedly. It flew a short distance each time. Observed from about 15 to 20 foot distance at times with 7x34 binoculars. Observers ruled out Catbird and Mockingbird using previous experience and *Peterson's Field Guide to Eastern Birds* and *Audubon Land Bird Guide* by Pough. On Jan Green's suggestion, *Peterson's Guide to Western Birds* was used to check appearance of Townsend's Solitaire. This seemed closest to the bird except that observer failed to note buffy wing patches.—*Ruth Lender, 1029 East 1st St., Duluth, Minnesota.*

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SUMMER OBSERVATIONS OF CERULEAN WARBLER AND LINCOLN'S SPARROW IN CROW WING COUNTY—**Cerulean Warbler:** I saw one male on July 11, 1966 near Bay Lake in Crow Wing County. It was a beautiful sunny afternoon in typical second growth of birch, poplar, oak, maple. The bird was first high in the trees but luckily it dropped almost to eye level in front of me. I could see the snowy white breast with black streaks on the sides and the black line across the breast. Then to prove my suspicions he turned around and there was the lovely blue-gray back and head with the stripes down the back. All told I must have had him in view 10 or 15 minutes. **Lincoln's Sparrow:** I saw one bird July 29, 1966 also near Bay Lake in Crow Wing County. I first saw the bird about 3 or 4 feet off the ground in a bush along a natural ditch between a swamp and the lake. His movements were jerky but seemingly curious, not frightened. He stayed in relatively plain sight for several minutes before flying 20 feet or so but still where I could see him. I especially noted his breast which was a lovely yellow buff across the upper breast and along the sides with streaks of brown on the top of the buff. There was a definite line of demarcation between the buff and the white underparts. I noted a lack of definite wing bars and the rounded tail. The face was almost plain grey but the sharp "whisker streaks" stood out in contrast. I realize the chance of confusing this bird with an immature Swamp Sparrow. I had "Peterson's" with me in the field and also studied Dr. Robert's plates and Forbush's *A Natural History of North American Birds* at the cabin. I am convinced. For color see Dover reissue of Frank Chapman's Handbook—color chart, lighter shade of "cream buff."—*Mrs. Nancy Roberts, 1218 Marie Ann Blvd., Panama City, Florida 32401.*

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RED-THROATED LOON OBSERVATION FOR LAKE COUNTY—Since Red-throated Loons are very rarely seen in Minnesota in the fall even on Lake Superior where they are found regularly in the spring, I thought it would be useful to other observers to share the experience that Liz and Rex Campbell and I had in identifying one in the harbor at Two Harbors, Lake County on October 20, 1966. With a 15-60 power scope I first spotted a loon in winter

plumage near the tip of the breakwater on the harbor side and immediately noticed that it was small, probably too small for a normal Common Loon. However, since size can be very deceptive, I wanted to see the upturned bill and sinuous shape of the head and neck that I had observed in this species in previous, spring observations. These characters are supposed to be noticeable at quite a distance. The bird was about 1500 feet away and conditions for observing were far from ideal. The sun was out but it was sideways to the loon and us, the loon was far enough out in the harbor so that it was in the choppy sea caused by the southwesterly breeze and was constantly disappearing from sight behind the waves, and the bird was either preening or diving so that we could not get a good view of it in profile. Neither Liz or Rex had ever seen this species before and they, as well as I, wanted to be sure of the identification. We watched for about 20 minutes and although the loon came closer (to about 1000 feet), the sea became calmer and the angle of the sun got slightly better, we could not see that the bill was upturned. We did get several looks at the bird in profile as well as see it flap its wings with its back to us a couple of times. This revealed that the back was a dark brown, contrasting to the lighter head and neck, but we could not see any spots on the back at that distance. Finally we took the spotting scope and walked out on the breakwater almost to the end. At the same time I took a white handkerchief and waved it over my head, hoping to arouse the bird's curiosity and bring it in closer to us. Our luck was good because we ended up with the loon about 75 feet from us, the sun at our backs and the lake almost calm. We watched it at that distance for about 15 minutes as it swam back and forth preening and occasionally diving. It was only when it was quite close that we could convince ourselves that the bill was upturned. Its head and neck were held in the manner of a Common Loon. We noted the following characteristics: 1) a small loon with a slender bill very slightly upturned (not as pronounced as the pictures in the field guides), 2) face below eye, throat, front of neck, breast and belly were white with dark creases on the side of the neck where it joins the head, 3) top of head and back of neck were a soft brownish grey that was lighter than the color of the back, 4) back and wings were dark brown with many small whitish spots (not scales), 5) eye was dark with no glint of red, and bill was lightish, possibly grey in color, and the top of the upper mandible seemed darker. Our observations were in the morning between about 11:00 and 12:00 D.S.T. Two hours later Ruth and Dick Kuchta walked out on the breakwater and tried to find the loon which we had told them we had seen. Although they saw two Red-necked Grebes that were present in the area (we had seen one), the loon had apparently left.—Janet C. Green, 9778 N. Shore Drive, Duluth, Minnesota.

