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# THE FLICKER

VOLUME 24

MARCH, 1952

NUMBER 1



BRECKENRIDGE

*Published Quarterly by*

**THE**

**MINNESOTA ORNITHOLOGISTS' UNION**

**MUSEUM OF NATURAL HISTORY**

**UNIVERSITY OF MINNESOTA**

**MINNEAPOLIS, MINNESOTA**

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## The Flicker

Organ of the Minnesota Ornithologists' Union

Published Quarterly in March, June, September and December

THE FLICKER is sent to all members not in arrears for dues. Dues for all members, \$1.00 per annum, should be paid in advance to the treasurer.

All articles and communications for publications and exchanges should be addressed to the editor.

# THE FLICKER

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VOLUME 24

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## The President's Page

The March issue tries to set the theme for the coming birding season. It is the hope of the editor and the Policy Committee that this issue will inspire you to take a more active part in the field of ornithology this year. Note these points as you read this issue:

1. A statewide bird survey is outlined. This is a project to lend direction to some of your observations.
2. We are reprinting two articles from other magazines, both of which outline projects that you might undertake.
3. The Canadian Lakehead section, the Seasonal Report, the 1951 Nesting Report, the 1951 Christmas Census, all are compilations of many individual observations. You are invited to contribute to any one of these regular sections.
4. There are notices of two annual meetings, those of the M. O. U. and the W. O. C. Here is your chance to meet other people interested in ornithology, and gain the inspiration that goes with such meetings.
5. You will note the paucity of names in the M. O. U. roster. Have you paid your dues? Do you know anybody that is interested, but who is not aware of the state organization? Does your high-school library receive the publication?
6. Examine the proposed constitution carefully, and be prepared to make suggestions at the May meeting.

P. B. Hofslund, editor.

# Minnesota Ornithologists' Union

## Heron Colony Survey 1952

The Wisconsin Society for Ornithology has been carrying on statewide investigations of individual species for several years. The M. O. U. Policy Committee feels that such a project for the State of Minnesota and adjacent areas would not only add valuable information on the birds studied but would provide a means of bringing members of the clubs together in organized club activities. Most of our field observations are of a random nature. Such a project will bring all this potential field effort to bear on one particular problem each year. The completed survey may then be summarized as a reasonably thorough report on a particular phase of bird study which previously had been only incompletely recorded.

Heron colonies have never been censused in Minnesota, and since they are widely distributed throughout the state, nearly all clubs or individual M. O. U. members would have access to one or more colonies on which to report.

As much of the following information as possible should be secured on each individual colony investigated:

1. Location of colony. County, Township, Lake, River.
2. Species nesting in colony. Great blue heron, black-crowned night heron, American egret, double-crested cormorant.
3. Numbers of occupied nests of each species; 1952.
4. Approximate length and width of area occupied by colony.
5. Height of trees supporting nests.
6. Species of trees supporting nests.
7. Height of nests above ground.
8. Dates.
  - A. Arrival at colony
  - B. Laying of first eggs
  - C. Hatching of first young
  - D. Young on the wing
  - E. Colony abandoned
9. Mortality: extent, causes (animal man, storm, other), dates.
10. History: How long has this colony existed? Is it larger or smaller than in previous years?
11. Location of additional currently occupied colonies not investigated.

This questionnaire appears as a separate sheet in this issue of *The Flicker*. Please study these questions carefully as a guide to 1952 field observations. The completed questionnaires should be returned as directed on the form. An article summarizing the data received will be prepared for a later issue of *The Flicker*.

#### Bird Survey Subcommittee

W. J. Breckenridge

H. L. Gunderson

D. W. Warner

# Revised Constitution and Bylaws of The Minnesota Ornithologist's Union

**Approved by the Policy Committee February 16, 1952**

To be submitted for adoption at the Annual Meeting at Frontenac on  
May 17, 1952

## **Article I. Title**

The organization shall be known as the Minnesota Ornithologists' Union.

## **Article II. Object**

The object of the Union shall be the promotion of a broad program of conservation primarily in the field of ornithology. To achieve this broad objective, the Union urges and promotes interest in field studies and observations of birds by individual members and affiliated Bird Clubs. It shall be a nonprofit organization.

## **Article III. Membership**

There shall be five classes of membership in the Union, i.e., active member, sustaining member, honorary member, life member, and affiliated club member. All members in good standing shall be entitled to vote and participate in all activities of the Union. A local Bird Club may become an affiliated club member by payment of dues based on the membership in the local club. Each individual bird club member of an affiliated bird club shall enjoy the full voting rights and program participation privileges of individual members. All individual members of an affiliated bird club may also become active members of the Union upon payment of dues.

## **Article IV Annual Dues**

The annual dues for each class of membership shall be as follows:

1. Active member — \$1.00
2. Sustaining member — \$5.00
3. Honorary member — no dues
4. Life member — \$50.00 (for life)
5. Affiliated club member — 25 members or less \$5.00  
26 to 100 members \$10.00  
Over 100 members \$15.00

Each individual member in good standing shall receive a copy of *The Flicker*. Club members in good standing shall receive one copy of *The Flicker*.

Dues are payable during any calendar month and a member shall be considered to be in arrears and not in good standing unless membership is renewed within 30 days after expiration. Dues may be paid direct to the Treasurer by individual members or through an affiliated Bird Club.

Dues received from all life members shall be earmarked for the purpose of providing a copy of *The Flicker* for each life member during their lifetime.

#### **Article V Officers**

The officers of the Union shall be as follows: President, Vice President, Secretary, Treasurer, and Editor of *The Flicker*. They shall be elected at the Annual Meeting for a term of one year, or until their successors are elected. In case of death or resignation of any officer, the Policy Committee may appoint a successor to fill the unexpired term. The officers shall draw no salary.

#### **Article VI Policy Committee**

The Policy Committee shall be composed of the immediate past president, the five officers of the Union, and a representative appointed by each affiliated Bird Club.

The governing body of the Union between Annual Meetings shall be the Policy Committee. Meetings of the Policy Committee are subject to the call of the President.

A majority shall constitute a quorum, and a majority vote of those present shall prevail.

#### **Article VII. Standing Committees**

The following standing committees shall be appointed by the President following each Annual Meeting:

1. Annual Meeting Arrangements Committee
2. Annual Meeting Program Committee
3. Annual Meeting Attendance and Registration Committee
4. Union Publication Committee
5. Nominating Committee
6. Membership Committee

The chairman of each standing committee shall be selected from membership of the Policy Committee.

#### **Article VIII. Union Publication — *The Flicker***

The official publication of the Union shall be known as *The Flicker*. The Editor, an officer of the Union, will be responsible for the publication of *The Flicker*. Assisting him as members of the Union Publication Committee will be the affiliate Bird Club representatives who are also members of the Policy Committee. *The Flicker* shall be published quarterly in the months of March, June, September, and December. It shall be sent free of charge to all members of the Union in good standing.

### Article IX. Annual Meeting

The Annual Meeting shall be held at such time and place as the Policy Committee shall decide. Notice of the Annual Meeting shall appear in the March issue of The Flicker.

A quorum to transact business shall be considered to be present regardless of number, and a majority vote of those present shall prevail.

### Article X. Amendments

Amendments to the Constitution and Bylaws may be made at any Annual Meeting by a vote of the majority of those present. No advance notice of proposed amendments shall be deemed necessary. All proposed amendments must have the endorsement and support of the Policy Committee.

## Suggestions for 1952 Nesting Records

It will facilitate the compiling of Minnesota nesting records if everyone will record the information on 3 x 5 cards one card for each nest. A printed card or cards kept with your field notebook will be a constant reminder to

record nesting data when you find a nest. Send these cards to the editor, or to the Museum of Natural History as soon after the nesting season as possible.

#### Sample Card

Species .....

Observer .....

Place ..... (at least to county) .....

Data ..... Dates of observation .....

.....Number of eggs or young

.....Condition of nest if revisited (give dates of revisit.)

# He Brought The Bluebirds Back

by  
Willis Lindquist

See a bluebird last summer? If you did or heard one caroling in a thicket you probably owe it to Dr. T. E. Musselman of Quincy, Illinois.

Bluebirds have long been one of our diminishing species, according to the National Audubon Society. Dr. Musselman, vice president of Gam City Business College, discovered that fact for himself some 20 years ago. When he tried to do something about it, even the contented Illinois cows turned against him. But they inadvertently helped him hatch one of the most unique projects of its kind, which is now snowballing across the country in a glorious flurry of bluebird feathers.

The story goes back to a bright afternoon during his childhood when he visited a farm with his father, the founder of the business college. There, in an old orchard overrun with weeds and hazel, ivy and sumac, the farmer showed him a bluebird nest deep in the hole of an old fence rail.

"I looked in," he remembers. "There was a grass nest with five round blue eggs. We stopped next at an old willow-twig apple tree which had a dead stub of a limb which a downy woodpecker had excavated. The farmer lifted me up and this time I was surprised to see four white eggs, yet the mother was a bluebird. In a neighbor-

ing stump was another nest with eggs. I was fascinated and wanted to stay to watch the eggs change to baby bluebirds."

He recalled the incident years later when he returned home with a Master's degree in biology from the University of Illinois. His first impulse was to test his biological wings by making a survey of the bird population. This he did, and was alarmed to find only three bluebird nests in Adams County, where before had been as many as three nests in one orchard.

What was happening to the bluebirds? Why were they disappearing so rapidly from the countryside?

T. E. — as he is called by young and old around Quincy — began sifting the facts.

He discovered that the bluebirds were hopelessly caught in the middle of a three-way squeeze.

First of all there were the English sparrows. They were crowding the bluebirds out by occupying the natural cavities in posts and stumps and dead trees. Not migratory, the sparrows remained all winter long and were firmly entrenched when bluebirds arrived in the spring.

Another imported bird, the starling, was invading the Midwest in large

numbers, taking over many of the woodpecker holes formerly used by bluebirds. And even where the bluebirds had built their nests, the starling would chase them off.

Nor were imported birds the only difficulty, for man, too, had unwittingly become an enemy. As farming became more and more of a science, bluebirds found themselves with fewer available nesting sites.

Dead trees were being cut down. Old rail fences with many a fine woodpecker hole were being replaced with cold steel. In orchards, a favorite nesting place, every tree was carefully manicured, every dead limb removed, the holes filled and painted over with creosote to keep out beetles, grubs, fungi, and hole-nesting birds.

What few bluebirds remained were making pathetic and desperate attempts to nest almost anywhere. Some tried rusty tin cans and jars in city dumps. One pair nested in a drain pipe. Washed out, they moved to a hollow iron coupling of a freight car which stood on a siding for several weeks.

In a Quincy park a pair laid their eggs in a cupped bracket just beneath the entrance of a wren house. The eggs were quickly pierced by indignant wrens. But the bluebirds went on brooding the eggs hopelessly, fighting off the wrens many times each day.

Rural mail boxes were also being used. More than one farmer got grass and scrambled bluebird eggs with his morning mail.

It was simply a case of an acute housing shortage. No nests, no eggs, no young birds, the old ones gradually dying off. No future in that for the bluebirds.

Many people were building houses for wrens. But who was doing anything

for the bluebirds? What was worse, no one seemed particularly interested. They all had valid excuses when T. E. spoke to them.

"It's no good," they'd say. "We've put up bluebird houses before, and we always get English sparrows. What's the use?"

T. E. knew why they always got sparrows. They put their boxes in the yard, usually close to the house. Sparrows are particularly fond of living in towns and near houses. Bluebirds are not. They prefer the solitude of the sun-drenched countryside, the remote corner of an orchard, the dead trees at the end of the field.

One thing which troubled him was the design and size of the bluebird box. Boxes for these birds had never been very successful.

Bird houses in the country seemed the obvious answer. T. E. began experimenting, and found it wasn't nearly as simple as that.

"One day as I was hiking along Mill Creek, I noticed a dead willow stub with a downy woodpecker hole," he says, "I broke the stub off and cut through the nest cavity with a saw to get the dimensions which made it so attractive to bluebirds. It was an up and down cavity about nine inches deep, somewhat gourd shaped, with a one and three-quarters inch entrance hole."

He made boxes with similar dimensions and set them up on farms of friends. The boxes placed only a short distance from barnyards were promptly claimed by sparrows. Starlings and other birds took the remainder.

He yanked the nests out and placed the boxes in different locations. This

time, remembering the bluebird nest he had seen on the old fence rail, he nailed some boxes to pasture fence posts, only three feet off the ground.

These attracted bluebirds. But to his surprise he had set off a battle of feathers and fur between birds and cows. The cows, it seemed, loved these wooden projections into the pasture—as back scratchers. One vigorous scratching destroyed the box or brought it to earth.

By switching the boxes to the other side of the fence posts where the cows couldn't get at them, T. E. quickly put an end to the battle and the bluebirds took over.

Oddly enough, no starlings came to drive them out. T. E. became convinced he had solved the starling problem. They were not interested in low nesting sites.

He had licked the sparrows, cows, starlings; designed a box bluebirds liked and a location that suited them. But he still faced the most formidable hurdle of all—public indifference. Not many people were likely to build boxes they couldn't put up in their yards where the birds could be enjoyed.

Yet, if the bluebirds were to be helped it would have to be by a large scale operation, something that would catch popular fancy. The problem was as large as the bluebird breeding grounds, which took in most of this country and several provinces in Canada.

But what could he do?

He recalled tree-planting campaigns to beautify city streets and country highways. He had seen long miles of flower beds along city parkways, and remembered the community enthusiasm

behind these projects.

Why not bluebird trails? Why not line the highways with bluebird boxes? What could be more breath-taking than the flashing of bluebird wings and amber breasts in a sunny sky?

It might work. But first he had to put the idea to a test with a trail of his own. He built 25 bluebird boxes, called in the neighborhood children and had a bird house painting party, using dull gray paint that would blend with weathered fence posts.

Next, he obtained permission from the farmers along the proposed trail, a simple matter, since the bluebirds are among our most useful birds. About 70 percent of their food consists of animal matter, including grasshoppers, crickets, beetles, ants, spiders and earthworms. Unlike the robins, they rarely eat orchard fruits, preferring wild fruits such as chokecherry, wild grape, Virginia creeper, juniper, alder, bayberry, sumac and mountain ash. These, incidentally, are the things you should plant if you wish to attract bluebirds.

He placed his boxes on fence posts along a country road, three or four boxes to the mile.

"My wildest expectations were realized. Every box had at least one bluebird nest. Twenty-one of them had a second nest that summer, seven had three nests, and one actually had four."

He published his findings in **AUK**, **BIRDLORE** and other nature magazines, with an appeal for help. He also carried on his campaign by radio, and by lecturing to various clubs throughout the Midwest, averaging more than 100 such talks annually.

As official salesman for Gem City

**THE FLICKER**

Business College, he often visited high schools within a 100 mile radius to interview seniors, some 200 schools in all. In each, he lectured the student body on nature subjects and bluebird trail building.

Things began to happen. Biology classes started trails as class projects, each member building a box or two and reporting on the activities of the birds in his boxes.

A high school teacher in Cape Girardeau, Missouri, Mrs. Oscar Findley, took several members of her Junior Audubon Club to the annual meeting of the Audubon Society and heard T. E. lecture on his bluebird trail and the help the boy scouts of Quincy were giving him.

Enthusiastic, Mrs. Findley's boys met the following Saturday, organized a Bluebird Chapter which was to operate all summer, built 32 boxes and erected them along a scenic drive encircling Cape Girardeau.

"Four days later," wrote Mrs. Findley, "bluebirds had moved into house number seven. It is a wonder this pair ever finished nesting, since they had such constant watching. But they did, and on July 26th, we banded five nestlings. The occasion was of such importance that the news photographer of the local paper was on hand to get pictures of the actual banding."

Begun in 1938, this bluebird trail continued to grow in all directions, and now takes in all the adjoining counties.

High schools, Boy Scout troops, 4-H clubs, Audubon Societies, churches and community organizations in eastern Missouri, eastern Iowa and western Illinois were soon building a network of bluebird trails, many of which are

constantly being extended by neighboring towns.

Meanwhile, with the active support of Quincy behind him, Dr. Musselman added 25 to 75 boxes each year. Boxes often come to him through the mail. Last summer, for example, 25 were shipped to him by a Cub Scout troop in Ogelsby, Illinois.

Local stores and factories save packing cases for the boxes, and nails and old hinges. The ends of orange crates make particularly good building material. Paint stores donate old and off-color paints which can easily be blended into neutral shades.

He now has ten different bluebird trails, some of which are 60 and 70 miles in length.

Bareheaded, in a brown leather jacket and leather boots, he haunts the fence rows during the bleak winter days of February. Deer mice and flying squirrels often take possession during the winter and unless these nests and last year's bluebird nests are removed, the bluebirds will not return.

His winter house-cleaning trips are sometimes anticipated by farmers with a sense of humor. On occasion he finds chicken eggs, safety pins and other things in the boxes, all of which are designed to startle the ornithological world. T. E. grins broadly when he tells about it. He knows his farmers as well as his birds.

Boxes which were unoccupied the previous summer are moved to more desirable locations. Sometimes only a few feet will make the difference.

Placement of the box is of utmost importance. "I discovered," he says, "that the junction of a roadside fence

with a right angle fence was particularly attractive. Normally a few bushes or trees grow in the corner, which adds to the food possibilities and also supplies protection in case of attack.

I normally select the fourth or fifth post from the corner, well removed from clinging vines and nearby bushes."

Boxes placed on posts bordering woods often have downy nests of the black-capped chickadee. Those placed on trees attract titmice, and those high on telephone poles are almost certain to interest red-headed woodpeckers.

Anyone finding a crippled bird of any kind sends it to Dr. Musselman's bird sanctuary at the edge of town as a matter of course. When the cripples are not well enough to join migrating flocks in the fall, he ships them south by rail, to be liberated by one of his friends in Texas or Louisiana. He thinks it odd that people should find this procedure unusual. As he sees it, there is simply nothing else he could do. To liberate such birds in Quincy, with winter coming on, would mean almost certain death.

He plans his high school speaking assignments in May so that he can travel along one of his bluebird trails, banding young birds of the first nesting as he travels. In some years he bands several hundred birds in this way.

The box tops, which are hinged to allow inspection and cleaning, are sometimes left open by curious children. This leaves the nest exposed from above, and cowbirds drop down to lay their eggs. But usually cowbirds cause no trouble. They seem to fear entering a box through a side entrance.

Never has he found starlings using a trail box, though once he discovered an immature starling crowding out four skinny, dirty little baby blues. He killed the starling, who was obviously hogging more than its share of food, washed the baby bluebirds in a creek and returned them to the nest. They were clean, healthy and ready to fly a week later.

Because severe spring storms blow from the northwest in Illinois, he faces his boxes to the south or southeast.

On a trail one chilly spring day he noticed a bluebird dipping and fluttering near a box. The farmer had rebuilt the fence and placed the box on a new oak post, with the entrance facing to the north. Rain had beaten in for two days, submerging the nest, killing one baby. Two others had climbed as high as they could to escape the cold water, and a fourth had clambered out of the box and fallen into the wet grass.

He took the nestlings to his car and warmed them before the heater. With a knife he bored a hole in the bottom of the box, drained it, removed the slimy nest and built a new one with dry blue grass which he always carries.

"Since then," he says, "I always make ventilation holes and leave a crack in the bottom for drainage."

The bluebird trails had wide publicity, and demands for his bluebird house plans became such that he finally had them mimeographed and sent them out gratis to all who included a stamp for postage. Thousands of plans have been sent out over the years, going to almost every state and to several provinces of Canada.

In 1936, Mrs. A. R. Lasky of Nashville, Tennessee, wrote for his box

plan. She built a 70 box trail of her own and inspired boy scouts and a women's garden club to start other trails. Though she claims to be merely a housewife with a love for nature, her records and studies, published in ornithological journals, have since made her one of the nation's leading authorities on the bluebird.

Bluebird trails sprang into being in many parts of the country, as far west as Nebraska, and east to Maine, Massachusetts and Georgia.

But the greatest activity centered around Missouri, where T. E. sent hundreds of plans for a statewide bluebird trail campaign sponsored by an official of the Audubon Society. Later the curator of the Missouri Resources Museum, A. C. Burrill, directed a 5,000 house project, the boxes being built by the boys of the National Youth Administration and put up by the Boy Scouts on trails from Chillicothe to Joplin and from St. Joseph to St. Louis.

When the war was about to break, the Federated Garden Clubs of Missouri, took up the project under the direction of Mrs. Erle R. Jackson, who conceived the idea of national bluebird trails from coast to coast and from north to south.

By 1944, to Federated Garden Clubs of 24 states reported, 225,000 bluebird

boxes had been put up on trails. Since then, trail building has become one of the largest, and certainly the most unique, housing projects in the nation, with 900,782 houses reported as of 1949. And still another trail from Florida to the Canadian border is now being whipped into shape by a Mr. Connie Watts of Baldwin, Georgia.

"Dr. Musselman has undoubtedly done more for the bluebird by solving its housing problem than any other person in the country," said Roger T. Peterson, a leading authority of the National Audubon Society. "His direct influence has been multiplied a hundredfold throughout the land by others who have taken up his trail idea."

According to the Fish and Wildlife Service in Washington, Dr. Musselman has banded 5,123 bluebirds to date.

Though often decorated and honored for his work with birds, and his books on nature subjects, T. E. derives his greatest reward from nature itself. It pleases him to remember, for example, that 7,500 blues were raised in his boxes last year.

There is still much work to be done. New trails have to be built. Old ones need constant attention. But Dr. Musselman's greatest satisfaction springs from the knowledge that his work has not been in vain. The bluebirds are coming back.

Florence Page Jaques' poem *There Once Was a Puffin* was quoted by an International Peace Committee.

# How Go The Seasons?

by

A. C. Hodson

FROM ANCIENT times people have been interested in observation and recording the periodic occurrence of natural phenomena such as the flowering of plants, the leafing of trees, bird migrations and the like. In many cases notes such as these have been used to advantage by associating events which occur together during the season and then using one event as a means of timing another. Thus, an old rule calls for the planting of corn when oak leaves have reached the size of a squirrel's ear.

Early in the spring of 1941 the recording of a number of natural phenomena was started at University Farm. At first the project was undertaken solely as a hobby, but as soon as the practical values of the enterprise became apparent a number of easily observed events were watched for as the season advanced each year. A selected group of them is listed in the figure above in order of their occurrence. The series of symbols that are lined up across the chart, after each item listed, designate the day of the month in each of 10 years when the particular event was first observed. A vertical line is inserted at the appropriate place along each series of symbols to indicate the average date for the 10-year period. Thus the dates when lilacs start to bloom have varied from April

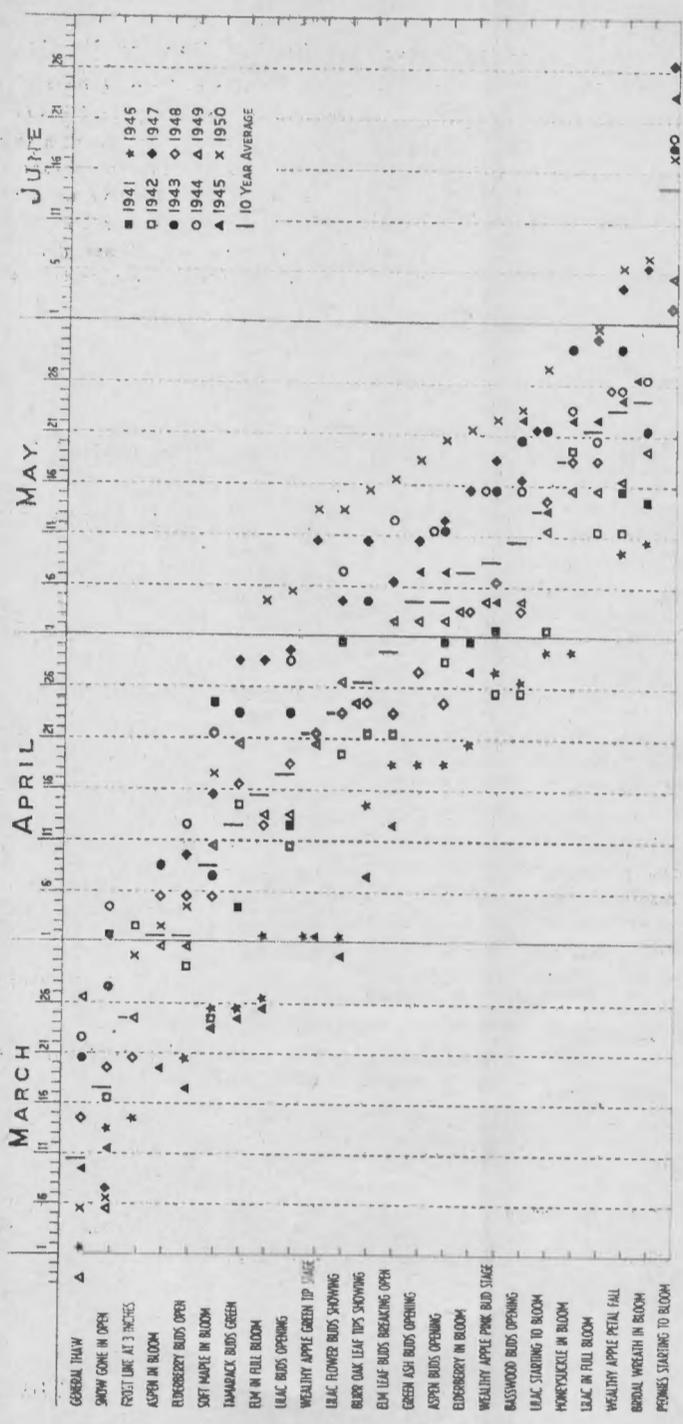
29, 1946 to May 27, 1950, and the average date for blooming is May 13.

An examination of the record will give us considerable information about the characteristics of our spring seasons. Obviously a normal spring would be one that is several days earlier or later than the arithmetic average. For example, only 1948 and 1949 show a record which follows the 10-year average at all closely. The tremendous variation which is characteristic of this picture is another point which stands out in a striking manner. In general, the greatest spread in the dates from year to year occurs in April and early May, but it can be seen that calendar dates mean very little throughout the spring.

Many persons wonder if the recent spring seasons have been becoming later or earlier than usual. The evidence at hand suggests that neither is the case for the average date of occurrence for certain events have been recorded for about 50 years agree within one day with the 10-year average indicated on the chart. To make it more complicated, the chart shows that a season which is early or late at the beginning may shift as summer approaches to show the opposite. The record for 1945 is a good example of this.

1. A. C. HODSON IS PROFESSOR OF ENTOMOLOGY AND ECONOMIC ZOOLOGY AT THE UNIVERSITY OF MINNESOTA.

2. REPRINTED BY PERMISSION FROM MINNESOTA FARM AND HOME SCIENCE, VOL. VIII, NO. 2, PAGE 15, FEBRUARY, 1951.



One can conclude then that plant growth records afford a ready measure of the advance of the season. To put it in other words, the natural events occurring about us add up the daily changes in effective temperature for the season and exhibit the sum by their responses.

#### Do You Want to Help?

Individuals from different parts of the state can help us by keeping records like those described in this article. We would like to incorporate your records with ours to give us a state-wide picture. If you would like to be a volunteer observer, please drop a card to A. C. Hodson, University Farm.

## Minnesota Ornithologist's Union

### Annual Meeting, May 17, 1952, Frontenac, Minnesota

The site of the Annual Meeting of the Minnesota Ornithologists' Union will be Frontenac, Minnesota in the southeast corner of the state. This area along the Mississippi River long has been known as one of the state's outstanding birding places. Morrison and Herz state in their *Where to Find Birds in Minnesota*. There is no finer spot in Minnesota to watch migrations, especially of warblers and shore birds." Some of the records from this region include: Western sandpiper, May 15, 1917; Western snowy plover, May 24, 1929; Kirtland's warbler, May 19, 1920; and American Knot, May 17, 1925. The program has been set up to allow for the maximum amount of time in the field.

More detailed information regarding the program will be sent to M.O.U. members, but the tentative schedule is as follows:

**Saturday, May 17**

Registration

Field Trips

Luncheon

Papers and business session

Late afternoon field trip

Dinner

Program continued at night

The following committees have been appointed by President Eastman:

**Attendance and Registration:** Amy Chambers, Minnesota Bird Club

**Arrangements:** Vera Sparkes, Minneapolis Bird Club

**Program:** W. J. Breckenridge, Minnesota Bird Club

**Nominations:** O. A. Finseth, Duluth Bird Club

**Directions for reaching the meeting site:**

Frontenac is about 10 miles below Red Wing on Highway 61. Go one mile south of New Frontenac and turn left at the roadside picnic grounds. Drive to Villa Maria, the site of the meetings.

## "The Canadian Lakehead"

# Field Notes From Canada

by

A. E. Allin

We at the Canadian Lakehead have much in common with our friends in Minnesota. Politically, we may be divided by Pigeon River which forms a part of your northern and our southern boundary; biologically the interests of naturalists from Minnesota and from Ontario are as one. When we require literature to aid us in the study of our fauna and flora we turn to the publications of the University of Minnesota Press. Drs. Roberts, Macy and Shepard, Breckenridge, Lakela, and Eddy are our authorities as well as yours. We feel as free to write to one of these Minnesota specialists as to anyone in Ontario. We are always assured of a prompt and courteous response. I look forward to receiving my copy of *The Flicker* as keenly as any subscriber in Minnesota.

Although we cannot boast of similar authors at Fort William-Port Arthur, numerous brief items have been published by members of our Club. We are proud of a brochure written by our Honorary President. Col. L. S. Dear; "Breeding Birds of the Region of Thunder Bay, Lake Superior, Ontario." (Trans. Royal Can. Inst., Vol. 23, No. 49, Pt. 1, pp. 119-143, 1940.) A recent article "A List of the Birds of Port Arthur-Fort William and Vicinity," (Allin, A. E., Thunder Bay Field Naturalists' Club, News Letter, Vol.

3, No. 5, 1950.) should be of interest to M. O. U. members.

We have entitled this evening's address *Field Notes from Canada*. Certainly our talk will pertain to Canada, but to a limited area only of that vast country. Ontario alone includes more than 400,000 square miles, and stretches from Lake Erie to Hudson's Bay, from the Carolinian Zone in the extreme south to the Boreal Region in the north. We will confine our discussion to that portion of the District of Thunder Bay lying north of Pigeon River neighboring the Cities of Fort William and Fort Arthur, twin homes of the Thunder Bay Field Naturalists' Club. This area lies in the Canadian Zone of the Boreal Region at the boundary between the Canadian and Hudsonian Biotic Provinces. (Dice, L. R., *The Biotic Provinces of North America*. Univ. of Mich. Press, 1943.) Only a casual acquaintance with the area shows the appropriateness of Halliday placing most of the area in the Superior Section of the Boreal Region characterized by its black spruce, balsam fir, poplar, white birch and jack-pine. Only the low stretches of the Pigeon, Pine and Kaministiquia Rivers lie in the Lake Superior West Section of the Great Lakes-St. Lawrence Forest Region characterized by white pine, sugar maple, white spruce, balsam fir and in the lowlands by red

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maple and white cedar. (Halliday, W. E.D. *A Forest Classification for Canada*. Forest Service Bull. 89. Ottawa, 1937.) We note the differences with difficulty at the Lakehead, but they become more and more evident as we cross Pigeon River and travel through Cook County. Consequently our bird life is very similar to that of your north-eastern counties somewhat modified by our propinquity to the Boreal Region. The difference is quantitative rather than qualitative.

Like all ornithologists we keenly anticipate spring migration. It probably commences two weeks later than at Duluth and is heralded by the return of crows and herring gulls. The flocks of the latter are eagerly scanned. Once we saw an Iceland gull and glaucous gulls have been observed on several occasions. The cawing of the crow as it flies over snow-covered fields and woods, is a welcome sound. At Nakina, a crow was famous for several years because it persisted in laying erythritic eggs.