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LATE FALL COMMON TERN OBSERVATION—On a trip to the Chippewa National Forest on October 23, 1966 two Common Terns (an adult and an immature) were observed on Stoney Point on the south shore of Leech Lake in Cass County by John and Ann Mathisen, John Green, and myself. This is a very late date for this species in Minnesota. They are usually almost all gone from the state by October 1st. The previous late departure date for the northern half of the state was October 3rd and for the southern half, October 13th. However, Bent gives late dates for New England and for Ohio in November (A. C. Bent, *Life Histories of North American Gulls and Terns*). These terns particularly seemed out of place because the day all the characteristics of a late fall day—sunny and clear with a very strong and chilly westerly wind. Because of the wind we had spotted few birds in our drive around the Cass Lake area. Gulls and ducks had been the most conspicuous groups and we had seen three species of the former—about 5 Herring Gulls, 30 Ring-billed Gulls, and 30 Bonaparte's Gulls in small groups on the lakes from Bemidji to Walker. I was hoping to see a tern (but did not hope for the species we did see) and when we drove up to the boat launching ramp at the Stoney

Point campground, someone said "There is your tern." It was flying around the tip of the point and soon landed on a boulder off the end of the boat launching ramp. It was an immature bird in first winter plumage and was easy to identify both in the air and resting on the boulder. We all noticed that the forehead was white and the black on the head extended from in back of the eye over the upper part of the nape (the occiput). The brownish wing coverts contrasting with the light grey wing were very noticeable, also, both in flight and when it was standing. All of us had seen Common Terns many times before. I observed it through a 15-60 power spotting scope at a distance of less than 100 feet and noticed that the bill was a mixture of orange-yellow (not the red of the breeding plumage) and black, being black for the distal $\frac{1}{3}$ of the lower mandible and distal $\frac{2}{3}$ of the upper mandible. The legs were a nondescript color—perhaps yellowish grey. When the bird was sitting on the boulder it was joined by another tern in full adult breeding plumage. It seemed reasonable to assume that this bird too was a Common Tern but I watched and waited until it flew and then could see that the primaries were slightly darker than the rest of the mantle.—*Janet C. Green, 9773 North Shore Drive, Duluth, Minnesota.*

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SUMMER RECORD FOR THE MAGPIE—On July 15, 1966 I was a passenger in a pickup truck traveling from Tofte to Duluth. It was a clear sunny morning and about 6:30 we were just west of Split Rock Lighthouse, Lake County, when I noticed a large black and white bird feeding on something at the edge of the highway ahead. The bird looked to me to be the size of a Common Grackle or a little larger. When we got to within about 30 feet of the bird it flew up. The most striking thing about the bird at this time was its long tail which I judged to be close to a foot long. The bird flew across the ditch, up alongside a bank and then into the woods. I recognized the bird as being a Black-billed Magpie as I had lived in Alaska for 10 years where these birds are a common sight. When I got home I checked the Peterson *Field Guide to Western Birds* to see if the white markings on the bird I saw corresponded with the magpie pictured in the book—it was the same. —*Mrs. Oliver C. Peterson, Tofte, Minnesota.*

* * *

GYRFALCON IN COOK COUNTY—On November 5, 1966 around 9 a.m. Ray Glassel, Emmett Hermanson, and I drove to the town dump near Tofte, Cook County. When we stopped the car, we saw a Rough-legged Hawk (light phase) sitting on a limb in a tree to the northwest. In order to flush it we all stepped out of the car and advanced toward the tree the bird was in. When flushed, it flew south then turned in a north-easterly direction. As it was departing we noticed a large falcon like bird swoop out of a tall spruce tree adjacent to the dump. It turned and flew easterly partly 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 B&L spotting scope for about 30 minutes. Temperature was about 20°F. The sky was clear. The bird appeared to us to be uniform dark grey on top of the back, tail, and wings. When perched, it was facing us. There were dark brown or grey streaks from the throat down to the belly as far as was visible. The head was dark grey with no visible mustache mark. A light area at the cheek was in evidence. We drove on another side road where we approached the bird to within 50-75 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 this bird is an immature gray Gyrfalcon.—*Donald Bolduc, 4211 Blaisdell Ave., Minneapolis, Minnesota.*