Among the most interesting of the April migrants is the woodcock, first observed locally in 1937. Subsequently it has increased in numbers and has spread throughout adjacent areas. On May 1, 1949, I flushed one, 90 miles north-east of Fort William. Another new-comer is the upland plover first noted in 1945 when at least one pair nested. Now a few pair are expected each spring. The only nest with eggs of the barred owl ever found in Ontario or Western Canada was a local one. This pair returned to the same area for several seasons. Other southern visitors include the mourning dove, brown thrasher, catbird, Baltimore oriole, bobolink, turkey vulture, whip-poor-will, purple martin and migrant shrike. We have seen and heard the

mockingbird on one occasion, and a Florida gallinule was found recently 100 miles to the north-east. An Audubon's caracara was collected in 1891. We have yet to see a screech owl or a cardinal (1), a crested flycatcher or a warbling vireo.

The above species are ones which occur more frequently further south. Recently our avian fauna has been influenced by an incursion of western species. Of these, the prairie sharp-tailed grouse supposedly arrived about the end of the nineteenth century. Col. Dear found the western meadow lark breeding locally in 1934, and we located nests of the clay-colored sparrow in 1938. The only nesting colony of Brewer's blackbird known for Ontario is located in a patch of partially industrialized territory in Port Arthur. The members of this particular colony are ground-nesters. First observed in 1943, nests were located in 1945. Their numbers fluctuate from year to year, probably never exceeding ten pairs. Last season we located two nests less than 100 feet apart. One male and two females appeared to constitute the reduced colony. For several years Holboell's grebes have nested at Whitefish Lake and pintails are increasing since we located the first nest in 1943. Single specimens of the prairie chicken, Smith's longspur, and Oregon junco have been collected, and there are a few sight records of the yellow-headed blackbird.

Other species which occur locally indicate a distinctly northern tendency. The only Ontario nest of the red-throated loon was found at Thunder Cape in 1912, by Col. Dear. Pigeon hawks are a relatively common species. One year we located four nests, and another year a pair successfully occupied an old crows' nest in a black

A CARDINAL WAS NOTED AT A LOCAL FEEDING STATION IN DECEMBER, 1951.

spruce tree in a city park. The American rough-legged hawk is occasionally observed in the summer and its local nesting is suspected but not confirmed. The raven nests on cliffs along the shores of lakes south-west of the Lakehead and in 1943, I found young scarcely able to fly, 100 miles to the north-east on the shores of Lake Superior. The Canada jay breeds commonly in the black spruce swamps. Warblers of 25 species abound in Thunder Bay District. A density of 28 pairs of Cape May warblers per 100 acres has been reported in forests infested with the spruce budworm (Kendeigh, S.C. *Bird Population Studies in the Coniferous Forest Biome during a Spruce Budworm Outbreak*. Dept. Lands and Forests, Ont., Biol. Bull. No. 1, 1947). In similar areas he found 59 pairs of Tennessee warblers and 92 pairs of bay-breasted warblers. The solitary vireo is another interesting inhabitant of our local swamps. Both American and Arctic three-toed woodpeckers occur. The latter is relatively common, but the former is only rarely observed.

Located on the shores of Superior, in a land of lakes we would expect to be visited by many species of shore and water birds. Unfortunately we have few beaches favourable for shore-birds, and what we have tend to be polluted by the waste products from the logging industry. Although 21 species have occurred, only a few individuals of a few species are seen each spring. Of these the occasional visit of the piping plover, knot and the two godwits is of some interest. The situation in regard to water-birds is more satisfactory. The cormorant occurs in increasing numbers. Bonaparte's gulls pass through in small numbers. They breed north of Lake Nipigon. The ring-billed gull is rarely seen, but there are many large colonies of herring gulls. The local

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harbour is free of ice earlier than the surrounding lakes, and here whistling swans, blue, snow, and Canada geese, may be found in small numbers. White-fronted geese have occurred at least once. Thousands of ducks are also attracted by the open water and by waste grain from the elevators, which augments their natural food supply. The common pond ducks are the black, mallard, blue-winged teal, and baldpate and occasionally the green-winged teal. Once I saw a European widgeon. Diving ducks are even more abundant particularly the ring-necked and greater and lesser scaup. The numbers of redhead vary from year to year, and the canvas-back is an accidental visitor. Buffleheads, American goldeneyes and the three mergansers also occur. The coween and white-winged scoter seem to avoid the bay and must be looked for on the broader expanses of the open lake. The wood-duck, ruddy and gadwall do not occur, although the former two may rarely be seen in the fall. It is regrettable the area cannot be made a sanctuary.

Summer is all too short a season. The last migrant, the black-billed cuckoo, does not appear until early June. By late July the first shore-birds have returned. Nighthawks are already migrating by the first week of August, and by early September great flocks of warblers in their difficult fall plumages commence their long autumn journeys. Later in the month the open fields teem with thousands of Lapland longspurs. In the same regions we expect the pectoral sandpiper and the golden plover. The majority of the latter are immature birds; on one occasion a flock of 1000 remained for several days. Unfortunately we fail to see the great hawk migrations so anticipated by ornithologists of other cities,

The fields and woods of October are filled with the migrating hosts of many

species. We scan the skies for rough-legged hawks and the woods for Richardsons', hawk, and great grey owls, and towards the end of the month expect the first snowy from the north. The marshes and lakes command our major attention at this season. Once a rare harlequin duck, and once a western grebe were seen on Whitefish Lake. Sandhill cranes have occurred on a few occasions. Great flocks of snow buntings and lesser numbers of rusty blackbirds feed in the beds of wild rice, and perchance the individual bird falls prey to a visiting northern shrike. Over-head a goshawk may be seen and frequently a bald eagle. Great flocks of ring-necked ducks and lesser scaup arrive. With the freeze-up at the end of the month, or in early November, greater scaup may pay a brief visit as they fly south-west from the larger lakes of Northern Manitoba to their winter quarters on the lower Great Lakes and the Atlantic Coast. Over the cliff-lined shores ravens are seen more and more frequently, and their hoarse croak is a familiar sound. Less frequently we hear their bell-like notes so rarely mentioned in the literature. The raven is increasing in numbers since the indiscriminate use of poison for the destruction of predators has been banned.

By mid-November winter conditions prevail, and the birds are reduced to the resident species, northern visitors and a few hardy stragglers which failed to migrate with their fellows. The commonest of the latter are the crows and herring gulls which feed about the garbage dumps and fur farms. They are accused of spreading mink diseases from farm to farm. Normally only an occasional robin is seen, but some years, when rowan berries are abundant, hundreds may remain. Very rarely we see a red-winged blackbird, bronzed grackle or slate-

colored junco, and once two white-throated sparrows were seen in January at a feeding station. The cedar waxwing is beginning to winter here more frequently, a condition which has also been noted in Manitoba.

The members of the Thunder Bay Field Naturalists' Club hold an annual Christmas Census, usually on December 26, reporting their observations in *The Canadian Field Naturalist*. Since 1939 45 species have appeared on our census lists. Only the Canada Jay, pine grosbeak and the introduced starling and house sparrow have been seen on every census list. The blue jay, ruffed grouse, herring gull, black-capped chickadee, downy and hairy woodpecker, evening grosbeak, common redpoll, and Bohemian waxwing, and in recent years the raven, red-breasted nuthatch and brown-headed chickadee are usually listed. The only local record of the white-breasted nuthatch was made on a Christmas census. The introduced Hungarian partridge is found about the elevators, but the ring-necked pheasant appears to have failed to survive our severe winters when the snowfall may exceed 12 feet. Waterbirds are rarely seen although in mild winters, American golden-eyes and American mergansers and once a black duck have been seen. On the contrary the few winter records for the coween have been made when Lake Superior was frozen many miles from shore. These were exhausted and emaciated birds picked up within the city limits. It is improbable that more than 60 species will ever be listed during the winter months.

And so the year comes to a close. Fortunate individuals may have recorded 160 species with a total of 180 being listed by the members of our Club. That is a fair list when we consider that only 240 species have been re-

ported at the Lakehead—164 migrants and summer residents, 11 winter residents, 23 residents, 41 species with the status of rare visitors and one species (passenger pigeon) now extinct.

I trust I have been able to indicate something of the nature of the bird

life at the Canadian Lakehead. Perhaps some of you will be able to join us on our annual field-day next May. If so, I can assure you an interesting trip and good bird-watching.—Regional Laboratory, Ontario Department of Health, Fort William, Ontario.

## 1951 ANNUAL MEETING

Over one hundred people attended the 1951 annual meeting of the Minnesota Ornithologists Union held at St. John's University, Collegeville, on May 12, 1951.

The morning was given over to informal field trips through the grounds of the college. Seventy species of birds were seen.

Following luncheon the group convened in the gymnasium for the program of business and papers. The president, Father Adelard Thuente, presided. The treasurer's books showed the M.O.U. to be in good financial condition. A Nominating Committee, consisting of Mr. George Friedrich, Dr. W. J. Breckenridge, and Dr. Vernon Whipple, proposed the following slate of officers for the coming year, and they were duly elected:

President—Whitney H. Eastman,  
Minneapolis

Vice Pres.—M. H. Adams, St. Paul

Secretary—Vera E. Sparkes, Min-  
neapolis

Treasurer—Mary Lupient, Minne-  
apolis

Editor of "The Flicker"—Pershing  
Hofslund, Duluth

The group accepted the invitation of the Minneapolis Bird Club to hold its 1952 meeting in Minneapolis.

Dr. Dwain Warner presented a request from Mr. Warren Nord of the U. S. Fish & Wildlife Service that members of the M.O.U. who travel about the state send in reports on the numbers of young ducks seen in the many potholes of the state, so that this information may be used by the research department of the Fish & Wildlife Service.

An interesting program of papers followed:

"Bird Banding"—Mrs. C. E. Peterson, Madison, Minnesota.

"Migration of Birds"—Dr. Dwain W. Warner, University of Minnesota

"Birds Away from Home"—Walter Jiracek, Minneapolis, Minnesota.

"Bird Population Studies of Swift County"—R. Hanlon, Benson, Minn.

"Pileated Woodpecker Damage to Power Lines"—Milton D. Thompson, Minneapolis, Minnesota

"Bird Observations in Eastern North Dakota Marshes"—William R. Pieper, Minneapolis, Minnesota

Although the annual meeting was officially adjourned at the close of the papers, an evening program of movies was held at the St. Cloud Teachers College for those who were able to stay.—Vera E. Sparkes, Minneapolis Bird Club.

# MINNESOTA NESTING RECORDS, 1951

by

Vera E. Sparkes

Perhaps the publication of nesting records of the previous year appearing in the March issue of *The Flicker* will serve as a reminder to those who failed to send in records for 1951. Certainly there are more observers among M.O.U. members than is ever revealed by a survey of the nesting records sent in.

The 1951 nesting records represent the observations of 33 persons, about half of them members of the Duluth Bird Club. For the observations reported below thanks are due to: Mr. & Mrs. O. A. Finseth, Mr. & Mrs. Harvey Putnam, Mr. P. B. Hofslund, Mr. & Mrs. J. K. Bronoel, Mr. & Mrs. Ralph Boeder, John Boeder, Myra Childs, Raymond Darland, James Felton, Evelyn Palmer, Catherine Lieske, Mary Elwell, and Dr. Olga Lakela, all of Duluth; Dr. W. J. Breckenridge, Mr. A. C. Rosenwinkel, John Pratt, Leo Manther, William Longley, Mr. Zaricek, Brother Pius, David Thurston, Harvey Gunderson, Vera Sparkes, John Jarosz, Franklin Willis, John Futcher, and Messrs. Wurimaa and Hunt.

A total of 91 species is covered in the 1951 observations. A comparison with the record for 1949 shows that 38 species were recorded as nesting in 1949 which were not reported this year, and 24 species were observed this year that did not show up in the 1949 list. In connection with the 1949 records there appeared in *The Flicker* a list of species seldom recorded nest-

ing in Minnesota, and observers were asked to be on the lookout for them. Two of those species—the pigeon hawk and the brown creeper—appear in this year's observations. In addition, the green-winged teal appears in this year's list; a cursory examination of the nesting records appearing in *The Flicker* as far back as 1942 fails to show that this species has been reported in the last nine years. In this same nine-year period the nest of the Canada Jay appears this year for the second time, the earlier record being two nests in Cook County in 1945. The alder flycatcher appears again for only the third time in nine years. Also, the lark sparrow, on this year's list, has been reported before only in 1942 and 1946. The western kingbird, only reported in three years since 1945, is again on the list.

In addition to the individual nests, a "tremendous colony" of Franklin's gulls was observed at Mud Lake by Mr. Hunt, and Mr. Rosenwinkel reported a colony of common terns at Whitefish Lake in Crow Wing County.

Only those records for which exact dates and locations were included have been incorporated into this list:

COMMON LOON. 1 young, June 16, Lake Vadnais, Rosenwinkel.

DOUBLE-CRESTED CORMORANT. 20 nests, June 24, Toms' Island, Rice Lake Refuge, Aitkin County, Duluth Bird Club. 16 nests were checked; 2

had 1 young, 12 had 3, and 2 had 4 young.

**GREAT BLUE HERON.** 20 nests, June 24, Tom's Island, Rice Lake Refuge, Aitkin County, **Duluth Bird Club.** 2 nests examined and found to contain 3 young each.

**MALLARD.** 3 eggs, May 8, Minnesota Point, St. Louis County, **Hofslund;** 12 eggs, May 15, Minnesota Point, St. Louis County, **Hofslund;** 5 eggs, May 20, Minnesota Point, St. Louis County, **Hofslund;** 9 eggs, May 30, Mother Lake, Hennepin County, **Rosenwinkel;** 9 young, June 17, Mother Lake, Hennepin County, **Rosenwinkel;** 5 young, June 17, Mother Lake, Hennepin County, **Rosenwinkel;** 7 young, June 17, Mother Lake, Hennepin County, **Rosenwinkel;** 12 eggs, June 17, Harbor Island, St. Louis County, **Duluth Bird Club.**

**BALDPATE.** 10 young, June 24, Rice Lake Refuge Aitkin County, **Duluth Bird Club;** 3 young, June 24, Rice Lake Refuge, Aitkin County, **Duluth Bird Club.**

**GREEN-WINGED TEAL.** 5 young July 5, Hennepin County, **Rosenwinkel.**

**BLUE-WINGED TEAL.** 8 eggs, June 17, Harbor Island, St. Louis County, **Duluth Bird Club;** 5 young, June 17, Mother Lake, Hennepin County, **Rosenwinkel;** 7 young, July 5, Lake Vadnais, Ramsey County, **Rosenwinkel;** 6 young, August 6, Ramsey County, **Rosenwinkel.**

**WOOD DUCK.** 10 eggs, June 2, Minneapolis, Hennepin County, **Breckenridge;** 6 young, June 17, Mother Lake, Hennepin County, **Rosenwinkel;** 6 young, July 4, Lake Minnetonka, Hennepin County, **Pratt;** 7 young, July 4 Lake Minnetonka, Hennepin County, **Pratt.**

**REDHEAD.** 4 young, June 21, Mother Lake, Hennepin County, **Rosenwinkel.**

**RING-NECKED DUCK.** 12 young July 5, Hennepin County, **Breckenridge & Poole;** 14 young, July 5, Hennepin County, **Breckenridge & Poole.**

**AMERICAN MERGANSER.** 1 egg, 9 young, June 24, White Iron Lake, St. Louis County, **Elwell & Lakela;** 7 young, July 166, Ask River, St. Louis County, **Lakela & Elwell.**

**RED-BREASTED MERGANSER.** 6 young, June 24, Encampment River, Lake County, **Pratt.**

**TURKEY VULTURE.** 1 young, August 20. Blackduck, Minn., Warden **Leo Manthei.**

**COOPER'S HAWK.** Incubating, June 7, Rice County, **Longley.**

**PIGEON HAWK.** Building, May 10, Minnesota Point, St. Louis County, **Hofslund.**

**RUFFED GROUSE.** 10 young, June 25, Encampment River, Lake County, **Pratt;** 6 young, July 1, U. M. D. Campus, St. Louis County, **Hofslund.**

**HUNGARIAN PARTRIDGE.** 12 young, July 15, Dodge County, **Longley.**

**COOT.** 2 young, June 17, Mother Lake, Hennepin County, **Rosenwinkel;** 2 young, Mother Lake, Hennepin County, **Rosenwinkel.**

**KILLDEER.** 4 eggs, May 0, Minnesota Point, St. Louis County, **Hofslund;** 3 young, June 5, U. M. D. Campus, St. Louis County, **Hofslund;** 8 nests (5 with 4 eggs, 3 with 3 eggs), June 17. Harbor Island, St. Louis County, **Duluth Bird Club.**

**UPLAND PLOVER.** 4 eggs, May 14, Dodge County, **Longley;** 4 eggs, June 7, Camp Ripley, **Zaricek.**

**SPOTTED SANDPIPER.** 4 eggs, June 3, Minnesota Point, St. Louis County, Hofslund; 1 young, June 13, Lake Minnetonka, Hennepin County, Pratt; 3 nests (4 eggs each) June 17, Harbor Island, St. Louis County, Duluth Bird Club; 1 young, July 5, Ramsey County, Pius; 1 young, July 26, Crow Wing County, Rosenwinkel.

**HERRING GULL.** 250 nests (359 young, 11 dead young, 55 eggs), June 16, Knife Island, Lake Superior, Lake County, Duluth Bird Club.

**COMMON TERN.** 49 nests (with 1 to 3 eggs), June 17, Harbor Island, St. Louis County, Duluth Bird Club.

**BLACK TERN.** 4 nests, May 20, Mother Lake, Hennepin County, Rosenwinkel; 3 young, June 19, Ramsey County, Rosenwinkel; 1 nest with 1 egg, and 1 young, July 9, Mother Lake, Hennepin County, Thurston.

**MOURNING DOVE.** 3 nests (one with 1 egg, two with 2), May 8, Como Park, Ramsey County, Rosenwinkel; 2 young, August 22, Ramsey County, Pius; 2 young, August 24, Anoka County, Gunderson.

**YELLOW-BILLED CUCKOO.** 1 egg, June 7, Rice County, Longley.

**BLACK-BILLED CUCKOO.** 1 egg, July 1, U. M. D. Campus, St. Louis County, Hofslund.

**GREAT HORNED OWL.** 3 young, April 23, Dodge County, Longley.

**RUBY-THROATED HUMMINGBIRD.** 1 nest, June 3, Whitewater State Park, Sparkes; 1 nest, bird incubating; June 13, Plainview, Longley; 1 nest, June 18, Hakensack, Thurston; 14 nests, observed from June 7 to July 24, Hennepin County, Jarosz.

**BELTED KINGFISHER.** 2 young, July 15, Washington County, Pius.

**FLICKER.** 4 young, May 20, Hennepin County, Rosenwinkel.

**PILEATED WOODPECKER.** 1 nest, bird incubating, May 19, Louis Hill Preserve, Ramsey County, Rosenwinkel.

**RED-HEADED WOODPECKER.** Bird feeding young in nest, July 15, Washington County, Pius.

**HAIRY WOODPECKER.** 3 young, June 15, Lake Minnetonka, Hennepin County, Pratt; 1 young, July 6, U. M. D. Campus, St. Louis County, Hofslund.

**DOWNY WOODPECKER.** 2 young, July 5, U. M. D. Campus, St. Louis County, Hofslund.

**EASTERN KINGBIRD.** 4 eggs, June 12, Lake Minnetonka, Hennepin County, Pratt; 1 nest, bird incubating, June 23, U. M. D. Campus, St. Louis County, Hofslund; 4 young, July 6, Ramsey County, Pius; 3 young, August 18, St. Louis County, Lakela.

**WESTERN KINGBIRD.** 1 nest destroyed, 2nd being built, July 3 Anoka County, Futcher.

**PHOEBE.** 6 eggs, May 5, Ramsey County, Rosenwinkel; Building nest, May 15, Dodge County, Longley; 4 young, June 20, Crooked Lake, St. Louis County, Lakela, Elwell, & Childs.

**ALDER FLYCATCHER.** 3 eggs, July 8, U. M. D. Campus, St. Louis County, Hofslund; 3 young, July 21, U. M. D. Campus, St. Louis County, Hofslund.

**LEAST FLYCATCHER.** Building, May 25, U. M. D. Campus, St. Louis County, Hofslund.

**WOOD PEWEE.** 1 young, July 15, Ramsey County, Pius.

**TREE SWALLOW.** Feeding young, June 13, Lake Minnetonka, Hennepin County, Pratt; young, June 27, Norris Camp, Minn., Longley.

**BARN SWALLOW.** Building, May 25, Dodge County, Longley; colony of 12 nests June 11, Lake Minnetonka, Hennepin County, Pratt.

**CLIFF SWALLOW.** 24 nests, June 9, Palo, St. Louis County, Lakela; 250 nests, July 7, Whitewater State Park, Rosenwinkel; 59 nests, July 20, Junction Highways 73 & 22, St. Louis County, Lakela & Elwell.

**PURPLE MARTIN.** Colony, June 15, Lake Minnetonka, Hennepin County, Pratt.

**CANADA JAY.** 1 nest, eggs broken, March 25, Orr, St. Louis County, Wuirimaa.

**BLUE JAY.** Incubating, May 19, Whitewater Valley, Longley; Building, April 30, St. Paul, Ramsey county, Rosenwinkel.

**CROW.** Incubating, May 8, Minnesota Point, St. Louis County, Hofslund; 3 young, May 9, Dodge County, Longley.

**WHITE-BREASTED NUTHATCH.** Building, April 10, Como Park, Ramsey County Rosenwinkel.

**HOUSE WREN.** Young, July 6, Dodge County, Longley; 4 eggs, July 28, Whitewater Valley, Longley; Feeding young, June 11, Lake Minnetonka, Hennepin County, Pratt; Feeding young, July 29, Encampment River, Lake County, Pratt.

**CATBIRD.** Building, May 26, Whitewater Valley, Longley; 3 eggs, 1 young, June 7, Rice County, Longley; 3 young, June 21, Lake Minnetonka, Hennepin County, Pratt; 3 eggs, July 6, Dodge County, Longley; 3 young, July

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24, Washington County, Pius.

**BROWN CREEPER.** 3 young, June 13, Hennepin County, Jarosz & Willis.

**BROWN THRASHER.** 2 nests, June 17, Harbor Island, St. Louis County, Duluth Bird Club (each nest had 4 eggs); young, June 28, U.M.D. Campus, St. Louis County, Hofslund; young, July 26, U.M.D. Campus, St. Louis County, Hofslund.

**ROBIN.** Building, April 9, Dodge County, Longley; 10 nests, April 30, Ramsey County, Pius; 4 eggs, May 5, Hennepin County, Rosenwinkel; 2 eggs, May 7, Dodge County, Longley; Incubating, May 25, Hennepin County, Sparkes; Incubating, May 30, Theodore Wirth Park, Hennepin County, Sparkes; 3 eggs, June 4, U.M.D. Campus, St. Louis County, Hofslund; Incubating, June 4, Lake Minnetonka, Hennepin County, Pratt.

**WOOD THRUSH.** Incubating, June 7, Rice County, Longley.

**VEERY.** 4 young, June 7, Dodge County, Longley; 2 eggs, June 8, U.M.D. Campus, St. Louis County, Hofslund.

**BLUEBIRD.** 3 young, June 12, Houston County, Longley; young, June 13, Dodge County, Longley.

**CEDAR WAXWING.** 1 egg, 2 cowbird eggs, June 23, Pitt Street, Duluth, St. Louis County, Hofslund; 1 nest, no eggs, June 18, Hackensack, Minn., Thurston; 2 young, July 14, Crow Wing County, Rosenwinkel.

**RED-EYED VIREO.** 3 eggs, June 25, Eagle Nest Lake, St. Louis County, Lakela & Elwell; Incubating, June 27, Norris Camp, Minn., Longley.

**WARBLING VIREO.** 1 nest, June 17, Hackensack, Minn., Thurston.

**GOLDEN-WINGED WARBLER.** 3 young, out of nest, June 16, Interstate Park, Rosenwinkel;

**BLUE-WINGED WARBLER.** 1 young, with adult, August 8, Whitewater Valley, Longley.

**NASHVILLE WARBLER.** Young, June 16, U.M.D. Campus, St. Louis County, Hofslund.

**YELLOW WARBLER.** 1 egg, 2 young, June 17, Hackensack, Minn., Thurston; 3 eggs, 1 cowbird egg, June 17, Harbor Island, St. Louis County, Duluth Bird Club; 1 nest, June 2, Whitewater State Park, Winona Co., Minneapolis Bird Club; Feeding young, July 5, Ramsey County, Pius.

**MYRTLE WARBLER.** Feeding young, June 26, Encampment River, Lake County, Pratt.

**BLACK-THROATED GREEN WARBLER.** Feeding young, June 23, Encampment River, Lake County, Pratt; 3 young, August 12, East Beaver Bay, St. Louis County, Lakela & Elwell.

**GRINNELL'S WATER THRUSH.** Feeding young, June 25, Eagle, Nest Lake, St. Louis County, Lakela & Elwell.

**MOURNING WARBLER.** 3 eggs, June 12, U.M.D. Campus, St. Louis County, Hofslund.

**NORTHERN YELLOW-THROAT.** 5 eggs, June 8, U.M.D. Campus, St. Louis County, Hofslund; 1 egg, 1 cowbird egg, June 29, U.M.D. Campus, St. Louis County, Hofslund; 3 young, July 1, U.M.D. Campus, St. Louis County, Hofslund; Young, July 6, Whitewater Valley, Longley; 4 young, August 1, U.M.D. Campus, St. Louis County, Hofslund.

**REDSTART.** 4 eggs, 2 cowbird eggs, June 7, Rice County, Longley; 19 nests

(13 destroyed), May 21 to July 6, Hennepin County, Jarosz.

**ENGLISH SPARROW.** Incubating, June 13, Lake Minnetonka, Hennepin County, Pratt; 2 eggs, July 6, Dodge County, Longley; 3 eggs, July 6, Dodge County, Longley.

**BOBOLINK.** Feeding young out of nest, July 5, Ramsey County, Pius.

**EASTERN MEADOWLARK.** 4 young, June 10, U.M.D. Campus, St. Louis County, Hofslund, 4 eggs, July 15, Dodge County, Longley.

**YELLOW-HEADED BLACKBIRD.** 1 young, June 21, Weaver, Minn., Longley.

**RED-WINGED BLACKBIRD.** 4 young, June 9, Weaver, Minn., Longley; 3 nests (4 eggs each), June 11, Lake Minnetonka, Hennepin County, Pratt; 1 nest (2 eggs & 1 cowbird egg), June 11, Crosby Lake, Hennepin County, Thurston; 5 nests (1 with 4 young, 2 with 3 young, 1 with 2 young, 1 with 4 eggs), June 12, Lake Minnetonka, Hennepin County, Pratt; 2 nests (2 young each) June 15, Lake Minnetonka, Hennepin County, Pratt; 10 nests (3 to 4 eggs) June 15, Lake Minnetonka, Hennepin County, Pratt; 10 nests (3 to 4 eggs) June 17, Harbor Island, St. Louis County, Duluth Bird Club; 4 young, July 5, Ramsey County, Pius.

**BALTIMORE ORIOLE.** Young, July 1, U. M. D. Campus, St. Louis County, Hofslund.

**BRONZED GRACKLE.** 1 egg, May 8, Dodge County, Longley.

**COWBIRD.** This year's records indicate that the cowbird parasitized the following species: cedar waxwing, yellow warbler, northern yellow-throat, redstart, indigo bunting, clay-colored

sparrow, song sparrow, and red-winged blackbird.

**CARDINAL.** 1 young, with adults, July 6, Whitewater Valley, Longley.

**ROSE-BREASTED GROSBEAK.** 4 eggs, June 7, Rice County, Longley; 3 eggs, June 11, U. M. D. Campus, St. Louis County, Hofslund.

**INDIGO BUNTING.** 1 young cowbird, July 6, Whitewater Valley, Longley; 1 egg, July 12, Ramsey County, Pius; 2 young, August 8, Whitewater Valley, Longley.

**PURPLE FINCH.** 2 broods of young out of nest, July 14, Crow Wing County, Rosenwinkel.

**GOLDFINCH.** Building, July 6, Whitewater Valley, Longley; Building, July 8, U. M. D. Campus, St. Louis County, Hofslund; 12 nests, July 11 to August 22, Ramsey County, Pius; Incubating, August 3, Whitewater Valley, Longley.

**SAVANNAH SPARROW.** 4 eggs, May 25, U. M. D. Campus, St. Louis County, Hofslund; 4 young, June 8, Dodge County, Longley; young, June 25, U. M. D. Campus, St. Louis County, Hofslund.

**LARK SPARROW.** 1 egg, 4 young, June 15, Rice Creek & University Ave., Hennepin County, Breckenridge.

**CHIPPING SPARROW.** Building May 10, Dodge County, Longley; 1 young, June 25, Encampment River, Lake County, Pratt.

**CLAY - COLORED SPARROW.** 5 nests (1 with 1 egg, 3 with 4 eggs, 1 with 1 cowbird egg), May 29, to July 28, U.M.D. Campus, St. Louis County, Hofslund; 1 egg, 1 young, 1 cowbird egg, July 13, Ramsey County, Pius.

**FIELD SPARROW.** 1 young, with adult, July 6, Whitewater Valley, Longley,

**SONG SPARROW.** 4 eggs, May 10, Dodge County, Longley; 5 eggs, 1 cowbird egg, May 26, Whitewater Valley, Longley; 4 eggs, June 17, Harbor Island, St. Louis County, Duluth Bird Club, 4 eggs, July 5, Ramsey County, Pius; 1 egg, 1 cowbird egg, July 16, Ramsey County, Pius; 3 young, August 5, Ramsey County, Larson.

**DICKCISSEL.** 6 young, June 6, Hennepin County, Jarosz & Breckenridge.

—Minneapolis Bird Club.

The deadline for the June issue is May 10 for all major articles and notes.

# The 1951 Christmas Bird Count

*compiled by*  
**Dorothy Smith**

The winter bird census conducted by the Minnesota Ornithologist Union continues to arouse more and more interest among the bird hobbists of the state. Five bird clubs participated in the census this year and turned in a count of 5,963 individual birds spotted and a total of 51 species observed. Eighty-four observers reported to their various clubs.

Reports from five clubs is followed by a table containing the results of the bird counts of the clubs. The two counts from St. Paul are compiled together.

## **Saint Cloud:**

The St. Cloud Bird Club had a general field trip and bird count December 26, 1951. This was supplemented by one day of individual counts during the week.

The weather was clear with the temperature hovering around zero and a raw wind from the west. The snow was about 4 to 5 inches deep. The count was made along the Mississippi River to Sartell, the Campus of St. Benedicts, and the St. John's University grounds.

Mr. Harry Goehring, Mrs. George Lehrke, Mrs. Rudolph Misho, Miss Loretta Rosenberger, Miss Marie Rosenberger and Miss Monica Misho attended the general field trip.

## **Duluth:**

On December 30 from 8 a.m. to 4

p.m. the Duluth Bird Club observed in the territory from Fond du Lac to Encampment Forest along the St. Louis River and Lake Superior including Minnesota Point. It included town suburbs 20%, deciduous city parks and highways 70%, and sand dunes 10%. The day was partly cloudy with temperature ranging from 10 to 20 degrees and an east wind 5 to 20 m.p.h. The ground was covered with 6 inches of soft snow and all fresh water was frozen except Lake Superior. There were 12 observers in 9 parties. Total party hours, 30 (21 on foot, 9 by car). Total party miles 192 (32 on foot, 160 by car).

Hulda Adams, J. K. Bronoel, Margaret Brown, Miriam Carlstedt, Flora Evans, James Felton, O. A. Finseth, Henry Gilbert, Stanley Hammer, P. B. Hofslund, M. M. Keith and Olga Lake-la were the participants.

## **Saint Paul:**

Saint Paul reports two counts. December 29 the area canvassed included North Hamline Avenue and adjoining open fields, Highway 100 to Rice, the area around Vadnais Lake and Sucker Lake, Edgerton and McMenemy Street to Highway 36, Phalen Park, Johnson Parkway, State Fish Hatchery grounds and some river bottom lands. December 30 observations were made along both sides of the Mississippi River from St. Paul to Newport.

Participants on December 29 were

Mrs. M. Ollie, Oscar Enstrom, John Hall, Sr., Miss C. Larson, Larry McEvoy, Thomas Meyer, Mrs. W. Olin, Genevieve Pearson, Kermit Piper, Brother Pius, Mrs. J. Rice, A. C. Rosenwinkel, and David Thurston. On December 30 George Anderson, Donna Carol Enstrom, Oscar Enstrom, Sr., Oscar Enstrom, Jr., J. Hall, Sr., Larry McEvoy, Kermit Piper, Medora Sandford and David Thurston participated. Minnesota.

The Minnesota Bird Club conducted their census on December 30 from 8:45 a.m. to 4 p.m. The territory was Cedar Creek Forest (Anoka County) Minnesota which consisted of four square miles of Cedar Creek Game Refuge area and land adjacent to the road leading to the area for a distance of about 11 miles. It contained open farmland 14%, white pine and hardwood 45%, white cedar, tamarack and alder 40% and cattail marsh 1%. The sky was overcast to partly clear. The temperature ranged from 8 to 31 degrees with an East wind 10-18 m.p.h. Hoarfrost covered trees and bushes. Seven to 12 inches of snow covered the ground. The lake was frozen but surface was soft and streams were largely open. Total party-hours 26 (20 on foot and 6 by car). Total party-miles, 132 (22 on foot, 110 by car).

Tom Breckenridge, W. J. Brecken-

ridge, Margaret Burr, Mrs. A. B. Corniea, Sally Davidson, Mrs. Wm. F. Davidson, Bert Haines, Charles Kinsey, Mrs. H. D. Klein, Mrs. Mary Lupient, Sam McIver, Theodora Melone, Paul C. Murphy, Robert Nordgren, Dana Struthers, and Edward P. Thatcher were the participants. There were 16 observers in 5 parties.

#### Minneapolis:

The Minneapolis Bird Club observed in the territory from Minneapolis Camden Park to Anoka, a 10 mile radius on both sides of the Mississippi River. The sky was overcast till noon and then clear to partly clear during the afternoon. Trees and shrubs were covered with hoarfrost. Temperature ranged from 8 to 30 degrees with an east wind. The snow cover of between 6 and 12 inches was somewhat drifted, and there was open water in the streams. There were 26 observers in 6 parties.

The observers were John Futcher, Vera Sparkes, Amy Chambers, George Rickert, Helen Lien, Boyd Lien, Mr. and Mrs. Whitney Eastman, Dr. and Mrs. K. Phelps, Joyce Gellhorn, H. S. Jerabek, Elizabeth Jerabek, Dorothy Smith, Lewis Barrett, Julian Berman, Laura Brenner, Angus Clark, Burton Guttman, William Piper, John Pavek, Mr. and Mrs. R. Rustand, Phyllis MacRae, Norris Jones, and Gary Filerman.

Bird Clubs	Saint Cloud	Saint Paul	Duluth	Minne- sota	Minne- apolis
Mallard		40			3
Black Duck		2			43
American Golden-eye	79	240	50		43
Buffle-head		2	2		
Hooded Merganser		3			
American Merganser	8	2			10
Lesser Scaup	44				
Sparrow Hawk		2			
Red-tailed Hawk		2	1		
Cooper's Hawk		2			

March, 1952

Ruffed Grouse			4	10	
Ringed-necked Pheasant	4	53	1		143
Glaucous Gull			4		
Herring Gull			294		
Wilson's Snipe		2			
Great Horned Owl		1	1		
Barred Owl		1		1	
Belted Kingfisher		1			1
Halcyon Woodpecker	2	18	4		3
Downy Woodpecker	4	12	18	2	21
Red-bellied Woodpecker					1
Pileated Woodpecker	1		1	2	
Canada Jay			4		
Blue Jay	24	25	8	23	88
Crow	1	9			16
Black-capped Chickadee	27	65	72	81	16
White-breasted Nuthatch	16	12		10	53
Red-breasted Nuthatch	27	12	22		1
Brown Creeper	4	4	1		3
Robin		1			
Golden-crowned Kinglet	3	8			
Starling	17	120	283	3	49
Bohemian Waxwing			36		
English Sparrow	520	550	385	23	917
Cardinal	4	12		1	5
Rusty Blackbird		2			
Brewer's Blackbird		1			
Bronzed Grackle					1
Evening Grosbeak			102		4
Pine Grosbeak	8	17	54		
Redpoll		7	12	88	18
Pine Siskin	22		1	140	
Goldfinch		12		109	100
Junco	34	65	1	3	29
Tree Sparrow		50		17	76
Snow Bunting			196		1
Purple Finch		2			
Oregon Junco		1			
Lapland Longspur		12			5
Rock Dove					20
Mourning Dove				1	
Total Individuals	849	1370	1557	513	1674
Species	20	37	25	15	27

# Seasonal Report

by

Mary Lupient

Except for a severe cold spell during the last ten days of January, when the thermometer dipped to 40 below zero in Detroit Lakes, Minnesota had a mild winter. There were a few blizzards in the western and northern sections which blocked roads for short periods. Driving was hazardous at times in all parts of the state caused mostly by drizzling rains with resulting icy highways. During the past two weeks to date of this writing, February 10, the weather was mild with very little snowfall.

The usual number of mallards and black ducks wintered again along the Mississippi and Minnesota Rivers where spring-fed streams remained opened. At Shakopee an estimated 150 mallards and 8 black ducks were seen February 8. In recent years Dr. Walter J. Breckenridge recorded the approximate number of American golden-eyes that formed rafts in the Mississippi River north of Minneapolis. This season the count was 249. Other counts were as follows: St. Paul 240, St. Cloud 79, and Duluth 50. Harvey and Mrs. Gunderson made observations along the North Shore as far as Grand Marais over the weekend of December 30. They saw only a few golden-eyes, but the lake was open as far as could be seen from shore so, no doubt, the flock that is normally there was scattered, and it was impossible to make an accurate report. Two buffleheads and

three hooded mergansers wintered near St. Paul and a few American mergansers were observed on the rivers in the Twin City area. At Northfield, two pied-billed grebes were reported by O. A. Rustad, December 19.

Few hawks and owls were reported. A goshawk flew over the Minnesota River lowlands, January 11, and just north of Minneapolis Dr. Breckenridge saw a marsh hawk, February 3. Reports on the species of hawks showed only three red-tailed hawks, three sparrow hawks, two rough-legged hawks and four Cooper's hawks. Although this is not a complete census of the winter population of hawks for the state these reports came from areas that have been heard from for the past several years, and indicate a severe decline in the number of wintering hawks.

Reports show that owls appear to have declined also. Only two were reported on the Christmas census which appears elsewhere in this issue. Of exceptional interest is the record of a hawk owl seen in Duluth, December 2, by P. B. Hofslund, O. A. Finseth and Joel Bronoel.

The winter population of gulls at Duluth has been checked by the Duluth Bird Club for the past several years. An excerpt from a letter by P. B. Hofslund reads as follows, "On January 13, O. A. Finseth, Joel Bronoel

and I counted at least five glaucous gulls and, we believe, on the basis of size comparison with known glaucous and herring gulls that there were also two Iceland gulls. Later in the day Mr. Bronoel saw eight of the white gulls at one of the Duluth dumps. How many of these were from the group we saw earlier in the day, of course, I don't know." The Duluth Bird Club listed 294 herring gulls for the Christmas census. One herring gull is wintering near St. Paul.

A red-headed woodpecker was seen near Lake Vadnais, St. Paul by Mr. and Mrs. Whitney H. Eastman, January 5. An Arctic three-toed woodpecker was seen January 17 at Little Falls by Dr. Breckenridge and Harvey Gunderson, and one was seen December 26 at Lake Vadnais by A. C. Rosenwinkel. Two northern flickers have been feeding all winter at the home of Mrs. M. E. Herz, Excelsior.

Judging from reports from several sections of the state, the red-breasted nuthatch was abundant this winter. The St. Cloud Bird Club counted 27 for their Christmas census, the Duluth Club 22, and the St. Paul Audubon Society 12. Besides these records there were many reports of from one to three individuals.

Reports of tufted titmice that appear daily at feeders are as follows: one at the home of R. D. Harmon near St. Paul, reported by Sally Davidson and one at the home of Mrs. Ray Fuller, Hopkins, reported by Mrs. M. E. Herz. One titmouse was seen near Northfield November 20 by O. A. Rustad, and two were seen near the Fish Hatcheries, St. Paul, December 8 by A. C. Rosenwinkel.

A few days before Thanksgiving a Carolina wren appeared at the home of Dr. and Mrs. George Bantle who live

on a bluff overlooking the Mississippi River near the Ft. Snelling bridge, St. Paul. The bird survived the rigorous cold January weather, and, though somewhat bedraggled in appearance by now, it is still there. Mrs. Bantle said that it came daily to her feeder and ate suet and seeds. At one time she filled the skeleton of a turkey with suet and hung it on a tree. The bird fed from its creeping in and out in a very wren-like fashion.

Last year robins wintered in the state in large numbers. This season only a few single individuals have been reported, the northernmost record being one bird seen by Mr. and Mrs. Harvey Gunderson at Grand Marais, December 30. A meadowlark was reported near Lake Vadnais, January 5 by Mrs. and Mrs. Whitney H. Eastman.

Usually several flocks of red-winged blackbirds linger through the winter at barnyards along the Mississippi and Minnesota Rivers. One flock only was reported to date. About 50 red-wings, males, immatures and a few females, are living at a farm near Shakopee. This record was sent in by Mrs. M. E. Herz. Marvin Wass stated that two red-winged blackbirds lived all winter at a farm seven miles east of Pequot Lakes. Two rusty blackbirds are living at a dump near the sewage disposal plant, St. Paul, and a Brewer's blackbird was listed on the Christmas census by the St. Paul Audubon Society.

Purple finches and goldfinches are unusually abundant this winter. They appear to be everywhere. Some of the flocks of goldfinches are exceptionally large.

Numerous small flocks of pine and evening grosbeaks were reported, and in some instances they come to feeders. In Duluth 102 evening grosbeaks were

counted at a feeder belonging to John Bero, December 30, which is an exceptional record.

Redpolls, snow buntings, and Lapland longspurs appeared throughout the state in the usual numbers. Tree sparrows, however, were reportedly less abundant than normal. Two fox sparrows were observed, one near Shakopee by Mrs. M. E. Herz, December 30, and one near the Mississippi River in Southeast Minneapolis, January 27 by E. S. Bode.

Few waxwings were reported although Joel Bronoel stated that Bo-

hemian waxwings were more numerous in Duluth this winter than they have been in the past two years. A small flock of Bohemian and cedar waxwings was seen by Sally Davidson and Margaret Burr, near St. Paul, February 8.

The first week of February was mild and it thawed nearly every day. Possibly due to the mild weather the horned larks appeared early. They were seen February 3, near Prescott by Robert Haines in numbers that definitely indicated a migration. Minneapolis, Minnesota.

#### Errata

The titles of the notes of interest on pages 54 and 55 of the September, 1951 issue of *The Flicker* give a misleading idea as to the contents of those notes. The second word of each title should read *on* instead of *of*.—P. B. H.

## *The Students Page*

### THE PHEASANT

The other day I decided to take a little walk down to the bay along the shore line. I was just poking around, not really paying much attention to anything when all of a sudden I heard a flutter of wings and something flew up right in front of me. It startled me for a minute; then I realized what it was—a beautiful male ring-neck pheasant. So I thought his mate must be close by. I followed him with my eyes as he flew toward a big clump of grass. While he was flying he made an awful noise and kept going in a wide circle. I walked on trying to locate the nest, knowing too well that he was leading me away from his mate. While he was flying from a clump of weeds to tree tops and other stopping off places I could see his wonderful coloring as he spread his wings and his long multi-colored tail feathers sailing in the wind. I quickened my pace and my excitement mounted as I thought to myself that here is my chance to come upon a pheasant's nest. But while I wandered around the area, Mr. Proud Pheasant was excited, too, and was making it his business to see that his nest would go undiscovered. Nature is smart in making such a beautiful male bird as she knew that he can attract any enemy away from his home and family.

Mr. Pheasant and I continued for awhile playing hide and seek and then I realized the sun was going down, and I knew it was getting toward supper time, so I gave up and headed for home, and as I walked farther and farther away I thought I heard a kind of a noise, and I imagined it was a shriek of triumph from Mr. Pheasant who had won our little game.

Richard Lawrence

Grade 6—Irving School, Duluth

### AMPHIBIANS AND REPTILES ON DISPLAY

This is my first year in Washington Junior High School. I was very glad when I was put in a science room as I was interested in animals. I volunteered to be curator.

The pupils in our room come from many parts of the city and country, so we get nearly all the amphibians and reptiles that can be found around Duluth. The two snakes we get are the red-bellied and the garter snake. To prove that the snakes are harmless we let the children handle them. It is a lot of fun when it is a girl's turn to handle the snake, because when they squeal it entertains the boys. We had five out of six frogs found near Duluth. They were the spring-peeper, swamp tree, leopard, common tree and wood frog. The springpeeper showed us how his throat would puff out when he croaked. We found a lot of Jefferson and red back salamanders around Duluth. The tiger salamander which

came from St. Paul measured nine inches. We had one tiger salamander that lived for four years before it got out and dried up. We had three salamanders in the room. They were the tiger, red-backed, and Jefferson salamanders. We had two turtles, the snapping and painted turtle. One of the painted turtles was found with a ring through its shell.

Norman Gill—Duluth, Minnesota

Grade 7—Washington Jr. High

## Wilson Ornithological Club Annual Meeting

The 1952 meeting of the Wilson Club will be held April 25 and 26 at Gatlinburg, Tennessee, the gateway to Great Smoky Mountain National Park. The Smokies are in bloom at this season, and with Mt. LeConte, 6500 feet high, practically at the visitor's doorway, it promises to be breath-taking. Chuck-wills-widows and Sycamore warblers nest near the park entrance, and other southern birds that should

intrigue Minnesotans will be found near the meeting place. Because of the birding possibilities, the paper sessions will start later than usual to allow for early morning field trips. An interesting demonstration of the mountain folk-craft will be a part of the less formal program. All in all, this year's meeting promises to be one that long will be remembered.— P.B.H.

## Notes of Interest

**A LATE RECORD OF THE GREATER YELLOWLEGS**—On Nov. 17, 1951 I saw a lone greater yellowlegs on the shore of Lake of Isles in Minneapolis. The bird, which appeared to be in good health, was observed through seven-power binoculars as it flew, walked along the shore, and waded deeply into the water. It was identified as a yellowlegs by its long, yellow legs, white rump and tail, and dark wings on which there were no stripes. Since its bill was relatively long and slightly upturned, I concluded that it was a greater yellowlegs rather than a lesser yellowlegs.

Roberts (*Birds of Minnesota*, second edition, revised, p. 497) gives Nov. 12, 1884 as the late date for the greater yellowlegs in Minnesota. It was of added interest to see this bird as late as Nov. 17, because, for much of the time after Nov. 1, 1951, the weather in Minnesota had been well below freezing, and several inches of snow had fallen. When I saw this individual, Lake of Isles was partly frozen over and snow was falling lightly. —John G. Erickson, Minneapolis, Minnesota.

**PROTHONOTARY WARBLERS ESTABLISHING NESTING COLONY ON MISSISSIPPI RIVER NORTH OF MINNEAPOLIS**—Mr. Claude Peterson, a member of the Park Board in Minneapolis, reported a nesting pair of prothonotary warblers on the bank of the Mississippi River, a few miles north of Minneapolis, early in June 1951.

The pair had appropriated a bluebird house located on a fence post in the yard of Mr. Arne Aasland's home. The bluebirds tried desperately to dispossess the warbler pair but were unsuccessful.

We visited the site on June 10 and observed the pair nesting. They subsequently reared a brood of five.

A second pair of prothonotary warblers came to the Aasland yard and found no suitable nesting cavity. Mr. and Mrs. Peterson enlarged the front entrance of a wren house which hung nearby the Aasland dining room window. They also hung another suitable nesting box in a tree nearby. While the second pair of warblers examined both nesting sites for several days, they did not appropriate them. It is presumed that they found more desirable quarters elsewhere nearby.

The Aaslands and Petersons are much interested in the possibilities of a growing colony of prothonotary warblers in their front yard and are prepared to erect additional nesting boxes if the warblers return next spring.—Whitney and Karen Eastman, Minneapolis Bird Club.

**RED CROSSBILLS AT MORRIS**—As I looked out of my window one day

March 23, 1951 I was reminded of the old German legend put into verse by Longfellow, about the bird that twisted his bill tugging at the nails on Our Savior's cross. Remembering the poem, the visitation was almost symbolic, for what I saw was a pair of red crossbills on Good Friday morning. They came back to my feeder repeatedly and I was pleased when they gave evidence of intending to stay.

According to Dr. Roberts, their nesting in Minnesota is very rare, but I was sure they were going to do so when I watched them "billing" at my window shelf, saw him feeding her sunflower seeds he had cracked, and later, feeding her by regurgitation several seeds that he had swallowed. He "pushed" them down her throat one after another, and there must have been a salivation process involved because there was a string of saliva between their bills as they drew apart.

I saw one or more of them every day and on May 31 they were bathing in a little pool that had collected across the street. There were nine of them, at least four males. I cannot account for such a large group, unless other families were also in the neighborhood and had "got together". I never dared to try and follow my pair to the nest for fear of frightening them away.—**Sheridan S. Flaherty, Morris, Minnesota.**



March, 1952

**OREGON JUNCO NESTING IN SEATTLE**—One of our many interesting observations on our trip west during July was watching an Oregon junco building its nest in our host's front yard in Seattle. Apparently the juncos were still in migration as numerous birds were in and about the yard. We watched the pair building for about two days. They used mostly dried grass from about the house and built their nest well concealed by ferns at the base of a leaning fir tree. From this yard in North Seattle we observed western tanagers, spotted towhees, black-throated gray warblers, chestnut-backed chickadees, red-shafted flickers and many white-crowned sparrows. On our return trip through Glacier National Park we were pleasantly entertained by a pair of water ouzels, whose beautiful song was distinctly heard above the rushing waters of the gorge.—J. K. Bronoel, Duluth Bird Club.

**UNUSUAL BEHAVIOR OF NIGHTHAWKS**—An unusually large number of nighthawks—presumed to be in migration—were observed over the Lake of the Isles in Minneapolis at dusk on September 24, 1951. The temperature was dropping fast. A cold wave was coming in from the north. The nighthawks were feeding on insects close to the surface of the water like swallows. They occasionally picked an insect off the surface.

It can be concluded that this migrating group of nighthawks could find no insects higher up in the atmosphere where they customarily feed because of the colder temperatures prevailing. They were apparently filling their "tummies" in preparation for their continuing flight southward.—Whitney and Karen Eastman, Minneapolis Bird Club.

**A SPARROW "SHOCKER" THAT REALLY WORKS**—Various sparrow traps and "scarecrows" have been devised, but none of these many gadgets which I have concocted and used over the years have been effective in keeping English sparrows away from my bird feeders.

Objections are raised in many quarters to violent means of ridding our feeding stations of this pest. In desperation I appealed to one of my scientific friends to build a "sparrow shocker."

He worked on the principle that a dead sparrow cannot talk, and therefore the electric shock must not be severe enough to kill them, but only to frighten them. Then, after shocking a small number of the flock, the ones who received the tickling sensation would tell all the other English sparrows in the neighborhood to keep away from that terrible device. That is exactly how the thing works.

The bird-watcher-scientist who created the simple sparrow shocking device is Dr. Donald H. Wheeler, a research executive in the research laboratories of General Mills at Minneapolis.

He fitted the first "shocker" to his own feeder, and after shocking a dozen sparrows, they no longer lighted on his feeder. He then adapted the device to my feeder—a Melody Hill unit.

I have had a flock of about 50 English sparrows feeding at my station for several years. I started using the shocker last spring. After shocking about a dozen sparrows during a period of a week, I have been completely rid of the pests at my feeding station all summer. I have now removed the shocker, and

the sparrows haven't yet noticed the difference. All summer long the sparrows sat on a fence or a tree some distance from the feeder while chickadees, cardinals, white-breasted nuthatches, blue jays, hairy and downy woodpeckers came for their regular helping of suet and sunflower seed. It will be interesting to see how long the sparrows will stay away from the feeder now that the shocking device has been removed.

Anyone interested in the construction details of the "Wheeler Sparrow Shocker" may obtain same by writing **The Flicker.—Whitney Eastman, Minneapolis Bird Club.**

**PILEATED WOODPECKERS EVERYWHERE**—Perhaps I'm especially alert to them, but I saw or heard these woodpeckers many places during my travels this summer. Others told me of their observations.

To start with, my husband saw them on the north shore of Lake Superior in March near Encampment Forest, and near St. Cloud at the M.O.U. meeting. In June they were hammering and calling early in the morning around our cabin on Schultz Lake and likewise calling around our lodge on Clearwater Lake near the Gunflint Trail of northern Minnesota in August. In September one flew over and back above us as we sat on a hill counting migrating hawks on the outskirts of Duluth. Near my home town, Black River Falls, Wisconsin, friends had pileated woodpeckers at their feeding trays in winter, and in summer, garden friends were glad to learn of the big bird seen on their farm.

The climax was seeing a western pileated woodpecker on my trip west in July. I was on a bus tour around Sequoia National Park. We were given ten minutes at a stop to take pictures or just stand in awe at the foot of the largest tree, the "General Sherman". Then the loud call of the pileated rang out just as we were told to climb into the bus. But I was rewarded, for it sailed across the clearing in front of the giant redwood just as we drove away.

At Sequoia National Park and Big Basin I had the pleasure of joining nature trips with the forest rangers.

From Seattle, Washington a former Duluth member, Miss Catherine Vavra, drove my mother and me to Paradise Lodge on Mt. Rainier. Sequoia had its many birds and big trees, but Mt. Rainier had its acres of flowers and its glorious snow cap. Birds most numerous there, were the Clark's nutcracker and Oregon jay (like our Canadian jay). I was most thrilled to see and hear the varied thrush, a bird which once paid a visit to Duluth in winter. Pileated woodpeckers are in this area and I thought I saw one in the distance.

Once again on the west coast, I was favored by seeing a pair of pileated woodpeckers. Miss Marguerite Kittredge, another former Duluth Bird Club member, took us to her nephew's cabin on Shaw Island in the San Juan Group. The special aim of this trip was to study and collect marine life when the tide was out. On a bird walk at 6:00 A.M. again the noisy vigilant rangers of the forest could be heard. Crossing a meadow to the thicket I flushed out many white crowned sparrows from the grass. Nearing the pileated woodpeckers, they flew out into a dead tree for a short stay, and then back into the thicket.

A pair favored me again near Ely, Minnesota, October 13. They furnished  
March, 1952

the best view yet, flying across the road in front of the car and climbing up and down the trees near by—near enough to see the top knot go up and down.

Are they more numerous than they used to be, or am I more aware of them since "Woody" visited our school room for two months, and won our heart and interest in his behalf.—Evelyn J. Putnam, Duluth Bird Club.

**ANOTHER WESTERN KINGBIRD REPORT IN MINNEAPOLIS**—A western kingbird was observed at close range in the Thomas Roberts Sanctuary on September 2, 1951. We ran into a large concentration of migrating warblers and flycatchers. This single western kingbird may have been keeping company with this group. Dr. and Mrs. Kenneth Phelps shared in this observation.—Whitney and Karen Eastman, Minneapolis Bird Club.

**UNUSUAL FEEDING TECHNIQUE OF BOHEMIAN WAXWINGS**—While birding in the Canadian Rockies this past summer we observed, on August 12, a flock of Bohemian waxwings commingled with a rather large flock of black swifts feeding in the air over the Athabaska River in Jasper Park.

The waxwings appeared to tire easily from their aerial maneuvers and periodically came to rest in a large tree on the bank of the river. Having previously observed cedar waxwings darting out from their perches in flycatcher fashion to catch an insect, it was interesting to see how long the Bohemian waxwings stayed aloft feeding like martins and swifts. Their flight in comparison to the black swifts appeared quite awkward, and we concluded that their dexterity in catching a sufficient supply of insects to satisfy their appetites was somewhat limited.—Whitney and Karen Eastman, Minneapolis Bird Club.

**A POSSIBLE XANTHOCROIC SCARLET TANAGER.**—During the May (1951) field day of the Duluth Bird Club, J. K. Bronoel called my attention to a bird that he was unable to identify. Although I identified it as a tanager, its plumage was totally unfamiliar to me. Its breast, throat, and head were bright yellow, its back an olive-green, and the wings brownish. Peterson's Guide was of little help except to eliminate females of other tanagers. Finally one of the D. B. C. members brought a copy of Robert's *Bird Portraits in Color*, and with the plate on the scarlet tanager, *Piranga olivacea*, the bird was identified as a scarlet tanager in abnormal plumage (xanthocroism). Unfortunately the area was within the Duluth city limits, and so the bird was not collected.—P. B. Hofslund, University of Minnesota, Duluth.

**THE WILSON PHALAROPE IN DULUTH**—Robert's (*Birds of Minnesota*, 1933,) fails to mention any records of the Wilson Phalarope, *Steganopus tricolor*, in northwestern Minnesota, Lake'a (*Check-list of the Birds of Duluth and vicinity*, 1951 mimeographed) does not record the bird. On June 21, 1951 several members of the Duluth Bird Club observed a single bird of this species in full adult plumage (presumably a female) on the recreation grounds of Minnesota Point, Duluth. —P. B. Hofslund, University of Minnesota, Duluth.

**THE YELLOW-THOATED VIREO IN DULUTH**—Robert's (*Birds of Minnesota*, 1936) states that, "This vireo is apparently almost entirely absent from the evergreen or Canadian part of the state . . ." He further states, "A single

fall record from Palo, central St. Louis County (Miss Lakela) may have been a stray migrant or the result of confusion with the Pine Warbler, which it closely resembles in coloration." On May 28, 1951 I saw a yellow-throated vireo, *Vireo flavifrons*, in full adult plumage on the Norondale Tract, Duluth, Minnesota. I am quite familiar with the bird, and had an excellent chance for observation.— P. B. Hofslund, University of Minnesota, Duluth.

**THE ICELAND GULL IN MINNESOTA** — On August 10, 1931 Dr. W. P. Abbott collected an Iceland Gull, *Larus glaucoides*, 12 miles northeast of Grand Marais, Minnesota. The bird in the second year plumage, was the only record of the Iceland Gull in Minnesota until February 25, 1951 when Harvey Putnam, J. K. Bronoel and I collected a second specimen about 10 miles northeast of Duluth on Lake Superior. This specimen was a first-year bird, and is now in the collection of the Museum of Natural History, University of Minnesota, Minneapolis.— P. B. Hofslund, University of Minnesota, Duluth.

**LeCONTE'S SPARROW IN DULUTH** — Robert's (*Birds of Minnesota*, 1936) says that there are no records of LeConte's Sparrow, *Passerherbulus caudacutus*, from the evergreen forest region except along the border in eastern Marshall and northern Isanti counties, an uncertain sight record in Pine county, and in the extreme northern part of Koochiching county. While working the Nortondale Tract in Duluth on July 4, 1951 I observed an adult bird of this species. Its actions indicated that it was nesting, but I was unable to find either the nest or young out of the nest. — P. B. Hofslund, University of Minnesota, Duluth.

## Call Notes

Dr. Dwain Warner has been giving a series of lectures to the Minneapolis Bird Club on "Let's Learn More About Birds." These meetings have been open to the public.

A lone snow goose wounded during the hunting season but now recovered has been wintering on the Genoa Pool in the La Crosse area.

There has been a scarcity of cardinals in most of the reporting areas of the state. Of interest in this respect, however, is the northeast extension of this bird with the first record of the cardinal in the Canadian Lakehead.

In Merrick State Park at Fountain City, Wisconsin outdoor fireplaces have been converted into winter bird feeders.

The M. O. U. Policy Committee met at the home of Whitney Eastman on February 16. Members present were: M. H. Adams, Vice-president; Vera Sparkes, Secretary; Mary Lupient, Treasurer; Pershing Hofslund, Editor; W. J. Breckenridge, Minnesota Bird Club representative; Amy Chambers, Minneapolis Bird Club representative, and O. A. Finseth, Duluth Bird Club representative. President Eastman presided. Guests included: Mrs. Eastman, Mrs. Adams, and Harold Wing, treasurer of the Michigan Audubon Society.

The Duluth Bird Club held their annual winter North Shore trip on the weekend of February 23. They were joined by a group of birders from the Cities and from the Canadian Lakehead. Details of the trip will be report-

ed in a later issue of *The Flicker*.

Dr. Dwain Warner recently returned from a month in the tropical evergreen forest at Puebla, Mexico.

Mrs. Charles Peterson, Madison, Minnesota reported a mockingbird that visited her station on November 18-19, 1951.

Word has been received of the death of Don S. Hamilton on February 1, 1952. Mr. Hamilton, a member of the Minneapolis Bird Club and the M. O. U., was known as the originator and manufacturer of the Melody Hill bird houses and feeders. Mrs. Hamilton will continue the manufacture of the excellent Melody Hill line.

The new editor of *The Wilson Bulletin* is Harrison "Bud" Tordoff of the University of Kansas Museum. Dr. Tordoff is well known to many M. O. U. members.

Dr. George M. Sutton has left the University of Michigan. He will spend some time in Georgia where he is illustrating the forthcoming *Birds of Georgia*, and then will take over his new position at the University of Oklahoma.

We can't help but interject an editorial comment in *Call Notes*. Why all the fuss about who should stand the cost of the bounties, the state or the counties? Why not just go back to a few fundamentals of conservation and game management, and abolish the bounties altogether? In every case

where the bounty question has been studied, it has been shown that the bounty has done nothing to increase or even maintain our game population. In fact, over-zealous predator control has been often near fatal to the game that was to be preserved.

The flagrant violation of the airplane ban is just another example of man's failure to look toward the future. The comment that there is no danger in the use of airplanes in our national preserve brings to mind some other famous last words, i.e., "the forests are of such huge extent that they can never be destroyed," and "the passenger pigeon is so abundant they will be with us forever."

Many people have helped enormously in putting out the last volume of *The Flicker*. Dr. W. J. Breckenridge, Dr. Dwain Warner, Mrs. Mary Lupient, Miss Vera Sparkes, Miss Amy Chambers, Mrs. Harvey Putnam, Mrs. O. A. Finseth, Mr. J. K. Bronoel, just to name a few. Special thanks should be given to Mrs. J. K. Bronoel who had the enormous job of retyping many of the manuscripts.

A. E. Allin, a frequent contributor to *The Flicker*, was elected president of The Thunder Bay Field Naturalist's Club for 1952.

The Thunder Bay Field Naturalist's annual Christmas bird census yielded 1645 individuals of 21 species.

During 1951, the Canadian Lakehead region added to its list the western tanager, western grebe, cardinal, and yellow-throated vireo. The record of the yellow-throated vireo is especially interesting to Head of the Lake observers, because the first spring record of the bird for this area of the state was also recorded this year.

We note with pride page 51 of the March, 1951 issue of the *Wilson Bulletin*, wherein is stated, "The Minnesota Ornithologists' Union and editor Dwain Warner are to be commended for their recent publication in *The Flicker* of Arnold B. Erickson's *Bibliography of the Wilson's Snipe*. It is to be hoped that other state organizations will exhibit from time to time a scholarly breadth of interest of this sort."

The deadline for the June issue is May 10 for all major articles and notes.