* * *

GOLDEN EAGLES IN HOUSTON COUNTY—On November 5, 1966 I saw two immature Golden Eagles two miles south of Brownsville on State Highway

26. When I stepped out of the car to check them routinely with 7x35 binoculars, I immediately noted the solid dark underparts with clearly delineated white areas at two places: the bases of the several primaries near the wrist of each wing, and the proximal one-half of the tail. The size of the soaring birds, their manner of soaring, and the limited area of white eliminated the possibility that they were Rough-legged Hawks. The distinctness of the white areas eliminated the possibility that they were immature Bald Eagles, several of which were seen the same afternoon in the same area. As the birds moved from over the water at a height of perhaps 300 feet to the bluffs and back over the water again, I was able to observe them through a 20x spotting scope. Though there was no bright sun, light was good, and I watched them for about 15 minutes.—*Fred Lesher, 509 Winona St., LaCrosse, Wisconsin.*

* * *

KING RAILS IN HOUSTON COUNTY—On July 20, 1966 while canoeing on a cattail swamp dignified with the name of "Blue Lake" and located just south of the LaCrescent-LaCrosse causeway, I saw four dark colored, pullet-size birds running like chickens across the lilly-pads. Through 7x35 binoculars at an approximate distance of 300 feet, few identifying marks could be seen. The bill was long and slender. The only other possible rail would be the Virginia, eliminated in this case by size. I do not believe that bitterns or Green Herons would behave as these birds did. Also, the American Bittern is much larger than these birds, and the Least Bittern too small. By process of elimination I identified these as King Rails.—*Fred Lesher, 509 Winona St., LaCrosse, Wis.*

BOOK REVIEWS

A NEW DICTIONARY OF BIRDS—Edited by A. Landsborough Thomson, 16 color plates, 32 pages of black and white photographs and 300 line drawings. 928 pages. McGraw Hill Book Co., 330 West 42nd St., New York, New York. 1964. \$17.50.

This new work is probably the most comprehensive reference ever published on birds. Roger Tory Peterson states "No one interested in birds can afford to be without this brilliant compendium which brings ornithology up to date. Every contributor speaks with a voice of authority." The material is arranged in alphabetical order and much of the information cannot be found readily in other sources. This reviewer was most impressed by the color illustrations, especially the one on page 320. This illustration contains the life cycle of the King Eider from egg to adult. The sequence of plumage of both male and female are shown. This illustration is done by Peter Scott and what a wonderful thing it would be if more illustrations of this nature were available on other species of birds. The black and white photographs are clear and very graphically illustrate the text

subject. This volume is a very good addition and companion to the owners of field identification guides.

Editor

AUDUBON'S WILDLIFE by Edwin Way Teale, 256 pages, 80 black-and-white plates, 20 color plates, published by The Viking Press, New York, 1964, \$15.00.

The author attempts to do three things simultaneously in this book: present a mixture of both colored and black-and-white reproductions of Audubon's famed bird and animal portraits, offer selected writings from Audubon's journals and notebooks, and give his own running account of Audubon's life. All three objectives are skillfully accomplished but this reviewer has a few misgivings about the organization and presentation of the plates. First of all, the plates are not offered in direct conjunction with the corresponding text and secondly, the small title-note for each plate is not found with that plate but is instead located immediately preceding a group of plates, thus making it necessary to keep flipping the pages back and forth to read the accompany-

ing note for each plate. Third, in order to offer the "full impact" of Audubon's paintings, some are presented life-size (i.e., original size) and this, because of the limited size of the book, requires editing of the painting, often losing some of the important background. To me, this background effort is one of Audubon's strong points. His accurate portrayal of foliage, insects, etc. truly enhances the naturalistic effect of his paintings. However, since these are matters of my own personal taste, they are really rather minor criticisms.