## The Book Page

A recently published book that will be of interest to M.O.U. readers is J. L. Snyder's *Ontario Birds*. The book is intended as a source book for all out-of-doors people. A more complete review will be given in a later issue.

A series that should be of great interest to the younger members of the M.O.U., and to most of our older readers, too, are the books of John and Jean George. *Vulpes the Red Fox* and *Vison the Mink*, two earlier editions, have been followed by one on the raccoon. The books are written with a beautiful sensitivity to the lives of these mammals and are wonderfully illustrated by Mrs. George. Both Mr. and Mrs. George are accomplished naturalists, and so their stories have authentic nature backgrounds. Mr. George is, at present, ornithologist-mammalogist at Vassar College. Mrs. George is the sister of John and Frank Craighead who are well known in Minnesota through their work on the birds of prey.

The Michigan Audubon Society has recently published a booklet *Enjoying Birds in Michigan*. This 64-page booklet describes many activities of the Michigan birders and gives many hints on studying birds. The booklet may be purchased through the M.A.S. Bookshop at Jackson, Michigan, or through the Duluth Bird Club for \$1.00.

Recently published state bird books from the Great Lakes region include Kumlien and Hollister's (with revisions by A. W. Schorger) *The Birds of Wisconsin* and Norman A. Wood's *The Birds of Michigan*.

The second volume of bird calls recorded by the Laboratory of Ornithology at Cornell University is now available. Those of you who have been puzzled by the strange calls that issue from the marshes will be interested especially in the recordings of the marsh birds, birds we hear more often than we see.

"By this time I had become such a confirmed addict that I could not get along without seeing birds periodically—if I went without them, I felt a need, like a thirst or hunger which had to be assuaged." Quoted from Florence Page Jaques' *Birds Across the Sky*. It's time to rediscover this delightful book.

This is the season when many of the M.O.U. members begin planning their summer vacations. Don't forget to add to your luggage a copy of *Pettingill's Guide to Bird-finding East of the Mississippi* and Morrison and Herz's *Where to Find Birds in Minnesota*.

There is another interesting article on Trans-gulf migration in the January issue of *The Auk*. Although it is not of the same series, it brings to mind the interesting and somewhat exciting Williams-Lowery controversy that appeared in earlier issues of *The Auk* and *Wilson Bulletin*.

A most delightful series of essays on conservation is Leopold's *A Sand County Almanac*. It should be required reading of all legislators and Department of Conservation men when the time comes to think of conservation problems.—P.B.H.

# Minnesota Ornithologists' Union

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## BANDING RECOVERY DATA FOR MINNESOTA

Species	Band No.	Sex	Age	Banded At:	Banding Date*	Recovery Data	Recovered at:	Recovery Date*
Bronzed Grackle	503-76041	-	Ad.	Ft. Smith, Arkansas	4/16/51	Found with injured wing and escaped	Canby, Minn.	5/4/51
Bronzed Grackle	50-309308	-	Ad.	Ft. Smith, Arkansas	3/11/51	Killed	Worthington, Minn.	7/2/51 (letter date)
Downy Woodpecker	37-117121	-	Ad.	Waukesha, Wisconsin	12/9/36	Found dead	Sandstone, Minn.	Winter, 1946
Blue Jay	48-375312	-	Ad.	Kansas City, Mo.	5/2/51	Found dead	Pine Co., Minn.	5/29/51
Chimney Swift	48-182897	-	Juv.	Memphis, Tennessee	9/25/49	Killed by auto	Stearns Co., Minn.	6/1/51
White Pelican	44-811241	-	Juv.	Chase Lake, No. Dak.	7/15/45	Captured and released	Lac qui Parle Co., Minnesota	11/21/48
Dbl. Cr. Cormorant	39-800503	-	Juv.	Imperial, Sask'ewan, Canada	7/9/48	Found crippled and shot	Brandon, Minn.	10/17/48
Blue Goose	498-22679	F	Ad.	Meadville, Missouri	2/25/50	Shot	Redwood Co., Minn.	10/18/50
Canada Goose	44-820686	M	Ad.	Mercer County, Ohio	9/24/47	Shot	Stearns Co., Minn.	11/5/50 (letter date)
Mallard	47-627955	M	Juv.	Marshall Co., Minn.	9/28/49	Caught in muskrat trap by Indian	Sandy Lake Post Ontario, Can.	5/15/51
Pintail	38-694790	F	Ad.	McClellanville, S. C.	12/10/38	Shot	Wheaton, Minn.	11/7/46
Mallard	36-707378	-	.....	Ellingwood, Kansas	2/26/36	Shot	Greenbush, Minn.	11/2/47
Mallard	497-01211	F	.....	Oswego Co., New York	11/5/48	Shot	Perham, Minn.	10/23/49
Pintail	48-620992	F	Ad.	Tinkler Harbour, Labrador	8/23/49	Shot	Nicollet Co., Minn.	10/19/49
Green-winged Teal	48-511146	F	Juv.	Salton Sea, Calif.	11/18/48	Shot	Cass Co. Minn.	10/9/49
Blue-winged Teal	39-504087	M	Juv.	Marshall Co., Minn.	8/22/50	Shot	Pinar del Rio, Cuba	11/28/50
Lesser Scaup	47-627863	M	Juv.	Roseau Co., Minnesota	8/12/50	Shot	Lake Winnipeg, Man., Can.	11/7/50
Wood Duck	495-05615	M	Juv.	Grand Isle Co., Vt.	9/12/49	Shot	Lake Co., Minn.	10/8/50
Blue-winged Teal	495-47008	F	Ad.	Cambridge, Maryland	10/15/49	Shot	Waseca Co., Minn.	10/20/50

\* The first number of date stands for the month.

—Forrest B. Lee, P.-R., Minnesota Conservation Dept.

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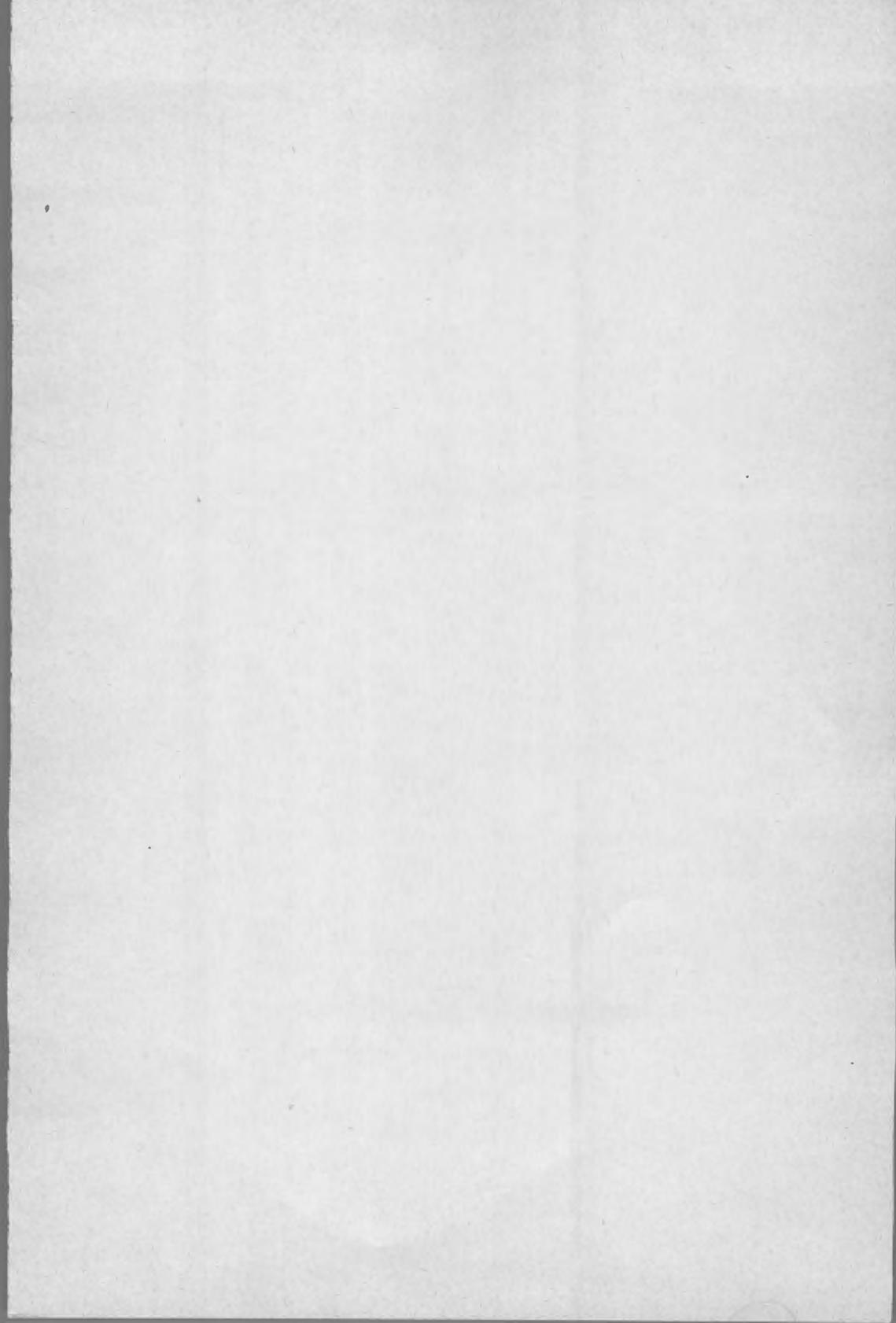
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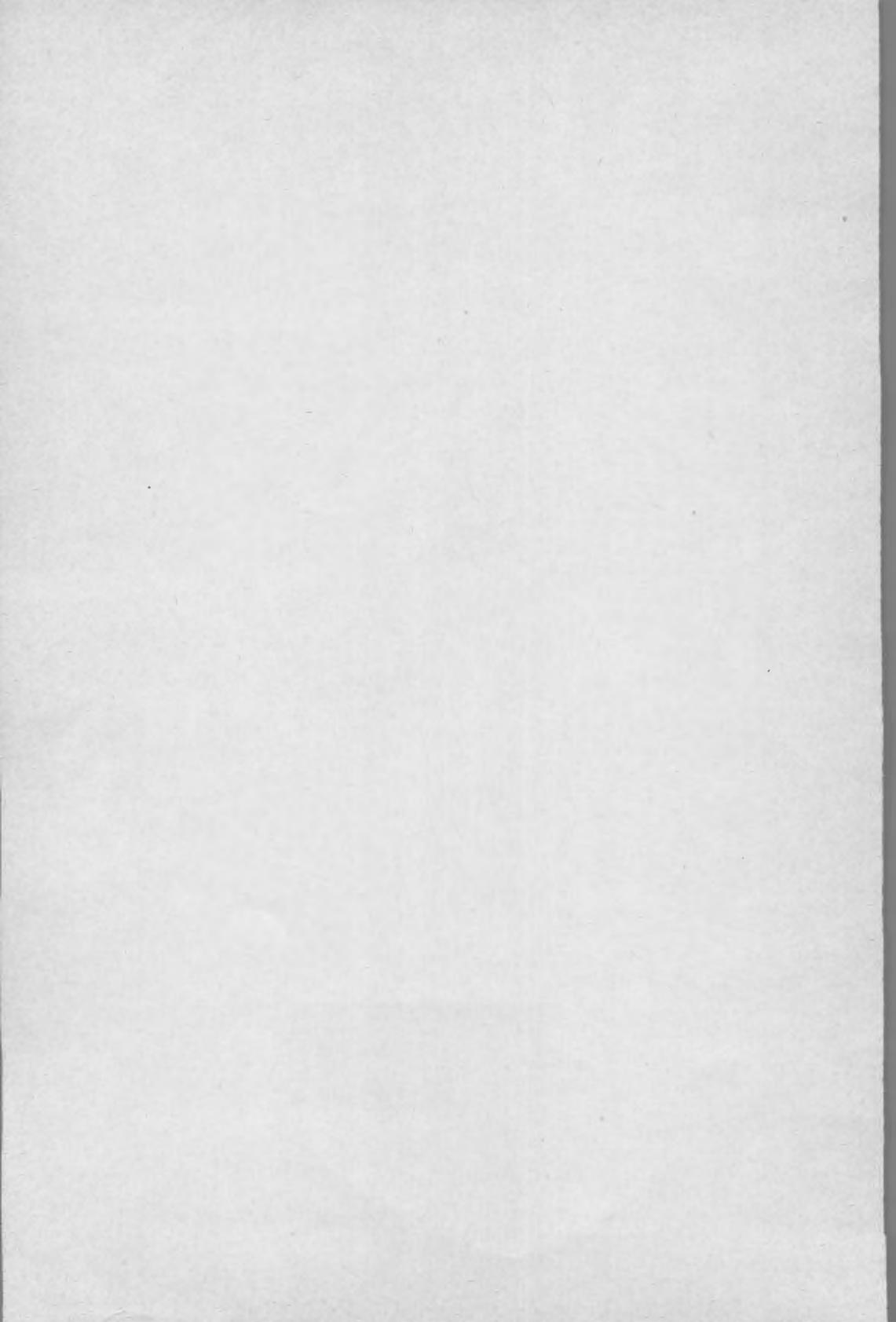
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# THE FLICKER

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## The Flicker

### Organ of the Minnesota Ornithologists' Union

Published Quarterly in March, June, September and December

THE FLICKER is sent to all members not in arrears for dues. Dues for all members, \$1.00 per annum, should be paid in advance to the treasurer.

All articles and communications for publications and exchanges should be addressed to the editor.

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nesota, Duluth Branch, Duluth, Minnesota

## The President's Page

My term of office has come to an end and my successor has been elected. I have enjoyed serving as your President, and I know my successor will welcome the same wholehearted cooperation which has been extended to me.

During the past year, your officers have worked diligently to instill new life and interest in our Union. We have endeavored to set up organization machinery to create an active participation in the affairs of the Union by a larger part of our membership.

In the past, the responsibility for Union activities has been borne by a small group of our members. This participation should be expanded considerably in order to provide a continuing successful program of activities. We have revised our Constitution and By-Laws to provide for a Policy Committee which will assume all responsibility for the activities of the Union between annual meetings. Three such meetings were held during the past year.

The revised Constitution and By-Laws provide for several new membership classifications which should help to strengthen our society and create a broader participation and interest. We have provided for certain standing committees; and I recommend that my successor proceed to appoint chairmen for these committees immediately following his election so that they can function more effectively throughout the year. Chairmen for special project committees should be similarly appointed.

We have devoted considerable time and effort to improve and expand the text of the THE FLICKER and to get the publication out on time. The Editor assumes a heavy responsibility, and a very real effort has been made to develop a broader interest in contributions for THE FLICKER in order to relieve the pressure on the Editor.

It is our hope that the organization foundation which has been laid will help to rebuild our membership and create a broader participation in the activities of your society.

**Whitney H. Eastman**  
**Outgoing President**

# THE FLICKER

VOLUME 24

JUNE, 1952

NUMBER 2

## Waterfowl of Three Prairie Potholes

by

William H. Marshall

**Introduction** — Much interest has developed during recent years concerning the production of waterfowl on temporary waters known as prairie potholes in the north-central states. With this interest has come a realization both of the rapid changes in water conditions due chiefly to agricultural development and of the high waterfowl values of such waters. However there are few reports available containing data on either the changes in the ponds or the use by waterfowl over a period of years.

The following paper stems in part from the efforts of Robert D. Benson in waterfowl studies while a graduate student at the University of Minnesota in 1946 and 1947, and in part from the work of wildlife students enrolled in the course in ornithology under Dr. Dwain Warner of the University of Minnesota. The present author served as advisor to Benson during his graduate studies and thesis preparation (Benson 1948) and as a "catalyst" in bringing the ornithology students and the potholes together each spring. Dur-

ing the late fall of 1946 and the months of April through August 1947 and April through May in 1948, '49, '50 and '51, standardized notes were taken by various individuals and filed for future reference as either the thesis or class project notes. These are now combined and an attempt made to assess the following points:

- (1) The physical and botanical changes as influenced by climate and land-use.
- (2) Use by breeding pairs of ducks and, in part, the productivity of the area.
- (3) Use by snipe during the migration period.

### THE STUDY AREA

**Location**—The potholes lie in eighty acres on either side of Fairview Avenue to the south of its junction with County Road "B" in Ramsey County, Minnesota. They are about one and a half miles north of the St. Paul campus of the University of Minnesota.

**Geology and Soils**—The soils are

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glacial in origin, being situated in a typical morainic areas which is gently rolling to hilly in aspect (Smith and Kirk 1916). One-half of the area which includes Ponds I and II is a Miami Loam that is derived from "till" or boulder clay. The grey to dark brownish grey soil is from 8 to 16 inches deep while the subsoil to a depth of three feet consists of brownish to greyish clay loam. Boulders and gravel are found to three feet in depth. The texture and structure admits free movement of water, yet retains enough for crop use. The other half of the area is a Gloucester Loam which consists of 8 to 16 inches of grey to red-

other small potholes existed on adjacent forty-acre areas. Waterfowl use of these latter areas was not studied.

**Intensity of Study**—The study was carried out in two phases—by Robert D. Benson in 1946 and 1947 and by various students in subsequent years. Notes were kept on a standardized form sheet and locations of observations entered in the field on outline maps provided to the observers. The following tabulations indicate both the periods and intensity of field work.

1946 Oct. 16 - Nov. 13 1 visit /2 days  
 1947 Apr. 4 - Oct. 20 1 visit /3 days  
 1948 Mar. 29 - June 9 1 visit /4 days

TABLE I. MORPHOMETRIC DATA AS OF MAY 1, 1947

Pond No.	Open Water*	Entire Pond**	Drainage Basin	Total	Shore line Distance* (miles)	Edge of Open Water	Average of Open Water
I.	1.8	3.1	10.7	13.8	0.54	12	18-20
II.	0.4	0.7	5.0	5.7	0.11	10	14-16
III.	0.6	1.2	6.2	7.4	0.34	9	18

\*Boundary of open water and emergent vegetation.

\*\*Boundary emergent vegetation and upland types.

dish loam underlain by a brown to reddish clay loam subsoil. Texture and structure allow a comparatively free movement of ground water. The substratum is a reddish-brown to red clay of considerable thickness. This type included Pond III.

**The ponds**—It will be seen from Table I that on May 1, 1947, the ponds were relatively small (less than two acres open water) and shallow (less than 20 inches in depth) draining areas of 6 to 14 acres in extent. There were several additional minor depressions with little emergent vegetation on the area. Two

1949 Mar. 25 - June 1 1 visit /2 days  
 1950 Apr. 5 - June 13 1 visit /2 days  
 1951 Apr. 3 - June 4 1 visit /3 days

The observers can be considered qualified to identify waterfowl during the breeding season. All were senior students who had completed a laboratory course in ornithology and could readily check observations. The present author usually visited the ponds once a week each spring and contributed his notes to the general pool of data.

Detailed cover maps were made in 1947 by Benson and in 1951 by Marshall.

**Weather changes**—Data from the U.S. Weather Bureau at Holman Field (8 miles southeast of the ponds) were used to indicate the rainfall and summer temperatures during the period.

The average annual precipitation is 27.24 inches. The relation of the annual precipitation to the average for the years in question was as follows: 1946, 3.42; 1947, 4.70; 1948, 6.54; 1949, 2.74; 1950, 2.78. It will be seen that except for 1946 rainfall was below normal during each of the years. When considering the precipitation of the four months of April through July when most vegetative growth occurred, there were large deficiencies or barely above average rainfall in every month except June 1946 and May, June, and July 1951. Summer temperatures were generally above normal for most of these months.

**Water level changes**—Since permanent water gauges were not placed, actual comparative water level data are not available. However, general observations and the condition of the vegetation will suffice to indicate the pattern during the five-year period.

During 1946 the ponds remained nearly full all summer and were known to be heavily used by waterfowl late in the year.

The drought of July—August 1947 was reflected by rapidly dropping levels in all three ponds studied. Pond III went completely dry on July 25. Pond II one month later, and Pond I dried up in September.

Ponds I and II recovered somewhat in the spring of 1948, '49 and '50, but did not maintain their levels as in 1946. In fact, in 1948, 1949 and 1950

both were practically dry by mid-June. These ponds remained full during the 1951 season.

Pond III did not recover to the levels of 1946 and dried up by late May in each subsequent year except 1951 when the open water area was still very small. This difference from the other ponds can be attributed to muskrat activity. In the second week of May 1947, the water level of this pond was observed to be dropping at a rate of four inches per week while the level of the other ponds dropped one inch. Investigation revealed that water was running out through a muskrat tunnel which had broken through the mud seal into sand and gravel below. Although the hole became plugged two weeks later the loss of over eight inches hastened the effect of the drought. Since that time this pond has not been above the approximate level of the tunnel. Inspection in April 1951 showed the outlines of the tunnel which was apparently still operating as a drain.

**Land use changes**—Several aspects of the prior land use and of grazing during the study period are of considerable interest.

For the past half century the area has been used for grain crops or grazing. About 1900 a drainage ditch was cut through the site of Pond I and until the early thirties the entire area was plowed and planted to grain. However, the ditch apparently fell into disrepair and for some 20 years the area has been grazed. The outline of the ditch could still be seen in the pond when it was practically dry.

Ditches on each side of Fairview Avenue provided some drainage for both Ponds I and II, but were so choked with vegetation that they did not function well.

As to conditions during the study period, there was a consistent difference between the east half which includes Pond I and the west half which includes Ponds II and III.

In the west half there was practically no land use. Twenty-one cows were in the area for a short period during the midsummer of 1947. About 12 acres adjacent to Pond III were planted to rye in 1947, but were not worked again. To the north of this and approaching Pond II in one corner were some ten acres of alfalfa which was mowed in 1947, 1948, and 1949, but then abandoned. The farmstead at the north east corner of the forty is still occupied but little or no farming has been carried on except as noted above.

In the east half the entire area was grazed each year. In 1947 eight cows were grazed here most of the summer and utilized the grasses quite heavily. In 1948, 15 or 20 horses were kept in the pasture in the early summer. In 1949 the area was used by some 30 horses for most of the summer. In 1950, 70 horses were kept in the area for the entire summer. This severe overgrazing resulted in the drastic changes in vegetation.

One other factor, which is a reflection of the proximity to an urban center, must be noted. The area is a "happy hunting ground" for many small boys and dogs. Three times blue-wing teal have been found shot by 22 rifles and probably some nests were destroyed or abandoned as a result of such activities.

The road which divides the area has been improved during each year and cars frequently use it. This affected primarily Pond II, and to a lesser extent Pond I. In 1950 a house was built just off the area but over-looking Pond

I and some 70 yards to the south. The residential development of the area may further adversely affect it in the near future, and plans for complete drainage are now being discussed in the community.

**Vegetation in 1947 and 1951**—The detailed plant lists and cover type map of the area in 1947 can be described as follows:

The upland cover was chiefly grasses with Kentucky blue-grass (*Poa pratensis*) and quack grass (*Agropyron repens*) most important. Other prominent species were yarrow (*Achillea lanulosa*), squirrel-tail grass (*Hordeum jubatum*), and Canada thistle (*Cirsium arvense*).

The upper edge of the wet areas supported blue joint grass (*Calamagrostis canadensis*), reed canary grass (*Phalaris canadensis*), slough grass (*Beckmanina syzigachne*) as well as more aquatic plants such as sedges (*Carex* spp.), rush (*Juncus macer*), needle rush (*Eleocharis acicularis*), and duck millet (*Echinochloa pungens*).

In each of the three ponds zonation of the emergent vegetation was very prominent. On all the areas of recognized emergent vegetation reed meadow grass occurred. It formed the open water edge of the shore cover in Pond I and was the matrix of many small patches of vegetation further out in the pond. Cattail and soft-stem bulrush were important and dominant in 78 per cent of the emergent marsh vegetation of all three ponds. The band of cattail varied in width from 5 to 35 feet and was interspersed with soft-stem bulrush. Water plantain (*Alisma triviale*) and wapato (*Sagittaria latifolia*) were important components of the emergent growths.

The Free-floating aquatics found

were lesser duckweed (*Lemna minor*), greater duckweed (*Spirodela polyrhiza*) and several green algae.

Sago pondweed (*Potamogeton pectinatus*) was the most abundant submerged aquatic in Pond I, but was in trace quantities in Ponds II and III.

The vegetation in 1951 was again mapped and a plant list by types compiled on July 23 with the able assistance of Dr. John Moore of the University of Minnesota Botany Department. The species present were similar to those recorded in 1947, but the distribution of emergents was very different.

In Pond I there was an almost complete absence of zonation of emergent vegetation. The center of the pond was a jumble of (1) sparse stands of aquatics such as sago pondweed, Berchtold's pondweed (*Potamogeton Berchtoldii*), and musk grass (*Chara* spp.); (2) emergents as duck potato, cattail, reed meadow grass and soft-stem bulrush; and (3) more upland species as dock (*Rumex crispus*) squirrel-tail grass and bedstraw (*Galium tinctorium*). There were even numerous seedlings of willow (*Salix* spp.), cottonwood (*Populus deltoides*) and box elder (*Acer negundo*). This was the area that had been open water in 1947.

The area which formerly supported a zone or band of cattails and bulrush now contained scattered clumps of these with the latter almost completely absent. In their place were weeds and grasses such as listed for the upland and upper edge of the emergent vegetation in 1947. There were also several colonies of river bulrush (*Scirpus fluviatilis*) and wool grass (*S. cyperinus*).

Pond II supported dense stands of wapato and water plantain with some

cattail, slough grass and bulrush in the former open water area. The emergent zone was similar to that in 1947 but much more dense and with some invasion by beggartick (*Biden* spp.), bedstraw, aster (*Aster simplex*) and other weeds. The growth here was very dense. In Pond III the center of the former open water area supported dense stands of water plantain and wapato. The emergent area which in 1947 was open water area, had tremendous growths in clumps of cattail, soft-stem bulrush and reed meadow grass. Next to these clumps were dense stands of weeds and grasses formerly of the upland and upper emergent areas.

#### Vegetation Changes 1947 vs. 1951 and their causes.

Three outstanding changes in the vegetation have occurred.

The first, a result of drought conditions, was an invasion of the open water areas of all three ponds by water plantain and wapato. Benson noted the establishment of these plants on bare mud flats in July, 1947. In two years both Ponds III and II were completely covered by these plants and Pond I nearly so. In 1950 students noted great difficulty in seeing ducks on the ponds due to the dead vegetation from the previous year. This in contrast to 1947 when all three ponds had half or more of their entire area in open water.

The second change occurred in Pond III. Here the dense stands of cattail, soft-stem bulrush and reed canary grass, which formed a belt entirely around the pond, were broken up so that only scattered stands remain. The weed type has grown profusely in the place of these emergents. This appears to be the result of the lowered water

levels due to muskrat activity and drought.

The third change which affected Pond I differently from Pond II and III was a result of both drought and land use. As noted earlier the 40 acre plot in which Pond I lies was heavily grazed by horses in 1949 and very severely over-grazed in 1950. The upland cover was much reduced the first year. By the end of the summer of 1950 the vegetation both upland and emergent was practically "skinned off." The horses waded into the mud of the pond to utilize completely such plants as wapato and cattail. At the break-up in 1951 the pond was open and bare in contrast to the previous year. As listed in the description for 1951 there was a general mix-up of open water, emergent, and upland vegetation with a great reduction in soft-stem bulrush and a considerable loss of cattail. The river bulrush and wool grass had gained considerable headway. This appeared to be the result of the combination of drought and overgrazing with the latter serving to accentuate the break-up of the vegetation zone.

The absence of well defined zones due to drought and overgrazing is in accord with finding of Evans (1951) on potholes in southern Manitoba.

#### USE OF THE AREA BY WATERFOWL

Migrant Birds—A small amount of

temporary use by spring migrants has been noted as follows:

In 1947 six lesser scaup (*Aythya affinis*) remained on Pond I from April 4 to April 11. These birds were paired and copulation was observed in one case.

In 1949 one female lesser scaup was seen the same pond from April 22 to April 29.

On April 11, 1947 one ringneck duck (*Aythya collaris*) was seen with the six Scaup.

On April 24, 1951 three male and two female gadwalls (*Anas streperus*) were seen on Pond I.

A pair of green wing teal (*Anas carolinensis*) was seen on Pond I on April 5, 1949.

A single wood duck (*Aix sponsa*) was seen on Pond III on June 24, 1947.

Single coots (*Fulica americana*) were seen on Pond I on October 22, 1946; from June 6 through June 9, 1947; and on May 13, 1950.

**Territorial Pairs**—Only two waterfowl species were known to remain as breeding birds on the area — the blue-winged teal (*Anas discors*) and the mallard (*Anas platyrhynchos*). Since visits to the area were frequent during the territorial period for these species, it is believed that an accurate picture of numbers is shown in Table 2.

TABLE 2. ESTIMATED NUMBERS OF TERRITORIAL PAIRS OF WATERFOWL 1947-1951.

	Pond I		Pond II		Pond III		Total	
	BWT	Mall	BWT	Mall	BWT	Mall	BWT	Mall
1947	9	2	2	1	3	1	14	4
1948	2	1	1	0	3-4	0	6-7	1
1949	2-3	3	1	0	0	0	3-4	3
1950	2	2	1	1	1	0	4	3
1951	3-4	2	1	0	1	0	5-6	2

The data in this table were derived by summarizing all notes in chronological order for each species and by comparing consecutive location of birds on the maps compiled each field trip. When a pair or waiting male was repeatedly seen in the same area for a period of two weeks or more, and usually a male remained for an additional period, a pair was indicated. Thus in 1949 on Pond I one pair of blue-winged teal was seen on April 22; 2 pair on April 25, 28, 29, and May 5; 3 pair on May 8, 9, and 10; 3 males on May 11, 12, 13; 2 males on May 15, 18, 21, 22, and 24. Other combinations noted were: 1 pair and 1 male on May 2, and 17; 2 males and 3 females on May 3; 5 males and 3 females May 4. These data were judged to indicate two or three territorial pairs.

Two pair of blue-wing teal were seen on what was termed the "Tree Pond" in 1949 and 1950. This was a very small (20x30 feet) pond about thirty yards from Pond II which had three large willow trees growing in it. In 1950 and 1951 there were a pair of both mallards and blue-wing on a one-acre cattail area just south of Pond III, but off the 80 acre area. These birds might well be considered as part of the breeding population of the immediate area.

Review of these data indicates that the number of mallards using the area for breeding purposes dropped from four to one the first year but increased to three for the next three years. This would seem to show a relatively constant use. On the other hand the teal breeding population dropped sharply in 1948 and remained at less than half the 1947 total during the next four years. It is thought that the great reduction in shoreline with open water accounted for this since territorial

blue-wing males were near open water whereas, mallards would use places with considerable heavy vegetation around it. Examination of the data for each pond shows that the drop in teal numbers for Ponds I and III was considerable, while Pond II each year had at least one pair and the adjacent tree pond which remained open provided space for one or two pairs.

These conclusions are made with the knowledge that there were no data on the breeding populations of blue-wing in the area in general.

**Nests**—Although nests were sought at times during the study coverage cannot be considered complete and the data serve only to indicate possible productivity of the area. The high hazard of the "dog and small boy factor" must be considered as unusual pressure on nests in addition to that from skunks and crows which were seen on the area each year.

During the duration of the study ten blue-wing teal nests were found with an average clutch of ten eggs. All of these nests were in the uplands and in most cases in dense clumps of grasses. Only three mallard nests were found with clutches of 9 and 10 eggs. Both were in the emergent vegetation—in each case cattails. Nearly all of the nests found were subsequently known to be destroyed.

**Broods**—Except for 1947 the data on broods on the three ponds are extremely scanty. This fact was due both to a lack of observations in late June and July and also because after 1948 vegetation growth in the ponds was so dense as to make brood observations difficult.

Benson (1948) observed seven female blue-wing teal with forty-three young on the area late in July. One

brood of eleven teal was consistently seen on Pond II during this period and the others on Pond I. There was a brood of teal on Pond III late in June. On two occasions Benson saw blue-wing broods proceeding overland to Pond I and surmised that the broods seen there in July were from at least all of the study area. However, it is possible that broods moved in from adjacent areas. In early July there were three or four Mallard broods in the area, again all but one on Pond I. On July 11 Benson recorded three broods of 8, 4 and 7 mallards respectively. Thus it may be estimated that 20 young mallards were produced in the area.

Due to possible movements overland these estimates are made in a comparative sense only. However, it is thought they are conservative because of the excellent escape cover present and the fact that broods might have moved out of as well as into the area.

In subsequent years very few broods have been seen in the area as follows: in 1948 one mallard and two blue-wing teal broods on Pond 1, in 1949 and 1950 one mallard brood in the same pond. It is to be remembered that these ponds were nearly dry by mid-June of each year. In 1951 the actions of a female mallard and blue-wing teal indicated the presence of two broods on Pond I in mid-June.

**Post Brood Use**—The contrast of waterfowl use in 1946 with later years during September and October is striking.

On the afternoon of September 21, 1946 Benson observed 116 mallards and 34 blue-wing teal on Pond I. Subsequent observations during September that year indicated 20 to 30 Mallards and 30 to 40 Blue-wing teal regularly used the area.

In 1947 the area was completely deserted by waterfowl by this date, and in the next three years a similar situation has continued. It is to be remembered that the ponds have been nearly dry by early August each year. **Discussion**—It is apparent that these potholes were intensively used by both blue-wing and mallards in 1947, and that they produced a considerable number of young that year. Further that this use and production dropped sharply, probably in response to changes caused by drought and grazing. The project will be continued in an effort to see whether further changes which may result from high water in the 1951 season will be reflected in changes in waterfowl use.

If we can assume that half the breeding pairs could be successful we can estimate the 50 acres produced 9 broods in 1947 (63 young actually counted), 3-4 broods in 1948, 3-plus broods in 1949, 3-plus broods in 1950, and 4 broods in 1951. In 1949 Evans (1951) estimated the production of 50 broods per square mile in the best pothole area of Manitoba. Reducing this to 80 acres indicates 6 broods as a comparison. Such data begin to show the productivity of pothole country on an acreage basis.

#### USE OF THE AREA BY SNIPE

Wilson's snipe (*Capella gallinago*) are also of interest to both sportsmen and ornithologists. There were striking changes in the use of the area by these birds during the duration of the study.

No data are available for 1946 and 1947 other than that the birds were present. Since that time adequate notes on these birds have been kept. The first birds were seen on either April 7 or 8 and a peak in numbers occurred between April 21 and 29 each

year. These high counts were as follows: 1948-21, 1949-20 plus, 1950-30, 1951-111, (other counts in 1951 were 55 and 52). Each year birds were heard in their courtship flight well into May or early June although no nests were found.

The close correlation with grazing becomes apparent when it is noted that all of these high counts were made on Pond I and that very few birds were seen in Ponds II or III. In the case of this bird the increasing over-grazing on Pond I added to its attractiveness.

#### SUMMARY AND CONCLUSIONS

1. The results of five years of observation on waterfowl use of three prairie potholes lying in 80 acres in Ramsey County, Minnesota, are reported.

2. It is apparent that drought during these years reduced greatly the open water area of the ponds and allowed several emergents to invade very rapidly. Complications of additional drainage by muskrats on one pond and of overgrazing on the other completely destroyed the marginal zonation of emergent vegetation on these two ponds. The third pond which was affected only by drought maintained its zonation.

3. The use of the ponds by migrant waterfowl was sparse. However, both

blue-wing teal and mallard used them as territorial areas. The numbers of blue-wing dropped sharply, probably in response to the reduction of open water. Mallard use remained more constant. Production of broods also apparently dropped though data on this are not entirely a pothole area of six to nine broods.

4. The use of the overgrazed area by Wilson's snipe during migration increased rapidly as the degree of overgrazing increased. The ungrazed ponds were hardly utilized.

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# Miscellaneous Notes On The Birds Of North Dakota

by

J. Dan Webster

During two years residence in North Dakota (August, 1947, to September, 1949), I recorded a few unusual birds which seem worth reporting. All localities mentioned are in Stutsman County in the southeast-central part of the state, unless otherwise stipulated. "East of town" or "near town" means within five miles of Jamestown. Specimens mentioned are now in the California Academy of Sciences collection. My thanks are extended to Dr. and Mrs. R. T. Gammell for help in the preparation of this manuscript and to Mr. George Barron and Mr. Wilbur Boldt for the use of their field notes.

**Green-winged Teal.** At least a thousand were seen, in large flocks along 50 miles of highway (Jamestown to Steele, Kidder County) October, 4, 1947. Ordinarily, few teal of any species are seen in October. Interestingly enough, at about this same date Donahue saw hundreds of Green-wings, "the largest flight he had seen in 40 years" at Lake Andes, South Dakota (Henry, 1948, *Aud.Fld. Notes*, 2(1):18).

**Turkey Vulture.**—Two were seen on the Jamestown College Campus in September, 1948 (exact day not recorded). Records of this species in North Dakota are scattered as to both place and time of year, but there have been very few reports in recent years.

**Broad-winged Hawk**—A single bird were seen several times along the

James River bottomlands in July and August, 1949. All other North Dakota records are from the Turtle Mountains, Devil's Lake, and the Red River Valley.

**Prairie Falcon**—This species has been seldom reported in recent years from North Dakota. Two were seen on the Jamestown College Campus April 3, 1948. George Barron, a student of mine, saw one at close range south of town on August 14, 1949.

**Knot**—A flock of eight were seen September 23, 1947, at Spiritwood Lake. The only previous North Dakota records are of May and August birds taken at Stump Lake and Grafton by Williams (Wood, 1923, *Univ. Mich. Misc. Publ. Zool.*, 10:29 and Williams, 1926, *Wilson Bull.*, 38(1):26).

**White-rumped Sandpiper**—My only two sight records were one at Spiritwood Lake May 25, 1948, and a flock of three August 3, 1949, at Eckelson Lake, Barnes County. Wilbur Boldt saw a flock of five on August 3, 1950, east of Jamestown. Although there are few published records for the state, the species is apparently a regular migrant in small numbers.

**Marbled Godwit**—A common bird about prairie lakes in July and August; I saw as many as 50 birds in a single flock (Eckelson Lake, Barnes County, August 3, 1949). As described,

but not figured, by Robert (1936, **Birds of Minnesota**, Univ. Minn. Press, Minneapolis), the field marks of this species on the prairies in midsummer include reddish cinnamon buff underparts, extending to the axillars and all of the underwings except the blackish primaries. The belly and flanks are sometimes, but not always, prominently barred. The most nearly satisfactory plate that I have seen of the species in summer plumage is that of Audubon (1838, **Birds of America**, plate 238, left hand figure).

**Hudsonian Godwit**—This species is only a sparse spring migrant in North Dakota, according to published records. And now there are two fall records from Stutsman County in 1949. On July 28, I saw one just east of Jamestown; on July 31, Eastman and Pieper saw a flock of 12 near Medina (the Gammels, 1950, *Aud. F'd. Notes*, 4(1):22).

**Bonaparte Gull**—Apparently a regular migrant (cf. Wood *op. cit.*:13). A flock of 100 flew south along the edge of the James River Valley at Jamestown, September 26, 1947. A flock of 25 flew north along the same track on April 23, 1948.

**Barn Swallow**—A late nest was found on August 26, 1949. It was in a culvert under highway U. S. 10, 10 miles east of Jamestown, and held three young.

**Philadelphia Vireo**—In 1948, three were seen May 4, in a "tree claim" 10 miles west of Jamestown, and two May 25, at Spiritwood Lake. All of the few published North Dakota records are from the Turtle Mountains, Devil's Lake, and the Red River Valley.

**Yellow-throated Vireo**—I saw single birds on the Jamestown College Campus May 31 and August 13, 1949. The

few published North Dakota records are from the Turtle Mountains, Devil's Lake, and the Red River Valley.

**Solitary Vireo**—There are no North Dakota records from west of the Red River Valley, except for one from the Turtle Mountain. (Henry, 1942, *Aud. Mag.* 44 (4 Sec. 2):12). I saw single birds on the Jamestown College Campus May 13 and 20, 1948.

**Pine Warbler**—I saw one at Spiritwood Lake May 25, 1948, in a small tree near the pavilion, where it was only a few feet above my head. The only North Dakota records are sight records by Schmidt in the Red River Valley (Schmidt, 1904, *List of birds that have been observed in North Dakota*, State Dept. Aub. Instruction, Bismark, and Schmidt, 1920:327, *Nature Study and Agriculture*, D. C. Heath, Boston).

**Oven Bird**—My only record was an immature collected at Eckelson Lake, Barnes County, August 26, 1949. Dr. R. T. Orr identified it as *Sieurus aurocapillus aurocapillus*.

**Hooded Warbler**—A pair was seen in the trees at Spiritwood Lake May 25, 1948. The only previous state records is a sight record June 1, 1942, near Kenmare by Hotchkiss (1943, *Auk.*, 60(4):607).

**Indigo Bunting**. My only certain record was a male seen near the James River, just south of town, on July 22 1949. (Already reported in *Aud. Fld Notes*, 3(5):249, the Gammels, 1949.) However, I am sure that the species was present in that area all summer in 1949; George Barron reported seeing one or two quite often at the same spot. All previous North Dakota Records except one from Lower Souris (Henry, 1942, *Aud. Mag.* 44 (4-sec.2)

:12) have been from the Red River Valley.

**Grasshopper Sparrow.** A late record was seen northeast of town on October 18, 1947. The species is a sparse summer resident in Stutsman County.

**Baird Sparrow.** An unusually early record was one seen northeast of town on March 30 1948. The species is a sparse summer resident in Stutsman County.

**Henslow Sparrow.** Regularly seen in prairie marshes and wet meadows. Earliest record, May 25, 1948, two at Spiritwood Lake; latest record, October 25, 1947, one in Western Dickey County.

**Sharp-tailed Sparrow.** Evidently a sparsely-distributed summer resident in Stutsman County. Sight records were 10 at Spiritwood Lake September 23, 1947; one about 3 miles north of Chase Lake July 27, 1949; one at Fox Lake August 8, 1949; two in marsh 10 miles east of Jamestown, August 26, 1949.

**Vesper Sparrow.** Earliest records two seen northeast of town April 27, 1948; three seen and one taken (I identified the specimen as *P. g. gramineus*.) April 28, 1949, in the same locality. Latest record: two seen in western Dickey County October 25, 1947.

**Field Sparrow.** Evidently the species is a sparse summer resident near Jamestown. In 1949 I saw one July 24, one August 22, and two May 24. Wilbur Boldt saw one north of town July 12, 1950

**McCown Longspur.** Evidently a regular migrant in small numbers near Jamestown. I listed five sight records, in April, September, and November. There are no reports for this species in the eastern two-thirds of the state during the last 30 years.

**Smith Longspur.** Evidently a regular migrant in small numbers near Jamestown. I have six sight records, in April, September, October, and November. As noted by Roberts (1936, *op. cit.*: 448), the best field mark for this species is the prominent white wing patch in the male. Also, it should be pointed out, the call of this longspur is a rich musical whistle in doublets or triplets, contrasting with the dry rattles of the other longspurs. Although there have been few records for the species of recent years in North Dakota, there are a good many older records. (E. g., Judd, 1917, *List of North Dakota Birds*, etc., pub. by author, Cando:26—"Common migrant (near Cando).")—Hanover College, Hanover, Indiana.

# Commercial Harvesting and Utilization of Wapato in Minnesota<sup>1</sup>

by Donald H. Ledin

For approximately fifty years a practically unknown industry has been thriving along the Mississippi River bottoms in the vicinity of Red Wing, Minnesota. This industry, from which a considerable number of Red Wing's residents are obtaining gainful employment, is the commercial harvesting of wapato.

The wapato (*Sagittaria latifolia*) is known by many different common names throughout the United States. Each locality seems to have adopted a name which best describes the race of people or the species of wildlife which consume or utilize the plant. Some of the more common names are as follows: Indian potato (Minnesota); muskrat potato, Chinese onion (Wisconsin); swamp potato, swan potato, tule root (California); wapato duck potato (trade); Wappatoo (Chinook, northwestern states); and arrowhead and arrowleaf.

Wapato belongs to the family Alismaceae. Some 30 species of this plant grown in the United States and are represented in practically all sections of the country where adequate environment exists. Wapato is commonly found in shallow water marshes, river bottoms and along the borders of sluggish streams.

The leaves of wapato are shaped like the points of Indian arrows which is probably one of the reasons why the species of *Sagittaria* occurring in the United States is called arrowhead. There is considerable variation in width, shape and length of leaves and also in the height of the plant, which may vary from a few inches to two or three feet. In the late summer this plant can be recognized by white flowers which are borne in the upper part of the scape and are usually in clusters of three.

Our species of wapato produce six to nine globular shaped tubers at the end of long subterranean runners and may attain a size somewhat larger than golfball. The largest tuber examined by the writer was 1 3/4 inches thick and 2 1/8 inches in its longest diameter. According to the reports of wapato buyers, however, larger ones are not uncommon.

It is the tubers of wapato which are utilized as food by muskrat, waterfowl and man. Though most game managers agree that the tubers make up an important part of the muskrat diet, there is some differences of opinion as to its classification as an important duck food.

Although wapato is plentiful along

—1 A contribution from Pittman-Robertson Surveys and Investigations Project 11-R, Minnesota Division of Game and Fish.

the Mississippi River from Hastings to Winona, the tubers have been used by waterfowl in significant quantities in only a few instances. This is due largely to the fact that the tubers are either too large for swallowing or buried too deeply for easy removal.

The tubers, however, are of considerable importance in the muskrat diet. Some muskrat houses which we have opened for examination contained a large supply of tubers which had been stored for winter consumption. Bank burrows also revealed many tubers along their walls. Whether they had been placed there for winter use, or whether the burrows had been tunneled near the tubers by chance could not be determined.

The use of *Sagittaria* tubers has not been restricted to wildlife alone. They have also provided food and medicine to the native races of North America. For example, the Sioux Indians living on Prairie Island, which lies along the Mississippi River north of Red Wing, prepare the tubers by peeling and boiling them like our ordinary potato. The tubers are then cut up and used in either soup or stew. Other Indian families boil the bulbs, dry them out for several days and use them during the winter months in the same manner as described above. The tubers also have been used as a medicine by the Chippewa Indians, for treating severe cases of indigestion.

The commercial harvesting of wapato tubers is limited to the Mississippi bottoms near Red Wing. Some wapato may be harvested in other parts of the state, but there are no records which would indicate a commercial harvest of any amount. Wapato, or Indian potato as it is called by the natives of Red Wing, has been harvested and sold to eastern markets for the past

40 to 50 years. The tubers are dug with a spade or pitch fork in much the same manner as the Irish potato. Before being packed in barrels for shipping, the bulbs are thoroughly washed in cold water and separated according to size and shape.

Very few individuals spend an entire day harvesting Indian potato tubers. Rather, it is more of a part-time and week-end occupation. In a good area it is possible for a hard working digger to dig 150 pounds of wapato in seven hours.

The harvest at Red Wing usually begins about September 15. At this time, the backwaters are usually dry and the tubers have ripened. Some individuals stake out areas during the fall and harvest the tubers even after the first snowfall. Most of the digging, however, is completed during September, October and early November.

Supply and demand are important factors in determining the amount which is harvested in the fall and early winter. During the war years there was considerable demand for tubers by eastern buyers who were paying as much as 18 to 20 cents per pound. Sixteen cents per pound is the present price, but during poor years prices have dipped as low as 2 1/2 cents per pound.

It is difficult to place a definite annual dollar value on the wapato harvest, because of the variation in weather conditions and water levels which affect the harvest, and also, because of the great fluctuations in market prices. During September, 1948, approximately 9,000 pounds of wapato were harvested near Red Wing and sold to eastern buyers for nearly \$1,500.00. It is believed that the harvest represents at least a \$5,500.00 a

year industry to the people in Red Wing.

Although most of the harvest is shipped by barrel to New York and Chicago buyers who sell it to the Chinese of those cities, a limited amount has been sold to Chinese restaurants in St. Paul, Minneapolis and Duluth. The tubers are not used in preparation of chop suey or chow mein, as was formerly believed, but are boiled and eaten like potatoes by the Chinese.

Digging of wapato in the Red Wing area over a period of years has failed to reduce the amount of the annual harvest. This continuous cultivation

and the practice of taking only the larger tubers, leaving the smaller ones for seed, is believed to be responsible for the continuous production.

In no instance was the harvesting of wapato tubers found to be detrimental to the food supply of either waterfowl or muskrat. Most of the tubers examined were found at a depth of six inches to two feet in mixed sand and mud and approximately 1/8 to 1/4 mile back from the Mississippi River.

Under the present methods of harvest and the restricted area of harvest, it is unlikely that any injurious result to wildlife will follow either from the reduction of food or disturbance of habitat. St. Paul, Minnesota.

# We Look Our Gift Horse In The Mouth

The **Flicker** is grateful for material sent in from all over Minnesota—without it there could be no **Flicker**. The work of preparing copy for the printer is done by volunteer MOU members, and since none of us has much time to devote to the work we often find ourselves in the unfortunate position of having to hold back potentially good copy for so long that when it is finally used it is no longer timely, and thus has lost much of its appeal.

Copy held back for additional editing corrections is not carefully written or does not follow the usual **Flicker** style. Our work may be lessened, and the correspondent may find much more satisfaction in seeing his work in print improved, if the reader will bear in mind the few of our requirements listed here. File this article away somewhere to use as a reference next time you send us some copy—and in the meantime test yourself with the quiz at the end of this article to see how you stack up as a **Flicker** correspondent.

While there are several more or less standardized departments in the **Flicker**, the correspondent must first concern himself only with whether his material is more suitable for a long article, published as such, or for a short one, published in the Notes of Interest section.

## NOTES OF INTEREST

Most of our editing difficulties stem from improperly written Notes. While

they vary in length from two or three sentences to a full page or more of type, they are all set up in exactly the same style. Any recent issue of the **Flicker** will furnish models for reference.

## The Headline

The only heading at the top of your page of copy should be "Notes of Interest." The specific headline for your story is part of the text, and should be indented and set in capital letters to form the beginning of the first paragraph. It is followed by a dash (—) and the first sentence, thus:

SNOWY OWLS IN DULUTH—  
Snowy owls were unusually common... The headline you choose should be designed to tell the reader as much as possible about your story, and should be kept brief enough to fit in less than one line of type. Begin your story at least three inches from the top of the page, to make room for editor's marks.

## The Text

There have been times when a **Flicker** copy-reader has been forced to rebuild one story into four or more separate Notes, simply because too much material is included under one heading. Be sure that every word of your story falls under the specific heading you have chosen. If it doesn't, write it up in separate notes. Each one, with its own heading, signature, and top-of-the-page heading, should be on a separate sheet of paper, double-

spaced. Leave large margins all around for our notations.

### Signature

Type a dash and then your name, professional capacity if you want it included, and your city and state as part of the text, following the final sentence. Underline all of the signature following the dash.

## LONGER ARTICLES

The longer **Flicker** stories fall into two general classes: stories of general interest, and reports of a technical or semi-technical nature.

### General Interest Articles

General interest stories aren't sent in very often, which is a shame, because a large proportion of our reader-audience is undoubtedly interested in them. **Ruth Self's Busy? Try It Our Way**, in the March, 1950 issue is a good model to look at if you are interested in writing a longer story for us. Unless the author writes at least two drafts and edits his material carefully, a long article may entail so much editing labor that it is out-dated long before it is ready for publication.

### Technical Articles

Technical and semi-technical reports are usually carefully written. I suggest that the author, before writing one word of copy, study similar articles in recent issues, and in **The Auk**. With an eye to the future, it behooves any author to keep a copy of his work and compare it with the edited article when it appears in **The Flicker**. A careful comparison will yield information on writing in general as well as tips on **The Flicker's** own requirements.

## COMMON ERRORS

We've come across almost every

possible variety of error at one time or another, but mention of a few of the most common may help a number of our contributors.

### Active Voice

"I saw a golden-crowned kinglet feeding in an alder bush" sounds much better than "A golden-crowned kinglet was seen on the path. It was feeding in an alder bush." Some formal scientific writing, outside the scope of **The Flicker**, does not allow the use of the first person, but **The Flicker** is written for the general interest reader. The active voice, with or without the first person, makes for much more interesting reading.

### Margins and Spaces

Double-space all copy, and leave WIDE margins all around. Put your name and the abbreviated title with the page number at the top of each sheet.

### Paper

Please do not use thin air-mail paper, ruled paper, or second sheets. Standard typewriter size is best, and it should be typed on one side only. If it's necessary to write in longhand, please use wide spacing between the lines to allow for editing corrections.

### Hyphenation

Please don't break words at the end of a line. We don't care how ragged the right-hand margin is, but we do have trouble finding time to black out all those hyphenated words, and rewrite them on the next line!

### Tables

Because tables are difficult to set in type, they should be avoided whenever possible. If there's a good reason

for the use of tables, however, don't hesitate to include them.

#### Latin Names

Unless a technical paper calls for fine distinctions, please don't use Latin names. They are out of place in **Notes of Interest** and in general interest articles—and often completely unnecessary in semi-technical papers. When their use is required, capitalized only the first word and underline the whole name.

#### Common Names

As for common names, please check them carefully. The **Flicker** does not capitalize common names, unless they are derived from proper nouns (it's Canada goose, for example). Don't use hyphens unless they are supposed to be there. For the fun of it, try this quiz and see how well you know your common names. If you enjoy it let us know—perhaps we can use some of the time we hope to save in editing to write some more quizzes!

#### ARE THESE NAMES CORRECT?

Which of the following are correctly written in every particular?

If your score is nearly perfect you are a boon to **The Flicker** copy-reader and we bless you for it!

1. Blackberian warbler
2. Holboell's grebe
3. prothonatory warbler
4. bluebird
5. bluejay
6. Myrtle warbler
7. Louisiana water thrush
8. Savanna sparrow
9. oven-bird
10. shoveller
11. buffle-head
12. pilated woodpecker
13. northern waterthrush
14. dickcissel
15. McCowan's longspur
16. LeConte's sparrow
17. Harris sparrow
18. rough-wing swallow
19. ferruginous rough-leg
20. blue-gray gnatcatcher
21. morning warbler
22. Winter wren
23. cerulean warbler
24. olive-back thrush
25. black-and-white warbler

(Answer on page 80 in this issue).

# Seasonal Report

by

Mary Lupient

After a pleasant winter with moderate temperatures, spring arrived with a severe March storm which covered the south half of Minnesota and all of six surrounding states. A snowfall of 16 inches was reported in some sections, and this was whipped by high winds into drifts six feet high. It was a heavy wet snow, and when the thaw set in with the spring rains, it caused disastrous record-breaking floods along the rivers, the valleys of which became large expanses of water presenting some conception of how the raging torrents of the glacial ancestors of these rivers must have appeared. Property damage was high because cities situated along the rivers were flooded. Sections of St. Paul were badly damaged. Severe flooding continued for several days, and to date of this writing May 18, the river waters have not entirely subsided to their normal level.

The spring season was marked by periods of cold weather, and contrastingly, there was a period of unseasonable heat during the last two days of April and the first week in May. Temperatures at International Falls and the Twin Cities were recorded at 93 degrees with correspondingly high temperatures elsewhere. Due to the fact that the heavy snows of March did not reach the northern forests, the hot dry spell created a fire hazard. Though not extensive, several forest fires caused the burning over of many hundreds of acres of timber lands.

During migration, fewer waterfowl than normally were observed in eastern and southern sections. The most abundant ducks reported were lesser scaup, mallard and blue-winged teal. Ruddy ducks are seldom very numerous but an unusual number of them appeared in the Twin City area. In western Minnesota the number of waterfowl was seemingly not diminished. There were few reports of geese around the Twin Cities. The uncommon report of white-fronted geese in eastern Minnesota was sent in by A. C. Rosenwinkel. He observed about a dozen of them near St. Paul, April 10.

Observation of whistling swans was hampered due to the high water. They had to abandon the flooded rivers and lowlands where they usually fed, and appeared mostly in shallow water-filled depressions in cornfields and meadows. Robert Janssen reported 20 near Shakopee, April 8, and by April 12 the number had increased to about 100. At Farmington, April 11, H. G. Heggeness saw about 85, and on April 13, 132 were observed in a field near Blue Earth by Cecelia Weaver.

Red-tailed hawks were fairly abundant during migration. Hundreds passed high in the air over the Minnesota River at Savage, April 6. Robert Janssen reported a hawk migration beginning March 29 and continuing to about April 7, mostly red-tailed hawks. P. B. Hofslund reported a pigeon hawk April 12, perched on a girder of a coal dock at Duluth. Beside it perched a pigeon,

and they apparently were paying no attention to one another.

The last week in April, rails arrived in goodly numbers. A dead yellow rail was found in Minneapolis by Robert Janssen, April 26. It was sent to the Museum of Natural History where a study skin was made of it.

Many mud flats frequented by shore birds in former years were covered by water this season so this report may be incomplete. According to reports a much smaller number have so far appeared, but the bulk of the migration is yet to come. Reports of the arrival of yellowlegs were about one week later than usual. Several long-billed dowitchers and one Hudsonian godwit, besides a few red-backed sandpipers were observed near Afton, May 15 by Sally Davidson and Mrs. William Davidson. Ruddy turnstones and black-bellied plovers were seen at Frontenac May 17. Possibly due to high water in their favorite ponds there were few reports of phalaropes. The earliest record was that of a pair of Wilson's phalaropes, May 10, near Afton.

Common and Forster's terns came to Mother's Lake near Minneapolis, April 15. A Bonaparte's gull was seen near St. Paul by A. C. Rosenwinkel, April 19, and one was seen at Frontenac May 17, by several members of the M. O. U. who were attending the annual meeting there.

Several blue-grey gnatcatchers were seen in the cemetery at Frontenac at the time of the meeting, and the nest of one pair was found. Observations of warblers was disappointing because so few of most of the species were found. The prothonotary warbler is nesting near the water's edge at Lake Pepin near the Methodist Camp. Mr. and Mrs. Whitney Eastman were first to discover the birds.

The only large warbler wave recorded was May 7. After a rainy night all of the early warblers passed through the Twin Cities in large numbers. An early record at Beaver Bay was that of a myrtle warbler, April 12. Mrs. Cora A. Corniea saw a pine warbler at Cedar Creek Forest, April 20.

Early dates of other species follow: 6 meadowlarks near Minneapolis, March 26, by W. J. Breckenridge; chimney swifts April 10, Minneapolis by John Futcher; A. C. Rosenwinkel and William Cummings reported early nesting dates, all at the National Cemetery, May 10, as follows: migrant shrike, 5 eggs, brooding bird; 19 Brewer's blackbird nests with from one to six eggs in each. One nest was on the ground and the others in pine trees.

Pine and evening grosbeaks lingered until late March. Joel Bronoel, Duluth, reported that they were still coming to a feeder there; March 24, and Bob Larson wrote that several hundred evening grosbeaks wintered at Rush City, feeding mostly on box elder seeds.

There were many records of Bohemian waxwings from all sections of the state, and they appeared in larger numbers than usual, staying on into early April.

Goldfinches were exceptionally abundant this season. They roamed about in large flocks, one flock reportedly containing approximately 1000 birds.

Slate-colored juncos migrated in larger numbers than normally. An interesting observation was sent by Mrs. C. E. Peterson, Madison, Minnesota. Eight to 18 white-winged juncos came to a shrub close to a house one mile west of Madison, April 5 and 6. White-throated sparrows migrated later and in fewer numbers than usual in the

Twin City area. A Henslow sparrow crept about the garden plants at the home of this writer, May 9. It stayed one day. Several tufted titmice were

heard by members of the M. O. U. at Frontenac, May 17. Minneapolis, Minnesota.

Answer to quiz on page 77:

Correct forms of incorrect names in the quiz are as follows:

1. Blackburnian warbler; 3. prothonotary warbler; 5. blue jay; 6. myrtle warbler (this one is named for a berry, not a girl!); 7. Louisiana water-thrush; 8. Savannah sparrow; 11. buffle-head; 12. pileated woodpecker; 13. northern water-thrush; 15. McCown's longspur; 16. Leconte's sparrow; 17. Harris' sparrow; 18. rough-winged swallow; 21. mourning warbler; 22. winter wren; 24. olive-backed thrush; 25. black and white warbler.

# THE CANADIAN LAKEHEAD

*Edited by*

A. E. Allin

## WINTER SEASON

The winter of 1951-52 came early to the Canadian Lakehead. Marshes were freezing by October 30 and few migrants remained after November 3 when the temperature dropped to  $-7^{\circ}$  and the ground was covered by a foot of snow. The ruffed grouse ceased ground-feeding, and could be observed at dusk budding in the tops of the alders and white birch. Along the shores of Lake Superior an occasional American golden-eye and red-breasted merganser still lingered, and three black ducks remained at least until November 11.

The weather throughout December was moderately severe. The seed crop on the evergreens was poor and there was practically no fruit on the rowans. The early snow falls had covered the weed seeds so that there was little food for wintering birds. This probably explained the absence of crossbills, pine siskins, and Bohemian waxwings and the presence of relatively few redpolls and pine grosbeaks. A few of the latter were noted feeding on seeds of black ash. Only on one previous occasion have we seen these seeds utilized by any species and on that occasion, too, it was by pine grosbeaks after the rowan berries had been eaten. There was a heavy crop of seeds on the Manitoba maples, favorite feed of evening grosbeaks. Probably this ex-

plains the unusual numbers of these birds present throughout the entire winter. Only an occasional robin wintered here in contrast to the hundreds which remained a year ago. On December 3, three glaucous gulls were associating with a large flock of herring gulls. A slate-coloured junco was noted at a feeding station in Neebing Township. There are few local winter records for this species. The outstanding record of the winter was an eastern cardinal at the same feeding station. This bird, a male, was first noted in mid-December and remained throughout the winter. It is of interest to note that the species was considered a rare straggler as late as 1923 at Minneapolis, 400 miles to the south. (Roberts, T. A. *The Season—Minnesota Region. Bird-Lore*, 26, No. 1:59; 1924). Following the heavy flight of snowy owls during 1949-50 and the equally heavy echo flight of 1950-51, we did not expect to see this species, but single birds were noted on November 3, 10, 12, December 8 and 26. Subsequently four more were to be reported on January 9, February 16, March 27 and April 3.

The remainder of the winter was unusually mild and the snow fall for 1951-52 totalled only half that which fell in the season 1950-51. The white-throated sparrow had never been recorded here in winter, but on January 12 we observed two of these birds on

a compost heap at the feeding station of F. Dupuis, Neebing Township, where the cardinal and junco had been noted. Another white-throated sparrow remained throughout the winter at Caramat in the heavily forested country 200 miles northeast of the Lakehead. A goshawk was observed on January 21. The second winter record for the brown creeper was made on March 9. At least three American golden-eyes were present throughout the winter on a small patch of open, rapidly running, water below Kakabeka Falls.

A highlight of the winter months was a dinner meeting on February 4, at Pigeon River, which was attended by 57 naturalists, members of the Minneapolis Bird Club, Minnesota Bird Club, Duluth Bird Club and Thunder Bay Field Naturalists Club. Several Canadians accompanied their American friends to Grand Marais where the field trip continued on the 25th. The contrast between ice-bound Thunder Bay and the open waters of Lake Superior at Grand Marais was striking. All were interested in the great flocks of coweens, the herring gulls, American golden-eyes and American mergansers. Two bald eagles, wintering bronzed grackles and slate-coloured juncos were also observed. We trust this International get-together may become an annual event.