This book, perhaps more so than some of the folio reprints I have examined, makes me wonder about Audubon's models. That he must have painted some of his portraits from living specimens is evident, because he often captures a certain wild, life-like quality on the canvas. Other portraits, however, appear to have been drawn from study-skins or perhaps other paintings or maybe even from verbal descriptions offered him by outdoorsmen? Quite possibly this noticeable variation can be ascribed to other factors, such as health, mood, period of the artist's life, etc.?

One very apparent error has crept into this book—the plate on page 245 clearly depicts a summer pelage Red Squirrel (*Tamiasciurus hudsonicus*) but the title note refers to it as a Richardson's Ground Squirrel (*Citellus richardsonii*). Not only are the two species entirely dissimilar in appearance, but the rodent in Audubon's plate is basking on a birch or aspen limb—something a ground squirrel surely could not do. Whether this error is Audubon's or Mr. Teale's I do not know.

Considering the lofty price of this volume, I would only recommend it for the serious student, the all-around naturalist or the history/biography minded student. The average bird-watcher would probably not feel justified in spending fifteen dollars for this volume, but for those who are keenly interested in the early naturalists of our country, this is a very good book. *Ronald L. Huber, 480 State Office Bldg., St. Paul, Minnesota 55101.*

WILDLIFE'S TEN-YEAR CYCLE—
Keith, Lloyd B. The University of Wisconsin Press, Madison. xvi + 201 pp. 1963. Price \$6.00.

The subject of cycles in wildlife populations is exciting and highly controversial among biologists. The very existence of a cycle is denied by some while others are actively expressing opposite views as to the cycle's cause. Dr. Lloyd Kieth's book *Wildlife's Ten-Year Cycle*, is sure to clarify much of this controversy and will stand as a landmark in the sequence of scientific investigation directed toward an understanding of this population phenomenon.

Basically, this book is a summary and collation of information on those long-term fluctuations, collectively designated "the ten-year cycle," which are allegedly characteristic of certain northern bird and mammal population. The text sequence leads from definitions of cycles through types of indices used to estimate population densities to an evaluation of the question, "Are there ten-year population cycles?" Dr. Kieth is of the opinion that so long as the term "ten-year cycle" does not imply strict regularity, it is a useful description of the phenomenon. He next presents population characteristics of cyclic species with a consideration of interrelationships between species and finally, discusses the major hypotheses of cycle causes.

Data from the literature and from unpublished and often obscure sources provide the main basis for this review. Dr. Kieth's own research and observations on snowshoe hares and grouse are reported where pertinent.

The reader who expects to find the ultimate explanation of the cause of population cycles in wildlife in this book will be disappointed. The author classifies the principal cycle hypotheses presented in the past into the following groups: random-fluctuations theory, meteorological theories, overpopulation theories, and "other theories" which include such aspects as nutritive quality of food, and factors intrinsic to biological systems. He does not cover the entire spectrum of hypotheses nor does

he, in his own words, "wish to offer still another theory on a subject already surfeit with speculation but sorely lacking in field research."

The 23 figures interspersed in the text plus 48 pages of text tables, maps and appendix tables at the end comprise a valuable compendium of data which will be of great value to future research in this field. My only criticism is that the reader must be continually turning ages to find the tables and figures referred to in the text (Figure

1 is first mentioned on page 23 but does not appear until page 28).

The format and print are satisfactory and the tables are well done. However, many of the reproductions of graphs and charts are small and difficult to read. The book is moderately priced and should be of value to anyone interested in animal numbers.—
J. R. Tester, Museum of Natural History, University of Minnesota, Minneapolis, Minnesota.

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CALL FOR SNOWY OWL OBSERVATIONS

Several Snowy Owls have been seen in the Lake States region this winter (1966-1967). A survey of the southward movement of the Snowy Owl is being made this winter to determine the distribution of these birds as well as the extent and duration of their invasion. The following information is requested: Name and address of observer, date, time, and location of ob-

servation (state, nearest town, county, and if possible: township, range, and section), habitat, activity, and weather. If bird is perching, how high and on what is it perching? Please send observations to: Thomas H. Nicholls, University of Minnesota, Museum of Natural History, Minneapolis, Minnesota 55455. Cooperators will be sent a report of the results, if requested.

PURPOSE OF THE M.O.U.

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

We carry out these aims through the publishing of a magazine, *The Loon*; sponsoring and encouraging the preservation of natural areas; conducting field trips; and holding seminars where research reports, unusual observations and conservation discussions are presented.

We are supported by dues from individual members and affiliated clubs and by special gifts.

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

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 type-written 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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