### EARLY SPRING

Following the mild winter, the spring of 1952 was earlier than average, despite heavy though not unexpected snowfalls in the latter part of March. April was the warmest in ten years with a mean of 40.8°. On April 18th the temperature reached 78.4° and for the remainder of the month the daily high ranged in the neighbourhood of 70°. Snowfall amounted to 5.2 inches

The first migrants, crows and herring gulls, arrived on March 18. The usual large flocks of redpolls were absent, only the occasional small flock being observed in the third week of March. By April 30, 61 migrants had been reported, in comparison with 63, 66, 31 and 39 in the years 1948, 1949, 1950 and 1951. They averaged four days earlier than usual. New early arrival dates were established by 11 species. A pied-billed grebe, April 3, pigeon hawk on April 11, white-throated sparrow, April 17 and olive-backed thrush, April 26 were particularly early, but most unusual were the reports of house wrens on April 22. This species had never been noted earlier than May 10.

By the second week in April, small areas of water were present in the fields and the first ducks, a pair of blacks, were noted on April 11. The streams and smaller lakes were open by the twentieth and small numbers of green-winged teal, mallards and pintails were arriving. The ice blew out of Thunder Bay on April 23, and the suitable feeding grounds thus provided attracted the diving ducks. On the twenty-fifth, American golden-eyes were abundant and the ring-necked, redhead, lesser and greater scaup had arrived. To the date of writing, however, ducks have appeared in relatively small numbers. Canada geese were observed on April 12, blues on April 16, and snows on April 23; but relatively small numbers of geese have been seen passing over. It is unusual for them to feed in this district on either spring or fall migration. A small flock of whistling swans is usually observed each spring. This year they appeared on April 29. Lesser yellowlegs on April 26 heralded the migration of the shore-birds.

As a whole, birds have been relatively scarce, the exception being the robin which is present in unusual numbers. The American rough-legged hawk has been very uncommon, only one report being received for that species. The woodcock, a newcomer to the Lakehead which had become a relatively common summer resident, is absent from its usual haunts. This species is rare this year throughout Ontario, a condition attributed to severe conditions in their wintering grounds in Louisiana. Unusual, was our observation of a Krider's hawk on

April 11 and C. E. Garton's record of a white-breasted nuthatch on April 26. This species has been reported at the Lakehead on only two previous occasions. The starling has apparently learned to migrate. Although fewer individuals are noted in the winter months, it again becomes common in early spring and now breeds throughout both the urban and rural districts. The ruffed grouse is particularly abundant and may be reaching the peak of another cycle.—Fort William, Ontario.

# 1952 Nationwide Study of Nocturnal Bird Migration

Do you have access to a telescope? — birds per mile of front are estimated

Whether it is big one of the sort found in observatories, or a small one of the sort in use among bird students, it gives you a real opportunity to aid in answering the many questions that surround the movements of birds in the night sky. Either instrument makes it possible to obtain counts of birds passing before the disc of the moon. From this information, estimates of the volume and direction of nocturnal migration at different times and places may be derived. From these results, in turn, comparisons can be made that should ultimately tell us anything we want to know about the mass movements of birds at night. This approach has already been employed with splendid success in a study of spring migration, based upon data secured by over 200 astronomers and ornithologists working at 30 widely separated stations. Some of the surprising things discovered are discussed in a recent paper by Dr. George H. Lowery, Jr. (**"Quantitative Study of Nocturnal Bird Migration,"** University of Kansas Publications, Museum of Natural History, vol. 3, no. 2, pp. 361-472).

In the original investigation, the northern United States was represented by very few hours of observation, producing low counts. The only observations in Minnesota were at Hopkins on the night of May 22. There, 2000

birds per mile of front are estimated to have passed the station in the four hours from 8 P. M. to 12 P. M. The peak flights occurred in the 11 to 12 P. M. interval, when more than twice as many birds are estimated to have flown by as in any previous hour. The directional trends showed a strong westward deflection. In contrast, six stations with more southern locations produced average hourly estimates of 2000 birds or better during watches extending over several nights. If night migration in the northern tier of states could be shown to be consistently as light as the Hopkins figures indicates it to have been on one night, that in itself would be a fact of tremendous importance. It is likely, however, that future observations will show that the data now available do not fairly represent the situation in the North.

For this reason, the best possible coverage is needed in Minnesota and the adjacent states during a second cooperative study being staged this fall. It is to be hoped that members of the Minnesota Ornithologists' Union will be able to lend full cooperation. The observational procedure is extremely simple; anyone can master it in a few minutes. Interested persons can secure instructions and additional details by writing at once to **Robert J. Newman** at the Museum of Zoology, Louisiana State University, Baton La.,

where the data will be mathematically processed.

**Editor's Note:** The telescopic observation of bird migration is an off-shoot of an interesting controversy over Trans-Gulf Migration that appeared in

the pages of **The Auk** and **The Wilson Bulletin** a few years ago. Readers who are interested in this cooperative project would do well to read the Lowery and Williams articles on Trans-Gulf Migration **P. B. H.**

## Notes of Interest

**SNOWY EGRET SEEN AT LAKE TRAVERSE**—On September 1, 1951 we saw a single snowy egret, *Egretta thula*, at the U. S. Reservation Dam on Highway 117 across Lake Traverse. This dam is approximately eight miles southwest of Wheaton, Minnesota. The snowy egret was seen at approximately 6:00 P.M., the day being heavily clouded and the temperature about 55 degrees. The egret was seen feeding at the dam with a flock of black-crowned night herons, which were obviously preparing for migration. The egret was easily frightened, and would fly away only to return to the same spot each time. It was observed with a 20-power spotting scope as well as binoculars which helped us to be certain about its identity. The yellow feet, black bill, and small size were the principle characteristics used in identification.

Dr. Roberts states in *The Birds of Minnesota* that one snowy egret was seen April, 1884 at Heron Lake, Jackson County, Minnesota, and one in Minneapolis in 1892. Dr. Roberts indicated that the breeding range was changing. The characteristic wandering movements of the egrets after the breeding season is over is probably the explanation of this unusual report.—Oscar Enstrom and Jack Bardon, St. Paul, Minnesota.

**Editor's Note:** A Snowy Egret was reported by Longley near Albert Lea in 1950.

**A BIRD-LIST FROM THE NORTH SHORE OF LAKE SUPERIOR**—During 1950 and 1951, residents on the North Shore of Lake Superior remarked, "The bird life of this region appears to be changing. This year we see birds that we have not discovered here before."

These comments stimulated questions in our minds. Were these observers achieving, through experience, an added insight into bird life which was expanding their bird lists? Had the unusual weather conditions of these years influenced the bird population? Or were the ecological changes, created by the return of forests to the burned and cut-over areas, producing conditions favorable for bird species not observed previously?

On the basis of our knowledge of the birds of the North Shore of Lake Superior, we could not attempt to answer our questions. We did resolve, however, to record our observations for use, over a period of years, as a means of comparison. Through necessity these observations were chiefly incidental and were made in the areas of the North Shore which were visited in pursuit of John's duties as Aquatic Biologist for the Minnesota State Department of Conservation.

We developed an appreciation of the unique personalities of the various species which gave us much pleasure. The early, "Please, please to meet you," of the chestnut-sided warbler created the same happy beginning for the day as the cheery, "Good morning," of a city neighbor on the way to work.

During June and July, 1951, observations were made to determine the species of birds found in second growth timber within a limited area near the Split Rock River. The Split Rock River is located in Lake County, Minnesota. It enters Lake Superior approximately 18 miles north of Two Harbors. Observations were made in an area about six miles from Lake Superior where a county road crosses the West Branch of the Split Rock River. Our bird lists in this locale were obtained from roadside checks and walks along the abandoned Alger-Smith railroad grade, between 7:45 A.M. and 6:30 P.M.

The vegetation is second growth aspen and birch with scattered conifers. Alder, dogwood, hazel and willow often form an under-story or an edge effect. Wild meadows and beaver ponds are common in the area.

Birds identified during June and July, 1951, within the described area are as follows:

short-billed marsh wren	great blue heron
brown thrasher	mallard
catbird	broad-winged hawk
olive-backed thrush	marsh hawk
robin	sharp-shinned hawk
veery	sparrow hawk
cedar waxwing	ruffed grouse
starling	woodcock
Philadelphia vireo	herring gull
red-eyed vireo	black-billed cuckoo
chestnut-sided warbler	ruby-throated hummingbird
mourning warbler	downy woodpecker
northern water-thrush	flicker
ovenbird	pileated woodpecker
redstart	yellow-bellied sapsucker
yellow-throat	alder flycatcher
cowbird	kingbird
red-winged blackbird	least flycatcher
scarlet tanager	wood peewee
rose-breasted grosbeak	blue jay
goldfinch	crow
purple finch	raven
clay-colored sparrow	black-capped chickadee
song sparrow	white-breasted nuthatch
white-throated sparrow	house wren

The bulk of the migrating warblers were seen in this area before May 19. Since the birds on the above list were observed repeatedly during June and July, it is believed that they are the summer residents of the area. An exception is the Herring Gull, which flies inland from Lake Superior.

A count of the birds singing in the vicinity of the West Branch of the Split Rock River was made on June 24. The location chosen for the count was an 1.8 mile section of the abandoned Alger-Smith railroad grade. This railroad grade

borders land which is predominately low and thus is devoted to aspen, willow, alder and dogwood growth. Three beaver ponds lie adjacent to the railroad grade. At the one point of high ground along the section mature aspen and birches are found.

In making the bird call census we walked steadily along the 1.8 mile section, one of us listening to the calls and the other recording the birds. A record was made of each singing individual bird. The call census on June 24 was undertaken between 9:00 A.M. and 10:00 A.M. following a night of rain. The sky cleared at approximately 9:30 A.M. when there was a noticeable drop in bird singing. This is only a tally of the birds which sang during this period. It also assumes that birds, once counted, did not fly ahead of us to be counted again.

The results of the bird call census in order of decreasing abundance are as follows:

chestnut-sided warbler	10	alder flycatcher	1
veery	9	ruffed grouse (drumming)	1
mourning warbler	7	catbird	1
ovenbird	7	cedar waxwing	1
red-eyed vireo	6	rose-breasted grosbeak	1
Philadelphia vireo	5	olive-backed thrush	1
song sparrow	5	downy woodpecker	1
white-throated sparrow	5	house wren	1
least flycatcher	4	scarlet tanager	1
redstart	4	goldfinch	1
yellow-throat	3	northern water-thrush	1
flicker	3	wood pewee	1
blue jay	3		

It is hoped that bird lists can be obtained from the same area during June and July of future years. Such lists might indicate changes (if any) in the bird species in the area. If a call count could be made in a later year on approximately the same date, under similar conditions of time and weather, a comparison of the number of singing individuals of each species might be obtained. Thus, a change in the number of singing individuals of a single species might indicate a change in abundance of that species.—John and Helen Hale, 2101 Knapp St., St. Paul 8, Minnesota.

**Yellow-breasted Chat in Southeastern Minnesota.**—During the years since 1936 when the second edition of *The Birds of Minnesota* appeared, few observations have been made on this species in Minnesota; the following notes are presented in order to bring up to date the information available on the status of the chat.

During mid-May 1950 a chat was heard calling in the dense weeds and brush of the flood plain of the Cannon River near its junction with the Mississippi River at a point 300 yards upstream from U. S. Highway 61 in Goodhue County. On May 15, 20 and 25, 1951, four chats were heard or were under observation at the same time and in the same small area of about 10 or 15 acres. Those seen called vociferously from exposed perches, interrupting their babbling and hop-

ping from branch to branch each with the peculiar fluttering and tumbling of their courtship display, a behavior pattern very unlike their usual habit of remaining well concealed. The high pitch of display activity and vocal efforts of these birds, probably all males, and the fact that the birds were found in the same patches of brush on each visit, suggest that territories were well established and that nesting may have begun.

On May 20, 1951, a single chat was heard calling near a stream 5 miles east of Cannon Falls in the same county. The area is similar in vegetation to the above mentioned habitat but is less extensive. A small colony of blue-winged warblers have nested there during the last several years.

Heretofore the chat had been found nesting in southeastern Minnesota only in a very narrow strip between the bluffs and the Mississippi River between Brownville and the Iowa border in Houston County, where it is now common (Bergerud, T.; *Flicker* 19 (3): 79. 1947). There in 1948 I found a fully grown juvenile still being fed by adults on June 29. The young bird had already begun its postjuvinal molt, indicating that the nest from which it came must have been started approximately 40 days before (May 20). A nest found on June 13, 1938, near the Mississippi River and one-half mile north of the Iowa border by the late Russell M. Berthel contained four heavily incubated eggs (*Flicker* 10 (1): 10. 1938).

The files of the Minnesota Museum of Natural History contain few other observations made since 1936. Except for a May 10 observation at St. Cloud, a mid-May observation in St. Paul and those from the extreme southeastern part of the state, all others are of birds seen in the extreme western counties (Lac Qui Parle, Big Stone), where individuals have been seen by several persons, and several have been banded in May, June and August by Mrs. C. E. Peterson of Madison. Two nests were reported found in 1941 and one in 1942 near Ortonville by Miss Alma Chesley (*Flicker* 15 (4): 52-53. 1943).

The chat is apparently extending its range in at least the southeastern part of the state; none were found in the Goodhue County localities in 1948 and 1949 although several visits were made to each area during the early part of the nesting season. —Dwain W. Warner, Museum of Natural History, University of Minnesota, Minneapolis.

**WESTERN KINGBIRD IN ANOKA COUNTY**—During the last 50 years there have been some important changes in Minnesota bird life. One of these changes has been the extension of range eastward of the Western Kingbird.

This past summer has produced an influx of western kingbirds in several places in Anoka County, not far from north Minneapolis.

The first bird was spotted near Moore Lake (Central Avenue & Highway 100) on Sunday, May 20, by members of the Minneapolis Bird Club. The bird club found another bird the following Sunday near a filling station at the intersection of Lexington Avenue and Highway 8. Two more birds were seen at the Anoka airport the next Sunday, and also on subsequent visits to the area during the summer (Pieper). Still another was found at 115th Street and the West River

Road in July. The nest was located, but there were no young birds present (Futcher).

The first Western Kingbird was reported in this area in May of 1930. The first record for the Minneapolis area was also found north of Minneapolis in this same region of the many reports of this year.

The Minneapolis Bird Club has been taking field trips in this sandy area for ten years, but this was the first season they have observed this interesting movement into this area.—William Pieper and John Futcher, Minneapolis Bird Club.

**THE ANNUAL NORTH SHORE TRIP**—On February 23 and 24, nine Minneapolis birders joined eight from Duluth for a trip up the North Shore of Lake Superior. The temperature was in the twenties, there was little wind, little snow, excellent roads, and the lake was open north of Two Harbors.

The stops that were made were at:

**The John Bero residence, Duluth**—His many unusual feeding trays attracted from 125-150 evening grosbeaks in the morning, and in the late afternoon a pileated and a downy woodpecker, and black-capped chickadees.

**Star of the North, Schroeder**—Here Marie Aftreith reported seeing an immature golden eagle diving at an American merganser.

**Dr. W. P. Abbott's residence, 12 miles north of Grand Marais**—There were Hudsonian chickadees at his feeders.

**The border**—Forty members of the Thunder Bay Naturalist's Club met us for dinner and a showing of *Behind the Flyways*, a Fish and Wildlife Service film.

**Gunflint Trail**—A short trip up the Gunflint Trail was made Sunday morning where two Spruce Grouse were seen.

Some of the other birds observed were: old squaw ducks, two grackles, glaucous gulls, northern shrikes, snow buntings, three bald eagles, many ravens, buffle-heads, American golden-eyes, and American mergansers. The latter were going through a courtship performance. Amy Chambers, Minneapolis Bird Club.

**NOTES FROM NISSWA, MINNESOTA, 1951**—The following notes were compiled from a letter sent by Mr. Wass to Harvey Gunderson.

**Wood Duck Male cripple** found in a small spring on December 4. It died the next day.

**American Golden-eye** Approximately 90 seen in Big Pelican Lake on November 11. On December 2, two were noted flying over.

**Bald Eagle** Two sitting on ice in Big Pelican Lake on November 11.

**Ruffed Grouse** Nine seen on November 24. One heard drumming after nightfall on December 4.

**Sharp-tailed Grouse** One observed flying overhead along lakeshore on November 21.

**Wilson's Snipe** One flew to an ice free spot from which a boat had just been chopped out, and began probing in the ooze. Lake was entirely frozen over.

**Arctic Three-toed Woodpecker** One or more seen near house almost daily. When I was home during the first part of June this last summer, a pair had just constructed a nest hole in a green jackpine with a rotten core. The male seemed to do most of the incubating. My brother thinks that the young were reared successfully in spite of the nesting trees location in a hog lot only about 150 feet from our house. I have recently seen an immature male. On December 5, I saw one enter a hollow jackpine bird house which I put up two years ago, hoping that crested flycatchers would use it. The adult male woodpecker remained in the house for several minutes. These woodpeckers are sedentary and solitary in their habits, never seeking easy picking in the cornfields as do the hairy's, or hobnobbing with roving bands of lesser birds as the downys do.

**Canada Jay** A single bird seen about 10 miles west of Pequot Lakes in Cass County on November 24. It was in a tiny spruce swamp.

**Red-Breasted Nuthatch** Quite plentiful this year. Seen almost daily. Five seen on November 10. I haven't seen more than two in any mixed flock.

**Brown Creeper** Also found in almost every flock, but I haven't seen more than two in any one day.

**Golden-crowned Kinglet** Still found in chickadee flocks, usually two in each flock. I have been able to identify six species of birds in the chickadee bands at quite a distance. The kinglets are the fluttery ones.

**Evening Grosbeak** Four seen on November 24 about 10 miles west of Pequot Lakes in Cass County.

**Pine Grosbeak** Common. Nine noted on November 21. They seem to feed primarily on Jackpine buds.

**Pine Siskin** Sixty-six counted on November 4. Dwindled to six on November 12.

**Goldfinch** Only two were seen on November 4, but on November 14, 23 were seen. None have been identified since then. Abundant paper birch seed caused these species to congregate. The last of it is now being eaten by the redpolls. The Crossbills which were most common birds last year, have been entirely absent this year.

**Slate-colored Junco** Two late birds seen on December 1.

**Tree Sparrow** Single bird apparently eating snow fleas was seen on November 21.

**White-throated Sparrow** A single bird was seen in a farmer's yard near Pequot Lakes on November 19. No other sparrow was present.

**Snow Bunting** Twenty-three seen on November 5, approximately 50 on November 30.

I was discharged from the army on October 31. The day after I arrived home the temperature dropped to -15 degrees near here. Recently the weather has been milder. On December 2 I transplanted 30 pine trees. On November 4. I saw a mourning cloak butterfly. **Marvin Wass, Nisssa, Minnesota.**

**FOOD OF OWLS** — During the past few years we have collected a number of owl pellets, some disgorged by recently captured birds and some found be-

neath nesting sites. The contents of the set pellets as well as animal remains found beneath the nests provide some insight into the food of these birds.

**GREAT HORNED OWL**—June 2, 1950—the remains of a little brown bat beneath a nest which contained two large young owls.

May 23, 1951—beneath a nest containing two young, we found the head of a muskrat, the head of a herring gull and the remains of a snowshoe hare. Pellets contained the remains of one young varying hare, one house rat, and the foot of a long-eared owl (incidentally the long-eared owl is a rare species locally for which we had only one breeding record and two additional records of single birds).

**BARRED OWL**:—May 12, 1943—dead red-backed mouse on ground beneath nesting cavity.

**GREAT GRAY OWL**:—December 8, 1950—an injured great gray owl was received which disgorged a pellet containing the remains of three meadow mice.

**RICHARDSON'S OWL**:—March 7, 1940—one of these little owls was retained in captivity over night. It disgorged a pellet containing the remains of a red-backed mouse. Fort William, Ontario.

**A TRIP THROUGH NORTHEASTERN MINNESOTA** — April 25-29, 1951. Business necessitating a visit to Kenora, Ontario, at the end of April, 1951, we decided to make the trip from Fort William via Pigeon River, Duluth, the Iron Range Country and International Falls. Since this portion of northeastern Minnesota, apart from the Duluth region, receives little attention by bird students, we believe an account of the trip may be of some interest to readers of *The Flicker*. They should recall that migration in the early spring of 1951 was retarded.

We left home on the late afternoon of April 25. The woods and fields were deep with snow until we were some 20 miles below the International border when it disappeared. Herring gulls, crows and robins, a pair of pileated woodpeckers and the first sparrow hawks of the season were noted. At Grand Marais on the open waters of Lake Superior we found cowbirds and horned grebes. Between Fort William and Two Harbours, where we spent the night, we saw many ruffed grouse budding in the trees. This was surprising at the time because it had been considered the previous fall that this species was again on the decline. (The season of 1950, however, proved to be a successful one for the species in the area concerned). Along the highway we counted 23 deer. Several varying hare in the brown pelage were observed between Grand Marais and Two Harbours.

Leaving the latter community on the morning of the 26th, blue jays, a downy woodpecker and a flicker were encountered. Approaching Duluth, species as well as numbers increased and we saw great flocks of bronzed grackles, American golden-eyes, a great blue heron and a cedar waxwing and added cowbirds and redwings, as mergansers to the year's list. But once we turned northwest along the 200-mile highway to International Falls, we again encountered winter conditions. The lakes were frozen although rivers were open. It was interesting to note varying hares were still white. Many ruffed grouse were noted dead on the

roadway where they had undoubtedly been killed by speeding cars. They were providing food for scavenging gulls and crows and since it would not appear that a dead bird would long remain uneaten, the total kill at this season must have been great. Mallards occurred in pairs on the open streams. A sparrow hawk, marsh hawk and a yellow-bellied sapsucker were among the few birds listed.

The area about Fort Frances has a much earlier season than has the Canadian Lakehead. At Emo we heard the first swamp tree frog of the year and western meadow-larks were listed. Along the highway to Kenora we saw an occasional American rough-legged hawk and red-breasted nuthatches. A hooded merganser displayed on an open stream. High overhead, my son David spotted a soaring turkey vulture. This is one of the few areas in Canada where this southern species may be expected.

The return trip was commenced on April 28. Such business trips permit little time to tarry and observations must be made from the speeding automobile. It was soon evident, however, that there had been a marked weather change and we later learned the temperature at Duluth reached 78°. Purple finches and evening grosbeaks were new species recorded for the trip. More and more frogs were heard and their presence probably explained the appearance of broad-winged hawks, which were perched silently over pools where the frogs were congregating. More and more ducks were seen on the rivers including lesser scaup. For the first time we heard the rattling call of the kingfisher.

As we re-entered Minnesota, great flocks of migrating birds were encountered—redwings, rusty blackbirds, bronzed grackles, robins, flickers, and song sparrows. More and more new species were seen as we travelled south. Near Eveleth we recorded William's snipe, buffleheads, a phoebe, myrtle warbler, pigeon hawk, hermit thrush and a few greater yellowlegs. Peculiarly, the only Canada jays of the trip were a pair observed northwest of Duluth where we spent the night.

Anticipating an interesting trip along the north shore from Duluth to Fort William we had planned to drive leisurely but a strong wind off Lake Superior, rendered conditions unsatisfactory for bird observation and only a flock of co-weens and the occasional flicker were seen. The third mammal of the trip was added when we saw a western chipmunk at Cascade River. Along the Fort William waterfront we saw a pintail, black ducks, American golden-eyes and the first ringnecked ducks of the year. As we pulled to a stop after a round trip of 1023 miles, during which we recorded 52 species, a pigeon hawk swooped at a house sparrow feeding on our lawn and overhead an American goldfinch sang in the birch trees, three weeks earlier than it had previously been recorded in our area.— **Fort William, Ontario.**

**SOME NOTES ON THE APPEARANCE OF THE MOCKINGBIRD IN MINNESOTA**—In reporting another appearance of the mockingbird in Minnesota, it might be interesting to review briefly previous reported appearances of this southern songster in the North.

Culling some reports from Robert's *Birds of Minnesota* we find that the rec-

ord goes back to 1883, the first report credited to Fred Baker of Parkers Prairie. The record follows:

Date	Where Observed
1883—June 1	Fred Baker, Parkers Prairie, Otter Tail County
1896—June	H. W. Gleason, Lake of the Isles, Minneapolis
1898—May	" " " Waconia, Carver County
1916—Nov. 23	Dr. N. A. Weber, Campus, U. of N. Dak. at Grand Forks: (This is just across the Red River from Minnesota)
1917—May 15	Miss Eleanor Jilson, Frontenac on Lake Pepin
1923—May & June	J. M. Eheim, Hutchinson, McLeod County
1927—Nov. & Dec.	Miss Mary Lees, Alma Wisc. (Just across the Mississippi). This is the first winter record.
1928—Nov. 5	W. J. Breckenridge, Mississippi River Bluffs, Near Mpls.,
1932—Dec. 26	Sigurd F. Olson, Ely, St. Louis County. The second winter record.
to	
Feb. 11, 1933	(This bird froze to death during a minus 40° cold spell).

Then follows a period of 17 years before there appears another authentic published report for Minnesota. In the meantime there are several reports from points in North Dakota.

1938—	Ralph Smith, Dickinson, N. D. (Western part of state).
1939—	" " "
1942—May	Mrs. W. E. Bretzel, Fargo, N. D. (Eastern part of state).
1943—	Mrs. Gray, Wilton, N. D. (Central part of state).
1946—July	O. A. Stevens, Fargo, N. D. (Eastern part of state).

Mr. Stevens made a careful study of the mimicry of the bird he had under observation at that time and claimed that it repeated the songs of 21 different birds.

After a long vacant spell two more appearances have been recorded for Minnesota.

1950—July 5	John E. Rehbein, Cohasset (Bird observed near Deer River).
1951—July 1	O. A. Finseth (Bird observed in N. W. part of Polk County, one mile from Dakota border).

Dr. A. E. Allin of the Thunder Bay Naturalists Club of Fort William, Ontario, Canada and L. S. Dear, also of that club, reported seeing a mockingbird

on July 20 1948, which report appeared in the *Wilson Bulletin*, 61.4 as follows. "On July 20 1948 while in the grounds of the Mental Hospital 5 miles west of Fort William, Ontario, our attention was attracted by an unusual song, shortly followed by the clearly enunciated call of the Whip-poor-will. Our suspicion aroused, although the bird was extremely restless constantly flying from tree to tree, we were eventually able to get a good view and to identify it as a mockingbird (*Mimus polyglottos*). This is unusually far north for this species and constitutes, we believe, a first record for this district."

As Fort William, Canada, is only 50 miles north of the Minnesota border and on the northwest shore of Lake Superior it is more than likely that the bird they saw might also have passed through or visited Minnesota.

In that long period between 1933 and 1950 when apparently no authentic report appears for Minnesota, there is, however, one unpublished report that merits our attention. Mrs. Walter C. Olin, formerly of Duluth, now living in Minneapolis reports the following:

"August 26th 1941 I saw a robin-sized bird with much white on wings and tail in flight. Thought at first it was a shrike but on closer observation found its back was brownish gray, breast seemed slightly barred and beak was quite long with no hook. It was slightly larger than a cat bird." She wrote Dr. Roberts about this bird and I quote here his reply:

"In regard to the bird which you saw and about which you were uncertain, I think your conclusion that it was a mockingbird is probably correct.—The barring on the breast is the chief feature that does not seem to fit in with the mockingbird."

There is the Doctor's opinion, but I'm sure he didn't mean to spoil our cherished hope that we once had a mockingbird in Duluth.

The bird the winter observed on July 1, 1951 in the Northwestern part of the State came to my attention through my niece and her husband, Mr. and Mrs. Gulbranson. They live on a farm having a small grove of trees planted as shelter and windbreak close to the farm house. When they first told me they thought they had a mockingbird visiting their small grove out on the prairie I very much doubted their identification. I called at the farm the next morning and had not been there 15 minutes when the bird opened up with his concert. I knew at once I was hearing something unusual in bird song. I started in search of the performer, and did not have far to go before a long slender grayish bird with noticeable white wing patches and white outer tail feathers, which he displayed prominently, came out of the low bushes and flew to the top of a dead cottonwood where he resumed his singing. First a series of calls repeated so fast I could hardly keep count, then a soft m-e-o-w dragging it like a cat bird would, followed by a loud robin-like song in full voice. It seemed to me that a blue jay, a flicker, an oriole and a vireo were all calling or singing in front of me, but the notes came all from one throat up in the cottonwood.

Another mockingbird characteristic was its night singing. My niece told me that often upon returning late from an evening out, their headlights would flash

on the grove as they swung into the yard and the bird would start serenading them. One night this was kept up until 2:30 in the morning. Their children complained they couldn't go to sleep because, "that bird sings so much."

The bird I have just described arrived about June 15, and seemed to divide his time between the Gulbranson farmstead and an adjoining farm grove about half a mile distant. It was observed almost daily up to July 13 when it disappeared.

From the above it is interesting to note that the mockingbird has now been observed at least a dozen times in Minnesota. There may of course be other observations that have not been reported or published and of which we have no knowledge. It has been observed in eight out of the 12 months in the year, twice in winter. It is worth noting too, how many times it has appeared two years in succession, viz: 1916—1917, 1927—1928, 1932—1933. (In the latter instance the same bird), 1938—1939 (North Dakota), 1942—1943 (North Dakota), 1950—1951 (Minnesota).

Will there be another three to five years before another is reported? Lets keep a sharp lookout for him. Maybe he visits us more often than we realize. O. A. Finseth, Duluth Bird Club.

**Editor's Note:** Mrs. Charles Peterson, Madison Minnesota reported a mockingbird at her feeding station, November 18-19 1951. *The Flicker*, 24:1) P. B. H

## Call Notes

Dr. W. J. Breckenridge was named president of the Wilson Ornithological Club at the Gatlinburg meeting.

Minnesota was well represented at the Wilson Club meeting in Gatlinburg, Tennessee. Dr. O. S. Pettingill, Jr. of Northfield, Dr. and Mrs. Breckenridge and family, Mr. and Mrs. Lewis Barrett, Miss Theodora Melone, and Miss Vera Sparkes from the Twin Cities, and Mr. and Mrs. J. K. Bronoel, Mrs. Harvey Putnam, and Mr. and Mrs. P. B. Hofslund of Duluth attended the 33rd annual meeting.

Placing third in a field of 70 entries in the 1952 duck stamp design contest was another honor garnered by Dr. Breckenridge. John Dick of Meggett, S. C. was the winner of the competition with a design of two Harlequin Ducks flying against high waves.

1,903,644 duck stamps were sold last year.

Several of the notes that appear in this section were gleaned from the columns of the *Voice of the Outdoors*, a feature of the *Winona Republican-Herald*. This column, at least the clippings we have received, is refreshingly different from the usual run of outdoor columns that appear in our newspapers. It reminds us of the *Waters and Woods* column that used to appear in the *Toledo Blade*. The latter was written by Lou Campbell, an accomplished ornithologist. The Call Note section of *The Flicker* would benefit if more people would send in clippings about happenings in the ornithological world.

June, 1952

A private pot-hole project was started a St. Paul meeting of the Wildlife Management Institute. The plan encourages a sportsman-farmer relationship in the development of private ponds where wild ducks can hatch and raise a family..

Minnesota ornithologists are cooperating with the Fish and Wildlife Service and other agencies in several projects. Mourning dove censuses, woodcock and Wilson snipe counts, a cooperative bird migration project, the Fall hawk migration project, and one in cooperation with the Weather Bureau to determine the possible effect of the ceilometers on migrating birds, to name some of them.

The 1953 meeting of the Wilson Ornithological Club will be held at the University of Michigan's Biological Station near Cheboygan, Michigan. This meeting will be close to home, and should provide an informal setting that helps to make these meetings so enjoyable.

The 1952 meeting of the American Ornithologists' Union will be held in October at Baton Rouge, Louisiana.

The annual Field Day of the Duluth Bird Club was held on May 24. The day was particularly well chosen, because of an excellent warbler wave. Unusually large numbers of black-pollled, mourning, and bay-breasted warblers were found among the 20 species recorded. Rare birds for the Head of the Lakes included three red-throated loons and a yellow-throated vireo. About

105 species were seen during the day.

Mr. and Mrs. Barrett, Miss Vera Sparkes, Miss Amy Chambers, and Dr. John Erickson were guests of the Duluth Bird Club at the annual May Field Day.

A word of commendation is due the retiring members of the officers of the M. O. U., Mr. Whitney Eastman and Mr. M. H. Adams for their excellent work during the past year.

The tent caterpillar season is on, and with it a rash of spraying. We have had reports of damage done to vegetation, and even to car finishes by spraying. It would be wise to remember that a spray that is effective is also likely to be dangerous. Spraying should be done carefully and with the consideration due to all things concerned

Several omissions were noted in the March, 1952 edition of *The Flicker*. The photo credit line was left out under the picture of the Red Crossbill. The cut was made from an enlargement done by Henry Gilbert of Duluth, from a negative taken by Sheridan Flaherty of Morris. Credit should have been given J. K. Bronoel for the compilation of many of the nesting records used in the 1951 Nesting Survey. Dr. Olga Lakela brought to my attention a record of LeConte's Sparrow in the Duluth Region in her mimeographed *Check-list of the Birds of the Duluth Region*. This record was on July 30, 1943.

John and Helen Hale are new contributors to *The Flicker*. John is an aquatic biologist, and is now stationed at the French River hatchery near Duluth.

## The Book Page

A recent study published as **Occasional Papers**, number 5 of the Museum of Natural History, University of Minnesota, is **The Common Loon in Minnesota** by Sigurd T. Olson and William H. Marshall.

A beautiful book illustrated by the color photographs of A. A. Allen has been published by the National Geographic Society. **Stalking Birds with the Color Camera** sells for \$7.50.

Many of us have wanted to own a George Sutton painting. Copies of four of his paintings are now available at \$15.00 a piece through the Committee of Neotropical Research, University of Michigan's Museum of Zoology. Proceeds from this sale will go toward the publication of some of Sutton's paintings of Mexican birds.

A thrill we had when we visited the Audubon Museum at Henderson, Kentucky was seeing Audubon's copy of Alexander Wilson's "Ornithology."

The Wisconsin Society for Ornithology has several articles in the winter issue of the **The Passenger Pigeon** that should be of interest to readers of **The Flicker**. One, **Shall W.S.O. Have a Bird Sanctuary**, suggests a project for future consideration by the M.O.U. Another, a reprint from the **Florida Naturalist**, deals with the sight record, a "bone of contention" in ornithological endeavor.

"Why should we help to preserve birds Not merely because they are useful, but above all, because they are interesting, beautiful and can give us so much delight. About the beauty of

birds I have not been able to say much — one needs to be an artist to portray such loveliness and a poet to describe it, but all who care to do so can appreciate it." Taken from Edward A. Armstrong's **Bird Life** published by the Oxford University Press.

The humor that we found in Clyde Christensen's **The Molds and Man** was surprising in a treatment of a scientific subject but never-the-less we found it both entertaining and informative. We particularly enjoyed the plug he gave for basic research. Dr. Christensen is a professor of plant pathology at the University of Minnesota.

Elsa Guerdum Allen's fascinating **The History of American Ornithology before Audubon** can be purchased through the **American Philosophical Society** at Philadelphia, Pennsylvania for \$2.00.

Dover Publications has done another service to ornithologists when they reprinted Arthur Cleveland Bent's **Life Histories of North American Wild Fowl (Order Anseres), Ducks, Geese, and Swans**. This two volume work sells for \$8.00, and therefore is in the price range even of ornithologists. This company had been noted for the publication of books that fit into the budget, and still are of great scientific interest.

We had an occasion to use Pettigill's **Guide** when we traveled to the Gatlinburg meeting. It met our expectations to a very high degree.

In Monica de la Salle's **Suggestions**

for a small Ornithological Reference Library (Audubon Magazine, 54:2, p. 110—111) Olin Sewall Pettingill's Guide to Bird Finding and Laboratory Manual, along with Margaret McKen-

ny's Birds in the Garden, that was published by the University of Minnesota Press, were selected as basic reference texts. P.B.H.

#### Names and Addresses of Minnesota

1. Mr. Pershing B. Hofslund, 4410 Pitt Street, Duluth 4, Minnesota.
2. Mr. Ron Anderson, 837 Nicollet Avenue Mankato, Minnesota.
3. Mr. L. S. Ryan Jr., Route 4, Little Falls, Minnesota.
4. Mrs. Charles E. Peterson, 621 Hillcrest Avenue, Madison, Minnesota.
5. Mr. R. A. Kortmann, Box 85, Newport, Minnesota.
6. Mr. & Mrs. Don F. Hamilton, Melody Hill, Hopkins, Minnesota.
7. Mr. Lyman W. Hewlin, Broadwater Lodge, Hackensack, Minnesota.
8. Mrs. Paul A. Becker, 251 E. Phelps Street, Owatonna, Minnesota.
9. Mrs. Melvin Jacobson, 229 Linden, Owatonna, Minnesota.
10. Mrs. G. H. Culberston, 104 Linden, Owatonna, Minnesota.
11. Morrie and Ruth Self, Birchwood, White Bear Lake 10, Minnesota.
12. Miss Constance Everett, 206—9th Street N. E. Waseca, Minnesota.
13. Brother Vincent, St. Mary's College, Winona, Minnesota.
14. Mr. Elmer Ollhoff, 626 E. Broadway, Winona, Minnesota.
15. Mr. Ed. Woolverton, Cook Minnesota.
16. Mrs. Luella H. Quady, Buffalo, Minnesota.
17. Mr. Harry H. Goehring, 602 3rd Avenue South, St. Cloud, Minnesota.

#### Bird Banders (April 20, 1951).

18. Mr. Wallace N. MacBrair Jr, 624 10 Street, South, St. Cloud, Minnesota.
19. Mrs. John A. Thompson, 3420 Holmes Avenue South, Minneapolis 8, Minnesota.
20. Mr. Dana R. Struthers, 4858 Fremont Avenue South, Minneapolis 9, Minnesota.
21. Dr. Dwain W. Warner, Mus. Nat. Hist., U. of M. Minneapolis 14, Minnesota.
22. Dr. W. J. Breckenridge, Mus. Nat. Hist., U of M. Minneapolis 14, Minnesota.
23. Mr. Milton D. Thompson, Library Science Mus. Minneapolis Public Library, Mpls., Minn.
24. Brother Pius, Creton High School, St. Paul 5, Minnesota.
25. Mr. William M. Cummings, 2276 Youngman Avenue, St. Paul 2, Minnesota.
26. Dr. William H. Marshall, 300 Coffey Hall, University Farm, St. Paul 1, Minnesota.
27. Mr. Walter A. Jiracek, 2404 35 Avenue South., Minneapolis, Minnesota
28. Mrs. E. R. Selnes, 500 E. 3rd Street, Morris, Minnesota.
29. Miss Julia Hawkes, Waseca, Minnesota.
30. Dr. James R. Beer, University of Minnesota, St. Paul, Minnesota.
31. Miss Margaret Drum, 217 South Street, Owatonna, Minnesota.

**NOT ACTIVE MINNESOTA  
BANDERS**

32. Dr. O. Pettingill, Jr., Carlton  
College, Northfield, Minnesota.

(Bands only in Michigan)

33. Mr. Marvin H. Adams, 1808  
Portland Avenue, St. Paul 5, Minne-  
sota.

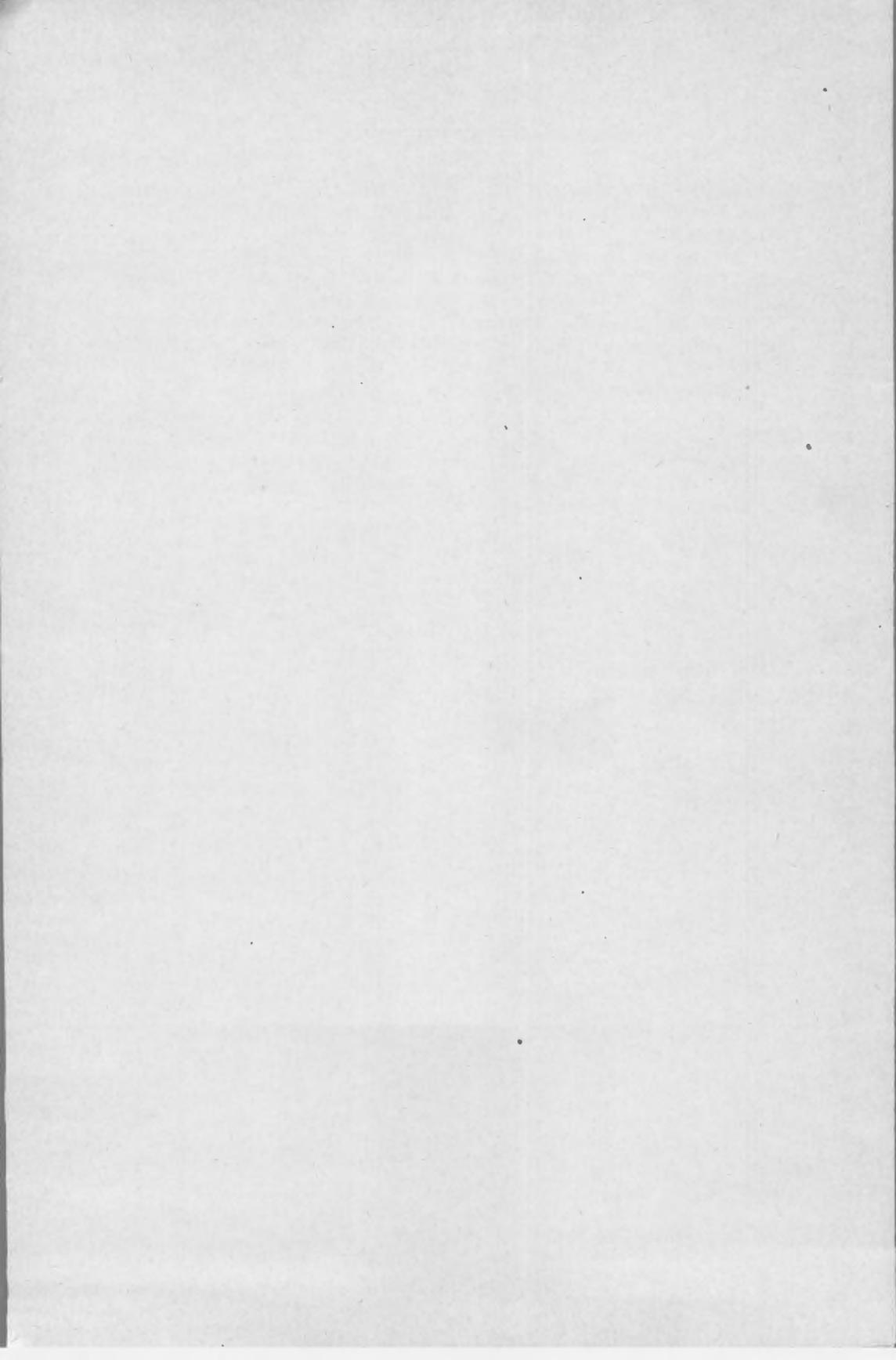
(Banded 5 years at Museum  
in Milwaukee, Wis.)

34. Mr. Arthur S. Hawkins—Fish  
and Wildlife Service, 1006 W. Lake  
Street, Minneapolis.

(Bands in Canada in summer)

35. Mrs. H. F. Sandhoff—Mound,  
Minnesota (Passed away 3-12-51)

Note:—Some of the above operate sub-  
stations under the permit of others.



# Minnesota Ornithologist's Union

## Affiliated Societies

### DULUTH BIRD CLUB

Officers: President, Mr. O. A. Finseth; Vice President, Ralph Boeder; Secretary, Mrs. Harvey Putnam; Treasurer, Miss Mira Childs.

Meetings are held at the University of Minnesota, Duluth.

### MINNEAPOLIS AUDUBON SOCIETY

Officers: President, Mrs. G. R. Magney; Treasurer, Mrs. W. W. Wilcox; Recording Secretary, Mrs. A. M. McLeod; Corresponding Secretary, Mrs. S. A. Gile; Field Secretary, Mrs. J. A. Thompson; Auditor, Mrs. Gaylord Davidson.

Meetings are held at the Walker Branch Library.

### MINNEAPOLIS BIRD CLUB

Officers: President, Mr. Rene Hurtubise; Vice President, Mr. Boyd M. Lien, Secretary, Mrs. Boyd M. Lien; Treasurer, Mrs. Victor Smith.

Meetings are held at the Minneapolis Public Library Museum.

### MINNESOTA BIRD CLUB

Officers: President, Dana Struthers; Vice President, Forrest Lee; Secretary, Jesse Richardson; Treasurer, Lucille Hunter.

Meetings are held at the Museum of Natural History, University of Minnesota.

### ST. CLOUD BIRD CLUB

Officers: President, H. H. Goehring; Vice President, Mrs. Charles Beacom; Secretary-treasurer, Miss Loretta Rosenberger.

Meetings are held in the committee room of the public library.

### ST. PAUL AUDUBON SOCIETY

Officers: President, Mrs. Charles E. Hart; Vice President, Mr. Phillip J. Hummel; Treasurer, Mr. M. H. Adams; Recording Secretary, Miss Helen E. Schulte; Corresponding Secretary, Mrs. Nanele K. Wells; Directors-at-large, Mr. John Haag and Mr. Joseph H. Reisinger.

### RANGE NATURALISTS' CLUB

Officers: President, Mrs. Dorothy Beard; Vice President, Hjalmer Halunen; Secretary, Vera F. Barrows; Treasurer, Ruth Ambrose.

Meetings are held the third Thursday of each month, October through May at 7:00 p. m. in the Clubrooms of the Virginia Public Library.

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PHYSICS DEPARTMENT

REPORT OF THE PHYSICS DEPARTMENT FOR THE YEAR 1900-1901

BY THE DEPARTMENT

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# The Flicker

## Organ of the Minnesota Ornithologists' Union

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### Officers of the Minnesota Ornithologists' Union

**PRESIDENT**—J. H. Reisinger, 849 Tatum, St. Paul 4, Minnesota.

**VICE-PRESIDENT**—Lewis Barrett, 1930 Lincoln St. N. E., Minneapolis 13, Minnesota.

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**TREASURER**—Mrs. Mary Lupient, 212 Bedford St. S. E., Minneapolis 14, Minnesota.

**EDITOR**—Pershing B. Hofslund, Biology Dept., University of Minnesota, Duluth Branch, Duluth, Minnesota.



# The President's Page

It was with extreme disappointment that I heard my doctor advise against travel just the day before the M. O. U. Convention at Frontenac. Through the little bird who conveys such tidings I understand that everyone had a most enjoyable time. I should like to extend my thanks to all participants, and I hope I shall merit the confidence they have expressed.

One of the first things that came to mind was a review of past issues of *THE FLICKER*. I found I was not taking advantage of the many privileges offered by my M. O. U. membership. There may be many other members with the same failing.

The M. O. U. maintains an exchange library carrying many periodicals of other organizations such as *THE PASSENGER PIGEON*, *JACK-PINE WARBLER*, etc. You will find these magazines a revelation and well worth the reading time. They are available at the Museum of Natural History, University of Minnesota, or can be mailed to you by writing the Treasurer, Mrs. Mary Lupient. Postage is paid one way. The Lakela Nature Library Collection, in honor of Dr. Olga Lakela, is available by writing The Librarian, University of Minnesota, Duluth Branch, Duluth, Minnesota. A list of titles is given in *THE FLICKER* Vol. 23: 4, Dec. 1951. Many nature publications of the University of Minnesota Press may be purchased at discount through your M. O. U. membership. Again write to the Treasurer, Mrs. Mary Lupient. It will be to your advantage as well as that of the organization to make your book purchase through this medium.

It is only through each member's help that the M. O. U. can become a functional society. The harder you shake the tree the more apples you gather. With the population increases we have had in this state since World War II we should considerably increase the membership in our various bird clubs, increase the number of clubs and the membership in the M. O. U. But the help of each member and each member club is necessary to reach this objective.

JOSEPH H. REISINGER, President



**A THISTLE-NESTING GOLDFINCH**

# THE FLICKER

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## Thistle-Nesting Goldfinches

by

Brother Hubert Lewis, F. S. C.

While making a song bird nesting census in the vicinity of St. Paul, Minnesota, in the summer of 1943, I was impressed by the abundance of goldfinches (*Spinus tristis*) within the city limits. I was puzzled, however, by my failure to find their nests. One day I happened to stumble against a thistle in which there was a nest with one egg. The plaintive calls of the female bird were quite familiar to me, but I had never before realized that those particular cries indicated the presence of a nest.

I found several more goldfinch nests in thistles. When I learned that only one thistle-nest had been reported from Minnesota (Roberts, 1936), I redoubled my efforts. Continuing my search throughout the summers of 1943, 1944, 1945 and 1946 I found a grand total of 591 active nests in thistles. A primary purpose of this paper is to explain how the thistle serves the bird during the breeding season, but certain observations which may or may not be correlated with thistle-nesting I wish to report also. My friends Brother J. Pius and Thomas Myers assisted me in my daily census work.

My study was confined to 1000 acres of neglected or undeveloped

real estate in the Highland Park district of St. Paul, Minnesota. The thistle-infested area was on two natural terraces across the Mississippi River from Fort Snelling. The lower terrace or the "flats" is about 200 feet above the river and is on Plattsville limestone covered with a few feet of black loam. The northwest and southeast parts of the lower terrace are covered by deposits of peat, on which the weed growth is dense. There are a few scattered homes, a trunk highway, and a switching railway on this part of the area.

The upper and more irregular terrace, about 200 feet above the lower one, is formed by glacial deposits. There were well-paved streets and a few scattered homes on the upper terrace which reaches an elevation of 1000 feet above sea level. A golf course and a 40 acre plot of victory gardens were in the north central part of this terrace and were not included in the study area.

The steep bluff separating the two terraces is covered by a loose growth of deciduous trees and shrubs. The most common are cotton wood (*Populus deltoides*), American elm (*Ulmus americana*), box elder (*Acer negundo*), black cherry (*Prunus ser-*

otina), red oak (*Quercus borealis*), and bur oak (*Quercus macrocarpa*): besides these there are several exotics along the streets, but Lombardy poplar (*Populus nigra italica*) was the only one used by the goldfinches. The most common shrubs in both parts were the smooth sumac (*Rhus glabra*) and wild plum (*Prunus americana*).

The most common weed in all parts of the study area was the tall thistle (*Cirsium altissimum*). It does not thrive in the shade of trees or in wet ground. It is at its best in loose, mulched loam. It is found in dense clumps of its own species, among dense growths of other weeds, and in isolated patches. It puts out branches along the stem, a trait most noticeable in the isolated plants. In all of its habitats some individual plants grow with three or four branches close together, forming the crotch in which the Goldfinch nests were found.

I do not know why only certain of these thistles should form three and four pronged crotches. The few plants of this species which grow near my home in Missouri branch in much the same way as to those in Minnesota. I have searched carefully for insect eggs and larva, but found none. I have pinched and budded plants but these do not form symmetric crotches.

The spines on *Cirsium altissimum* are weaker than those of any other species of thistle found in St. Paul. But they have spines and prickles on all parts of the plant, and this I considered an important factor in the high nesting success reported later.

Some other plants which are common in the study area are the Canada thistle (*Cirsium arvense*), giant ragweed (*Ambrosia trifida*), common nettle (*Galiopsis tetrahit*), common milkweed (*Asclepias syriaca*), field bindweed (*Convolvulus arven-*

*sis*), goldenrod (*Solidago spp.*), spreading dogbane (*Apocynum androsaemifolium*), and white sweet clover (*Melilotus alba*). The common grass in Kentucky blue grass (*Poa pratensis*). Sedge saw grass (*Cladium jamaisense*) is common in some places.

The principal predatory animals of the area are the domestic cat (*Felis*), weasel (*Mustela noveboracensis*), red squirrel (*Sciurus hudsonicus*) and garter snake (*Thamnophis sirtalis*). A broad-winged hawk (*Buteo platypterus*) nested in woods within 150 feet of three successful goldfinch nests.

#### METHOD OF STUDY

In 1943 and 1944 I had no intention of making a long-continuing study. Most observations were made in the afternoon and nests were inspected every three or four days. Some were inspected every day, and a few more often. Outlying nests were visited at least once a week. Because the area was near an army post and a large airfield, the search for nests was not very intensive. In 1945 and 1946 our search for nests was much more thorough.

The nests were numbered when found and a numbered tag fastened to the plant. The location of the nest was kept in the field notes and entered on maps when necessary. We did no banding or trapping. During cool weather or when the sun struck the nest, we kept the bird off as little as possible. Of 591 active nests found in thistles 34% contained no eggs when found, 44% contained eggs, and 22% contained young.

#### NEST CONSTRUCTION

The goldfinch seems to prefer the tallest thistles and those protected from the sun and wind. The mean height of 591 nests was 4.04 feet. Of these, three were at 1 foot, 54 at 2 feet, 152 at 3, 182 at 4, 132 at 5, 61

at 6, and 12 at 7 feet. The actual nest site averaged 0.6 of the height of the plant. The nest is never built on the sheath of the leaf as is sometimes the case with other birds nesting in this thistle, but is secured at the top of the branches of a tree or four pronged crotch. The nest is started by filling the crotch with fibers of plants until a foundation is formed. Then the outside of the nest is woven with fibers of last year's milkweed, sweet clover, common nettle, and other hems; grasses are also sometimes used.

The lining is made of pappus of dandelions (*Taraxacum officinale*), sow thistle (*Sonchus arvensis*) and related composites. As soon as the seed of the Canada thistle has matured, the pappus of that is used. Dr. Alvin Larson, plant pathologist of the University of Minnesota, informs me that the seed dispersal of the Canada thistle starts July 15 and that heavy dispersal gets under way August 1. Hence, goldfinches do not wait for Canada thistle to ripen before starting nesting, as is sometimes thought.

The completed nest will hold water for 24 hours after a soaking rain. This fact accounts for some abandoned nests with or without eggs and with drowned young.

The earliest date on which a nest was found was July 3, but suitable crotch-forming gets under way about July 1. The last nest found under construction was August 30. Nest-building is a slow process at the beginning of the season, taking about 12 days, although one nest took 22 days before the first egg was laid. Later in the season the period of nest construction is considerably shortened. One nest which was observed carefully was started the afternoon of August 15. Three days later the first egg was laid.

Though many bull thistles (*Cirsium lanciolatum*), pasture thistles

(*Cirsium pumilum*), and Canada thistles were examined carefully, no nests were found in them. Two nests were found in swamp thistle (*Cirsium muticum*), a thistle which also has comparatively weak spines. Several nests were found in saplings of box elder, black cherry, cottonwood, American elm, Lombardy poplar, and smooth sumac. One nest was found in a mass of goldenrod. None of these nests is included in the nesting data.

#### EGGS

The number of eggs per clutch varied from two to six, with a mode of five. Egg-laying started July 8, rose to a peak about August 15, and was completed by September 3. (See Table 1). I frequently noticed that the greatest activity in nest building and egg-laying was during cool periods.

#### NESTING SUCCESS

During the four years over 700 nests were found. Those which were abandoned before being found, or where the young had already fledged, are not included in the data, leaving 591 nests for which the history is known. The records for hatching and fledging for the four years and for different clutch sizes are remarkably uniform (See Table 2). Hatching success ranged from 83% to 87%; fledging success from 75% to 80%, with a mean of 78%. In Michigan Walkinshaw (1939) found 58% fledging success from 248 eggs, and Stokes (1950) found 49% fledging from 696 eggs in Wisconsin.

Nesting success of open-nesting passerine species seldom rises above 50%, and the above nesting success of 78% is very unusual. I attribute this high success in fair measure to the nature of the nest site. Nests placed in a secure crotch of thistle and separated from the ground by four feet of spiny stem are ideally

protected from ground predators. Cats, weasels, red squirrels, and snakes do not master such a spiny stem. Humans do not care to frequent the dense growth of thistles mingled with nettles, bindweed, and giant ragweed.

ing before the Goldfinch starts nesting.

Of the 166 nests that were abandoned or destroyed, 34 resulted from intolerance between female Goldfinches, 25 from weed cutting, 16 from real estate development, 9 from



Plate 1 Another view of a goldfinch that has chosen a thistle as its nesting place.

Bronzed Grackles (*Quiscalus quiscula*) and Blue jays (*Cyanocitta cristata*) have finished their depredation and Cowbirds (*Molothrus ater*) have largely finished egg-lay-

wind, 8 from grass fires, and 74 from unknown causes.

The nests of other species which nested in thistles in the study area had a high survival rate also, though some of the nests were built on the

sheath of the leaf. Thus 10 out of 11 indigo bunting (*Passerina cyanea*), 4 out of 5 chipping sparrow (*Spizella passerina*), 6 out of 8 clay-colored sparrow (*Spizella pallida*), and 5 out of 6 song sparrow (*Melospiza melodia*) nests were successful.

#### INTOLERANCE

The usual manifestation of intolerance is shown by the female when she tears out the lining of a nest built too near her occupied nest. The intruder is allowed to complete its nest before destruction is begun. My records indicate that nests are not tolerated within 70 feet at the beginning of the season. But this diminishes until at the end of the season I have observed two successful nests within ten feet of each other.

Proximity intolerance applies only to their own species. A goldfinch and indigo bunting reared their broods in the same thistle. The chipping sparrow, clay-colored sparrow and the song sparrow all nest in the tall thistle and are tolerated to within a few feet of nesting goldfinches.

#### SUMMARY

A four year study of the nesting habits of the goldfinch was made

on 100 acres of wasteland in St. Paul, Minnesota, and 591 active nests were found in thistles, mostly *Cirsium altissimum*.

The nest was placed in a three or four pronged crotch about 3/5 of the way up the stalk. Tall thistles were preferred as nesting sites, but nests ranged from one to seven feet off the ground.

The nest lining consists of pappus of various composites and the other part of the nest of old plant fibers.

Nest building started as early as July 1 and continued until August 30. Nest construction may extend over a period of days early in the season, but as little as three days towards the end. Clutch size ranged from two to six eggs, with a mode of five. Egg-laying started July 15, reached a peak about August 15, and was completed by September 3.

73.3% of all nests produced fledglings; 78.2% of all eggs produced fledglings. Mean young raised per pair was 3.7. The high nesting success was attributed to the tough spines of the thistle stalk as well as the unattractiveness of the area to humans.

Intolerance between neighboring female goldfinches resulted in 34 nests being pulled apart.

TABLE 1—SEASONAL DISTRIBUTION OF EGG-LAYING

Date of	Jy.	Jy.	Jy.	Jy.	Jy. 29	Aug.	Aug.	Aug.	Aug.	Aug. 23	Sept.
first egg .....	5-10	11-6	17-22	23-28	Aug. 3	4-9	10-15	16-21	22-27	Sept. 2	3
Number Nests.....	2	12	41	56	86	81	75	89	68	25	3
Total .....											538

TABLE 2—NESTING SUCCESS

	1943	1944	1945	1956	Tot.
Number of nests with eggs .....	48	129	157	200	543
Number of nests in which eggs hatched .....	43	118	144	195	480
Number of nests in which birds fledged .....	41	108	131	159	439
Total number of eggs laid .....	222	606	736	933	2497
Total number of eggs hatched .....	193	524	642	771	2130
% of eggs hatched .....	87	86	87	83	85
Number of young fledged .....	177	481	590	704	1952
% of young fledgling .....	80	79	80	75	78

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# The Possibilities of Establishing A Hawk And Owl Banding and Photographic Station at Duluth, Minnesota

by

**Ross Olson**

## INTRODUCTION

Hawks, one of the disappearing groups of large and picturesque birds, make up a very small percentage of our native population. For years hawks have been victimized by public opinion and the advances of civilization. Where there was once a wooded ravine with a pair of broad-winged hawks or barred owls, there is now a small factory or a new housing addition. Many rural residents will not have a hawk resting in their grove or woodlot. They shoot them on sight, and destroy their nests, not because the hawks kill all the chickens, game, and song birds, but because the people think they do. City hunters, out only for the hunting season, shoot many hawks because hunting lags and the hawks make good targets. Besides they think there might be a bounty on them, and even if there isn't "a hawk would sure look good mounted over the fireplace." Anyway, there are so many hawks around, shooting one or two won't hurt. They forget that hunting season coincides perfectly with the influx of southbound hawks that make up the breeding population over thousands of square miles in our Northern States and Canada. They also forget that hawks gather in hunting areas where they feed on cripples lost by hunters.

Certainly a hawk feeding on crippled ducks or pheasants is doing no harm.

Hawks, then, are persecuted by ignorance, and all the protection laws ever written won't help our hawks unless public opinion is changed through education. To help facilitate this change of public opinion, the following recommendation for utilization of a great hawk flyway is respectfully submitted. I am grateful to Walter Breckenridge, Dana Struthers, and Harvey Gunderson for contributions and helpful criticisms.

## THE NORTH SHORE HAWK FLYWAY

The North Shore of Lake Superior is one of Minnesota's most beautiful tourist areas. Every spring and summer thousands of tourists visit the shore to relax and cool off by the world's largest freshwater lake, and every Fall thousands of hawks pass down the shore on their way South. For years a few falconers have known of this Autumn phenomenon and have trapped and banded birds of many species. Likewise shooters have taken their annual toll at concentration points near Duluth, but the latter has been stopped within the confines of the city, thanks to the Duluth Bird Club and others.

Three things combine to make the flyway one of the best on the North American Continent. They are topography, large expanses of cold water, and large hawk breeding reservoirs to the North. All along the North Shore we find high basalt sawtooth-shaped bluffs. When winds coming off the lake strike these bluffs they create updrafts or thermals which the hawks ride as they migrate. Similarly, when winds, blowing in the opposite direction, bring hot air off the land, they rise over the cold air on the lake, and this likewise creates thermals. Both these situations are favorable for migrating hawks.

Figure 1 shows an east wind coming off the lake, hitting the bluffs and forming updrafts. The vector

North Shore. About the only time thermals and updrafts are not present is during stagnant days.

The second important factor creating this flyway is the semi-funnel shape of the lake shore. The birds, passing South, hit the lake and are forced to fly SW along the shore, since they do not like to fly over large bodies of water they cannot see across. This is probably the most important feature of the flyway: In practice, however, they will often fly out over the lake looking for a way across, returning to shore several miles away. Therefore, the actual path of two hawks coming down from, say Ely, would look something like figure 3, where each vector arrow represents the path of one hawk. Notice how the path moves

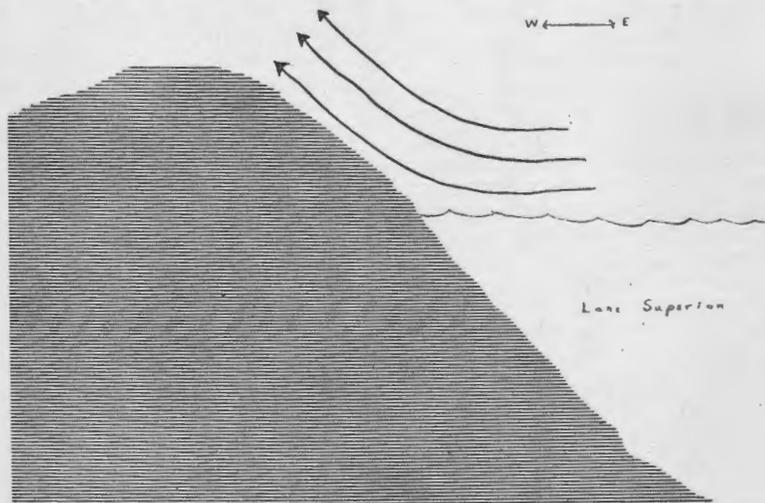


Figure 1 The formation of thermals by an east wind.

arrows show the path of the moving air mass as it strikes the bluffs.

Figure 2 shows a warm west wind blowing out over the lake and rising above the cold air on the lake forming thermals. So we see that from whichever direction the winds come, thermals are formed along the

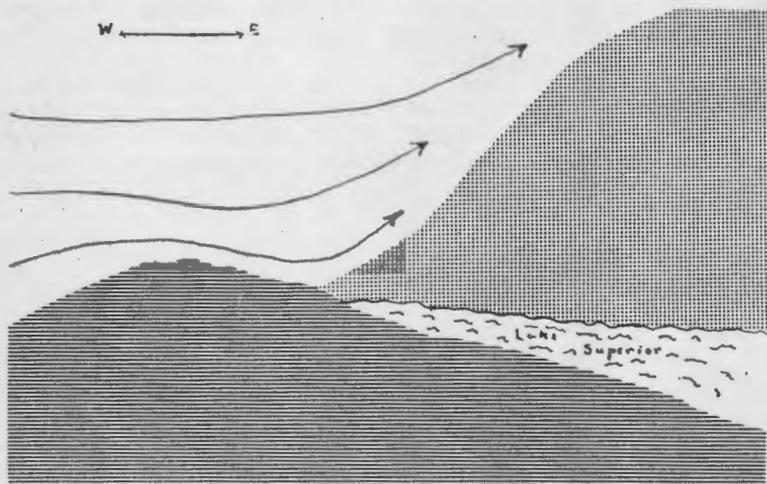
out over the lake before returning to follow the shore.

The third and last important factor creating this flyway is the presence of extensive breeding reservoirs to the North. Minnesota's Superior National Forest and Canada's Quetico Provincial Park support thou-

sands of summer resident hawks which each fall must pass through the big semi-funnel terminating at the Duluth apex. Furthermore, there are thousands of square miles of uninhabited forests in the region of Hudson's Bay which produce migratory hawks and owls, many of which pass through the funnel.

From the nature of the North Shore Flyway, it can be seen that

pose, however, of such a project would be to educate the public along hawk conservation lines. For obviously if a group of rational people band, photograph, and otherwise study hawks and owls, the public will begin to recognize their value and stop persecuting them. If on the other hand, positive educational steps are not taken, birds of prey are certain to become a memory



**Figure 2 The formation of thermals by a west wind.**

the Duluth area is the real bottleneck, and would be ideal for establishing a Field Laboratory. Furthermore its proximity to the University of Minnesota and the Duluth Branch of the University, would give interested persons an excellent opportunity to study the food, migration, and plumage variations of the birds of prey. For example, the capturing of hawks in certain immature plumages and the holding of them through subsequent plumage changes, could throw much light on the status of the many races of red-tailed hawks. Also arrangements could be made to secure certain live specimens for bird classes. This would greatly facilitate hawk identification. The most important pur-

of an interesting day in the field long ago, especially with the increasing numbers of guns and hunters along with the better means of transportation. It was only about three weeks ago that I read an advertisement on a stuffed great-horned owl which was guaranteed to "lure the most wary crow or hawk into shooting range."

The methods used in hawk trapping are quite elaborate, but briefly they consist of using a suitable lure surrounded by a vertical array of nearly invisible and collapsible gill nets. The hawk, in his effort to reach the lure, becomes entangled in the suspended nets. Bow nets are frequently used, and these are effective for catching large numbers

of hawks, because of the ease with which the birds can be removed. They are either automatic or manually operated from a blind. Large funnel traps have been used, but care must be taken so that the birds do not injure themselves trying to get out. Among the pole traps the Verball trap is the most effective as it does not injure the bird's legs like the steel jaw trap. Steel paw traps on poles should be outlawed on the basis of their cruelty. Another method uses a semi-spherical cage with live lures inside. Nooses surround the cage and the hawk becomes snared in the nooses. Electrical and mechanical modifications of all

one of the trapping techniques would offer spectacular photographic opportunities.

Since we know that the various trapping methods do capture hawks and owls in excellent condition, we might wonder what species could be banded and studied at a Duluth field station. A glance at falconer's and ornithologist's past records show immediately what a fabulous flyway exists there, both as to numbers and types of hawks. First of all, it should be noted that flights of sparrow hawks and sharp-shinned hawks start moving down the first of September while the last flights of red-tailed hawks, goshawks, and snowy

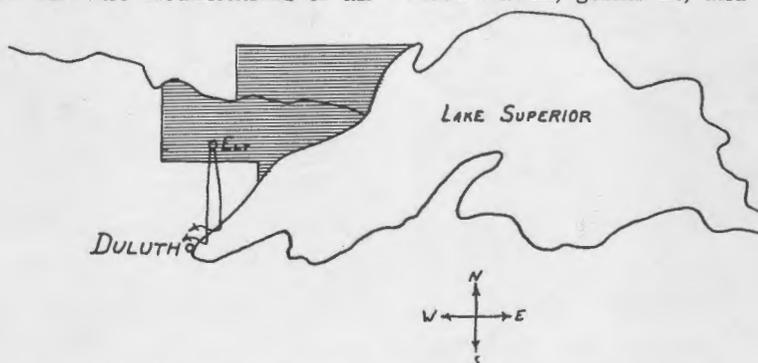


Figure 3 The path of two southward bound hawks from Ely.

these methods increase their effectiveness for any given installation because they minimize the chance for human error. It must be remembered that a hawk's reflexes are very much quicker than those of a man.

The types of lures used at any trapping station would vary from snakes, mice and frogs for the Buteonine or soaring hawks and most owls to sparrows, starlings, pigeons, and rabbits for accipiters, falcons, eagles and snowy owls. A suitable lure for ospreys would be fish. Experiments in the field with various lures would give much information on the feeding and hunting habits of birds of prey and, of course, any

owls are still coming the last of November. This allows three months for banding activities to say nothing of the Spring flights which last for a month and are smaller but far from negligible. The most common hawk passing through the semi-funnel is the sharp-shinned hawk, a close second is the broad wing, followed in decreasing order by sparrow, rough-legged, red-tailed, marsh, pigeon, goshawk, osprey, coopers, duck hawk or peregrine falcon, and finally, both species of eagles. Undoubtedly, gyrfalcons pass through during years of scarce food supply in the far North. As for owls, you will see the snowy great-horned,

long-eared, screech, barred and great grey owls. An occasional richardson's and hawk owl might appear. It should be remembered that practically any hawk seen can be captured with the proper equipment and lures provided the bird is hungry which is usually the case on the North Shore Flyway in the fall.

Typical daily hawk counts in the area run as follows:

Sept. 12, 1951; Poor. It rained all day but we saw: 5 marsh hawks, 5 sparrow hawks, 5 pigeon hawks, 1 peregrine, 1 osprey, 2 cooper's hawk (banded), 60 sharp-shinned hawks.

September 16, 1951, was an exceptional day since the big flight came through.

Approximately 4,393 hawks were counted from Duluth observation points.

October 1, 1951; Fair. In three hours we saw: 300 or more sharp-shinned hawks (banded 3), 2 red tailed, 6 marsh, 6 sparrow, 2 pigeon (both of which were trapped) 1 osprey.

In conclusion I would like to repeat the advantages of a Duluth Hawk and Owl Field Station. It would:

1. Provide scientific data such as weights, sizes and colorations.
2. Provide data on feeding and migration habits.
3. Afford superb photographic opportunities.
4. Provide a humane way to recover banded birds and band new ones.
5. And finally it would provide a lever arm with which to help the public realize the value of birds of prey.

If plans for a field laboratory such as described are not initiated in the near future, all remaining favorable locations will soon become commercialized and useless. The record of the last 15 years growth along the Shore bears this out and today expansion of the North Shore towns and cities is being stepped up for the taconite and oil refining projects.

**University of Minnesota, Mpls, Minn.**

# Waterfowl Mortality Due To Oil Pollution In The Vicinity Of Red Wing, Minnesota

by

**Forrest B. Lee<sup>1</sup>**

On Monday, April 9, 1951, the State Division of Game and Fish was notified of the death and sickness of ducks in the vicinity of Red Wing. I immediately drove there and contacted State Game Wardens E. P. Nordeen and Norman Anderson, who had reported the incident. Dead and sick ducks were first found near Red Wing on April 6; the heaviest losses probably occurred on the next two days.

Affected ducks were noted on points of land along the Mississippi River for about seven miles downstream from Red Wing. Wardens Nordeen and Anderson, and I picked up 24 dead ducks at Green's Point and noted many sick waterfowl which swam out into the open water. The previous Saturday, 67 dead and sick ducks had been picked up here. At Presbyterian Point, 32 dead and 15 sick ducks were noted along about a quarter-mile of shoreline. It was here that 127 dead ducks had been counted on the previous day along less than a mile of shoreline. The following species were found dead, or in a sickened condition: American goldeneye, lesser scaup, American merganser, red-breasted merganser, hooded merganser, and coot. It was reported that a white-winged scoter and a male wood duck were also picked up dead. Goldeneyes and scaup were the most numerous ducks in the river at this

time, and hence were the species most affected.

Those of us who investigated the incident believed that a very conservative estimate of total losses would be 500 waterfowl, and that the number could easily have been much higher. The level of the river was rising rapidly, and land that was exposed on Saturday was under water on Sunday. Ducks that had crawled on shore and died on Friday or Saturday, in many cases, were covered with water by Monday.

The dead ducks were found to have their feathers matted or coated with the oily substance that smelled like linseed oil. It appeared as if this oily material had matted the feathers so that the water was able to penetrate to the skin. Some dead ducks were lying along the shore, others had crawled under trees or cabins to die. All the dead ducks seemed more or less water and oil soaked. Live ducks were found under trees and cabins and along the shore in the same water and oil soaked condition. Some of them shivered as if from the cold. The oily material was found all over some ducks and others had it on their breasts and sides. Still other ducks had the material caked on their bills and nostrils and may have been eating it. A few sick ducks which swam from shore as we approached rode very low in the water, and even had dif-

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<sup>1</sup> A contribution from Pittman-Robertson Surveys and Investigations Project 11-R, Minnesota Division of Game and Fish.

ficulty in staying on the surface at all. They apparently had lost their buoyancy due to the effect of the oily material on their feathers.

It is unlikely that many of the sick ducks survived since the period from April 7 to April 13 was characterized by cool, rainy, and cloudy weather with temperatures ranging from 33 to 48 degrees F.

ings. Both noted the matted condition of the feathers of the ducks. Fourteen of the 50 ducks examined by Dr. Warner had some of the oily material and mucous present in the oral and nasal cavities.

The skin of all the ducks examined was discolored, being dark reddish. Dr. Fenstermacher requested that some unaffected ducks



Plate 1 State Game Warden Norman Anderson, LeRoy Angell, and Warden E. P. Nordeen, holding oil soaked ducks picked up at Green's Point on Lake Pepin.

Thirteen of the dead ducks were brought to Dr. R. Fenstermacher of the Division of Veterinary Medicine, University Farm, and 50 were brought to Dr. Dwain W. Warner, Museum of Natural History, University of Minnesota, for examination and use of the specimens. Both Dr. Fenstermacher and Dr. Warner prepared summaries of their find-

ings. Both noted the matted condition of the feathers of the ducks. Four lesser scaups were brought to him and found to be in about the same physical condition as the dead birds as far as fat deposits were concerned. Dr. Warner also found the 50 ducks he examined to be about normal in respect to fat.

Only one of the 63 ducks examined contained lead shot in its gizzard.

This was a male lesser scaup which carried three pellets.

The gizzards and digestive tracts of all ducks contained little or no food material. Eleven of the 50 ducks examined by Dr. Warner had the lungs and air sacks of the body cavity nearly filled with water.

Possible cause of death was suggested by Dr. Fenstermacher and Dr. Warner. The oily substance on the feathers had apparently so matted

further exposed to the cold water. The fact that 11 of the 50 ducks examined by Dr. Warner had the air sacs and lungs nearly full of water, suggested that drowning may have occurred due to loss of buoyancy. Dr. Fenstermacher speculated that if the oily material that matted the feathers were toxic, death could possibly have resulted from the ducks eating some of the material, or from

A further investigation was con-



**Plate 2. Oil soaked ducks found near Green's Point, Lake Pepin, April 6, 1951.**

them together that they lost their insulating qualities and cold water or air reached the skin. This condition undoubtedly allowed a great heat loss from the body and this "exposure" may have caused death. Also, when water reaches the skin, the normal buoyancy of the bird is affected so that it swims low and is absorption through the skin.

ducted by the Division of Water Pollution Control of the Minnesota Department of Health. No definite source of oil pollution which could be associated with the duck kill was found during this survey, although several possible sources of oil were found. Minnesota Division of Game and Fish, St. Paul, Minnesota.

# Seasonal Report

by

Mary Lupient

With the exception of a few rather severe local windstorms, Minnesota enjoyed fine weather during late spring and early summer. In northwestern sections there was a drouth through June, but elsewhere in the state rain fell frequently, and there was just enough hot weather to provide good crops.

The warbler migration in late May was unusual because of the exceptional number of early warblers that appeared with those that ordinarily arrive late in the season. In the warbler migration flycatchers, cuckoos and other species in large numbers passed through the Twin Cities and surrounding area, May 27, and lesser waves were observed during the following three days. In Duluth the migration of warblers was large only on May 24, according to P. B. Hofslund, who stated that very large numbers of bay-breasted, Blackburnian and black-poll'd warblers were observed. He saw a Connecticut warbler feeding young in Lester Park, July 12 and there was another nesting pair of Connecticut warblers along the Fox Farm Road near Duluth. A prothonotary warbler's nest containing 5 young was found near Champlin, June 12 by John Jarosz. May 28, in the same area he located a nest containing young of a brown creeper, which in this state is about the southernmost limit of its range. To the date of this writing, August 13, no returning warblers have been reported.

The spring migration of shore birds continued on into the first few days of June. Paul Murphy reported

that they were abundant, June 1, at Goose Lake near White Bear. P. B. Hofslund stated that they were late in arriving in the Duluth area. They were first seen there May 25 and by May 30 they had appeared in goodly numbers. White-rumped sandpipers and long-billed dowitchers were reported from several sections of the state, and one of each of these species was seen in Duluth, May 30. Among other shore birds, near Afton a bluff-breasted sandpiper was observed by this writer May 25. Returning shore birds came early. Paul Murphy saw five least sandpipers at Goose Lake July 5, and on July 12 there were four lesser yellow-legs and about 50 least sandpipers. Large flocks of shore birds fed on mud flats in southwestern Minnesota and along the Minnesota River lowlands near LeSueur and St. Peter, July 26. The peak of the migration was during the first week in August. Several large concentrations were reported.

Although it is early to make a definite estimate of the duck population, it is believed by observers in this state and Canada that there is a fairly good crop of ducks. Mallards and blue-winged teal are reportedly abundant, and more than the usual number of nesting black ducks have been seen. There were two reports of the nesting of the green-winged teal near the Twin Cities. A pair was seen August 7 feeding young at Mother Lake in Minneapolis by Michails Evanoff. Two broods were seen near St. Paul by A. C. Rosenwinkel. There was a brood of nine

downy young and another brood of 10 several weeks old.

The Forster's tern nested again at Mother Lake this year. One young was collected by Harvey Gunderson and John Jarosz, members of the staff of the Minnesota Museum of Natural History. A colony of common tern nested this season at Harbor Island, Duluth. This report was from P. B. Hofslund who also stated that members of the Duluth Bird Club banded 500 herring gulls on Knife Island, June 14. A herring gull banded by them in the summer of 1951 was found at Tampico, Mexico, April 5, 1952, and a cormorant banded in 1951 was found in Golden Meadow, Florida, April 10, 1952.

Other observations of interest were made by Mr. Hofslund. One was of an eared grebe which he believes is the second record from that area. Three red-throated loons were seen in Duluth Harbor, and a nesting colony of Brewer's blackbirds was found on Park Point. He found the nest of a broad-winged hawk in Lester Park, July 4. It contained two young but later only one young minus one eye was found in the nest. Dana Struthers reported the nesting of a broad-winged hawk on East River Road near the Shriner's Hospital, Minneapolis. The last year's nest of a Cooper's hawk was used. Nearby a Cooper's hawk nested again this year.

Of interest is the record of a summer tanager sent in by Dana Struthers, who saw one carrying food near Frontenac, June 8.

Apparently the western kingbird extended its range eastward in greater numbers this season. One was reported at Brooklyn Center by John Jarosz and four were seen by A. C. Rosenwinkel just north of Anoka June 14. Mr. Rosenwinkel later reported 2 young near Langdon, Washington County, August 13. Dr. W. J. Breckenridge saw at least a

dozen western kingbirds in the area between Minneapolis and Bethel.

A very large migration of night-hawks passed along the St. Croix valley near Afton, May 25. Flock after flock appeared during the afternoon at about 20-minute intervals. A concentration of night-hawks numbering approximately 1500 to the square mile was seen May 30 near St. Paul by A. C. Rosenwinkel.

Observers from several sections of the state reported the dickcissel as common this season.

American egrets were observed along the Minnesota River lowlands at Le Sueur and St. Peter, July 26 and a single individual was seen near White Bear the first week of August. The nesting of egrets was recorded by Robert Galati who took pictures of the nest and young. The nest was found in a heron colony near Paynesville and contained five young, one of which was blown out of the nest and killed. O. A. Rustad stated that the American egret was observed by him in Rice County in the spring of 1952 which is the first spring record for the county. His records are as follows: April 23, three; May 1, three; June 29, six; July 11, 11. The birds were seen in each instance on an island in General Shields Lake, and although no nest was found, Mr. Rustad believes they nested there.

Mr. Rustad sent an interesting report to the Museum of a survey he made on a great blue heron colony, which has existed in Rice County for at least 63 years. The birds began arriving March 29 and continued to April 18. They built 573 nests in 151 trees, from 1 to 24 nests in a tree. There was some mortality among the young, the exact cause of which was not determined by Mr. Rustad, but he noted that after a storm the number of dead on the ground was higher. In this heronry Mr. Rustad

discovered a great horned owl's nest containing two young. It was in a basswood tree among four great blue heron nests which were at distances from it of 6 feet., 5.5 ft., 3.5 ft., and 2.5 ft. Many other nests were only 15 ft. distant. In this close proximity the birds all lived peacefully, but when the owls flew to other parts of the five acre island the heron there became greatly disturbed. Terrific havoc was made in a heron colony located at Rice Lake near St. Paul by a severe storm which occurred June 24. Harvey Gunderson, who made observations there, stated that approximately 75 percent of the colony was destroyed, and that the

ground was strewn with dead and injured herons, many with broken legs and wings. Numbers of injured young out of the nests were not old enough to feed themselves, and doubtless died of starvation.

The heronry near Paynesville reported by Robert Galati had 139 nests. Approximately 392 young were counted a small percentage of which were killed by a wind storm. A heronry at Many Points Scout Camp was visited by Whitney Eastman, July 26 and 27. Mr. Eastman stated that there were about 200 herons, young and adults, in the herony at the time of the observation.

**Minneapolis, Minn.**

# THE CANADIAN LAKEHEAD

Edited by

**A. E. Allin**

As a whole, May and June were fine months but the period commencing May 11 was cold and wet with snow falling outside the Lakehead cities. Migration, which had commenced on March 18 with the arrival of herring gulls and crows, continued throughout the first few days of June, closing with the appearance of alder and yellow-bellied flycatchers and black cuckoos. Chimney swifts arrived unusually early, appearing on May 5 although we had not previously recorded them before May 14 (1941 and 1947). On the cold and wet evening of May 13, we observed an example of an unusual bird phenomenon — reverse migration. Red-breasted nuthatches and Cape May, myrtle and palm warblers were moving steadily in a south-westerly direction accompanied by innumerable black-capped chickadees. Cape May warblers had never been reported so early previously, and black-capped chickadees are ordinarily breeding at that time. The explanation of the movement is not immediately available, but was probably associated with the unusual weather conditions present during that period.

Shore-birds are uncommon at the Canadian Lakehead, but numbers of them were reported by C. E. Garton at Port Arthur on May 18, a week earlier than expected. A heavy migration on the night of May 23-24 brought a wave of redstarts, chestnut-sided warblers and lesser numbers of other species, including catbirds and brown thrashers, both of which visit us but rarely. As a whole,

I believe birds were more abundant than they have been for several years. This condition persisted into the breeding season.

A new species and an additional subspecies were added to the local bird list during the month. On May 24 participants in the Thunder Bay Field Naturalists' Club Field Day observed two rough-winged swallows, and on May 19, I saw a northern horned lark. Horned larks are rare visitors with us and those previously identified had been Hoyt's. It is difficult to explain the absence of the prairie horned lark since there are farm-lands which appear suitable for that subspecies. It will be recalled that a red-tailed hawk observed on April 11 was identified as Krider's.

Five members of the Thunder Bay Field Naturalists' Club, were privileged to attend the M. O. U. Field Day at Frontenac on May 17. It was a rare treat to travel from the black spruce - aspen poplar - white birch country typical of our own area and of northeastern Minnesota, south 275 miles to a land of almost prairie conditions, its valleys wooded with oak, elm and maple. Red-bellied woodpeckers, prothonotary warblers, blue-gray gnatcatchers and the tufted titmouse were strangers to us, and we were amazed at the number of brown thrashers, catbirds, Baltimore orioles and cardinals. The Canadian Lakehead is well within the Canadian Zone whereas Frontenac near the southern border of the Transition Zone is invaded by birds from the warm humid Upper Austral

Zone to the south. This would partly explain why 138 species were observed at Frontenac and only 78 at Fort William a week later when we held our own field-day.

Several breeding records were of particular interest. On June 13, Colonel Dear added the brown thrasher to our local breeding list when he located a nest which contained one egg on June 22. It was later deserted. The upland plover is a rare summer resident, first observed in 1945. During the same summer Colonel Dear found a young bird. One or more pairs have been noted in subsequent years. On June 3, when I found a nest which contained two eggs, the bird flushed wildly. On June 7, when four eggs were present, she was approached very closely before flushing. I believe the latter habit is the customary one. An adult accompanied by three young were seen by Dear and I on June 15. Brewer's blackbirds returned once more to the only area in Ontario where they have been found breeding. We also observed them in several occasions in a new area, but an actual breeding record was not established. Until recently Holboell's grebe was known to breed in Ontario only on Whitefish Lake, 50 miles south-west of Fort William. On June 14, Keith Denis and the Allins found three nests containing one, two and two eggs respectively. Bobolinks are uncommon summer residents but at least six pairs were present in Fort William during the past summer, but we again failed to add them to the local breeding list.

Forest-tree tent caterpillars were extremely abundant in Northwestern Ontario, and large areas of forest were denuded of their foliage, particularly aspen poplars. This undoubtedly affected the bird life. Although black-billed cuckoos have been said to invade such areas, we found them in the usual numbers.

On the other hand, the one nest of the species we found was discovered only because it had been exposed by the destruction of the surrounding leaves. This condition was true of numerous other nests including several of the rose-breasted grosbeak. The percentage of deserted nests appeared to be extremely high. The nest of a chipping sparrow was pre-empted by a caterpillar which pupated in the cup and the cocoon largely filled the bottom of the nest. The nest was never occupied by the sparrow.

That nests and eggs can only be identified by the presence of their owners was demonstrated on two occasions during the summer. Had we not been able to observe the parent birds carefully we could not have determined the species to which the eggs belonged. On June 22, I found a nest, 36 inches from the ground in a Saskatoon bush. A female chestnut-sided warbler flushed from four eggs, and both Colonel Dear and I observed the parent birds closely. The nest was typical of the species but the ground colour of the eggs was distinctly greenish although it has been stated: "Their eggs are white or creamy white (never greenish white) speckled with brown and grey." (Reed, C. A., *North American Birds* Eggs. P. 297, 1904)

On June 19 I located a ground nest typical of the oven-bird, but the flushed bird could not be identified as it ran along the forest floor in mouse-like fashion. The nest was visited several times with the same result. On each occasion a male oven-bird was singing near-by. Finally on June 30, the bird was flushed and definitely identified as an oven-bird. The nest had contained one egg on June 19. On June 30 the single egg was still present and was infertile. It was the shape of an oven-bird's, but very

small, measuring 16 by 12 mm, whereas Reed gives the average measurements as 20 by 15 mm. The ground colour was white finely speckled at the larger end with light brown. Except for the peculiar nest this egg would have been mistaken for that of a Tennessee or Nashville warbler.

The whistling swan is an uncommon migrant locally, a few being reported each year during the last days of April and the early part of May. During the summer of 1951 a swan was observed at Lake Shebandowan, and there are reports that for several years two have been seen

during the summer in the Nipigon Straits. This pair was again reported in 1952. A single bird was seen on Lake Nipigon in July by Laurie Manuel. Two were present in late July on the Kaministiquia River above Kakabeka Falls, and one of these was seen flying over the river on July 25 by Colonel Dear. A swan spent the first two weeks of August on the same river at Kaministiquia Village, ten miles above Kakabeka according to Mrs. Tuominen. Presumably the above birds are whistling swans, but their presence so far south of their normal summer home deserves special study.

**Fort William, Ontario**

# M. O. U. Annual Meeting

May 17, 1952

History was made for the M. O. U. at the 1952 annual meeting.

During the year 1951-52 the whole structure of the M. O. U. was revised and made more business-like, under the leadership of the president, Mr. Whitney H. Eastman. A Policy Committee, whose existence was authorized at the 1950 meeting, was developed to help guide the activities of the Union during the period between annual meetings. As a result of this careful planning, the 1952 annual meeting was the finest the Union has ever held.

First, this year's meeting was the best attended. 190 persons were officially registered, representing more than eleven clubs.

Second, for the first time the meeting was stretched out into a week-end gathering, with the main part of the program held in the evening. This allowed more time for visiting and renewal of acquaintances and was such a great success that it will undoubtedly set the pattern for future M. O. U. meetings.

Third, because of the large number of observers in the area and the longer period of observation, the largest composite list ever obtained - 150 species - was recorded.

The Methodist Campus at Frontenac was ideally suited to our purpose, and the site contributed much the close of the meeting on Sunday to the success of our meeting. Guests arrived from 8:00 p. m. Friday until noon, and all were comfortably housed and fed.

As usual, field trips occupied the Saturday morning hours, and while the hoped-for warbler wave did not materialize there were birds in

abundance. Some life lists got a little boost over the week-end.

The business meeting followed the Saturday noon lunch, and several matters of business came before the Union. A new constitution and by-laws, printed in the March issue of *The Flicker*, was adopted with but three slight changes (see article on page 139). This new instrument provides a more workable framework through which the Union's activities can be channeled. It makes permanent the Policy Committee which has functioned on a less stable basis during the past year. This committee is composed of the Union's officers and one representative from each of the affiliated clubs. By having a continuing body the Union will be on a much firmer footing than it has in the past.

The new constitution also provided for honorary membership, and Mr. George Friedrich of St. Cloud, who did so much to launch the M. O. U. and to keep it going in its infancy, was elected the Union's first honorary member.

Through the efforts of Mr. Eastman the M. O. U. has been granted tax exemption, which means that all moneys donated to the Union can be charged off as deductions from federal income tax. This puts the Union in position to receive bequests and gifts to build up an endowment fund.

In the course of the business meeting Mr. P. B. Hofslund, editor of *The Flicker*, gave a brief report on the Union's publication. He explained the cause of the delays in publication, called attention to the new features which had been added

to the publication, and appealed for members to send in manuscripts. Attention was called and thanks given to Dr. W. J. Breckenridge for the new cover design.

Mr. Lewis Barrett gave a very brief report on the meeting of the Wilson Ornithological Club held on April 25th and 26th at Gatlinburg, Tennessee. Twelve M. O. U. members attended this session.

Representatives of bird clubs from Mankato, Owatonna, Albert Lea, and Faribault were in attendance, and invitations were extended to them to affiliate with the M. O. U.

An invitation was accepted from the St. Paul Audubon Society to be guest at the 1953 meeting.

The Nominating Committee, under the chairmanship of Mr. Ole Finseth of Duluth proposed the following slate of officers for next year, and they were unanimously elected:

- President ..... Mr. J. H. Reisinger,  
St. Paul
- Vice President .... Mr. Lewis Barrett,  
Minneapolis
- Secretary ..... Miss Vera E. Sparkes,  
Minneapolis
- Treasurer ..... Mrs. Mary Lupient,  
Minneapolis
- Editor of **The Flicker** ..... Mr. P.  
B. Hofslund, Duluth

A fine program of papers followed the business meeting in the afternoon and again in the evening. Dr. Breckenridge, chairman of the program committee, presided. The papers were as follows:

**"Some Unusual Observations from Twenty Years of Bird Records"** by Myers Peterson, T. S. Roberts Ornithological Club.

**"Birds of Newfoundland and Labrador"** by Dr. John G. Erickson, Minneapolis and Minnesota Bird Clubs.

**"Poultry and Predatory Birds"** by Herman Brown, St. Paul Audubon Society.

**"Hawk Banding Possibilities at Duluth"** by Ross Olson, Minnesota Bird Club.

**"Birding from a Tractor Seat"** by Charles Flugum, Albert Lea Bird Club.

**"A Nesting Study at Hayden's Lake in Hennepin County"** by John Jarosz, Museum of Natural History, University of Minnesota.

**"Biological Highlights of a Trip to the Great Smoky Mountains"** by Lewis Barrett, Minneapolis and Minnesota Bird Clubs.

**"An Unruffled Grouse"** by Dr. W. J. Breckenridge, Minnesota and Minneapolis Bird Clubs.

Much of the credit for the success of the 1952 meeting is due to the hard working members of the Minneapolis Bird Club. With the help of the Policy Committee they have blazed a trail for a new type of state-wide meeting. With the 1952 meeting as a guide, the M. O. U. should go forward to bigger and better meetings in the years ahead.

—Vera E. Sparkes, Minneapolis  
Bird Club

# Notes of Interest

**SOME NOTES ON HAWKS, OWLS, AND THEIR PREY**—During 1949 and 1950 I recorded only three incidents involving hawks. On September 30, 1949, a marsh hawk was seen catching a vole, on April 6, 1950, a marsh hawk was found eating a car-killed jack rabbit and on April 12, 1950 a sparrow hawk was seen carrying, with some difficulty, a large vole. During 1951 following an increase in meadow voles, the hawks and owls seemed to be more numerous in southeastern Minnesota, and I recorded the following notes.

**April 26, 1951.** Winona County. Two hawks were engaged in battle. A marsh hawk repeatedly swooped at a red-tail which soared in small circles a few feet above the ground of a hayfield. Each time the attacker was thwarted as the red-tail turned sharply over on his side and flashed menacing talons. When the red-tail lit on the ground, the harrier continued his harrassing tactics. When a passing truck started the larger hawk into flight, the marsh hawk immediately lit at the contested spot, where some prey apparently lay, but the harrier's stay was short. He had to dodge quickly when the red-tail plummeted down with a vengeance. The red-tail then picked up the prey, a big pocket gopher, and flew to a tree to eat in peace.

**June 7, 1951.** Rice County. From a field of young oats, a female marsh hawk arose with a fluffy ball of feathers in her talons. Just a few feet up, the cargo slipped from its grasp and fell to the ground. The hawk swung back immediately and relocated the prey after a few passes. Once again the hawk, after alighting beside the motionless prey, picked up the object and started away. And once again it slipped from her grasp.

By this time I was out of the car racing to the spot. With an eye less keen than that the hawk, I searched quite awhile, and very nearly gave up the search, when the near-victim, a young horned lark flushed underfoot. He flew a few rods to the adjacent plowed ground. Just as he lit, a male bobolink attacked him and drove him away, reminding the youngster of the ceaseless character of the war of nature.

**September 10, 1951.** Dodge County. A red-tailed hawk flushed from a fence post carrying a garter snake.

**September 27, 1951.** Rice County. Like a meteor a buteonine hawk dropped at a steep angle toward a hillside and just out of sight. Then two hawks came up from behind the hill, a red-tail and a Krider's red-tail. The Krider's hawk gained altitude faster and dove sharply at the other which at the last moment side-slipped easily out of the way. Both soared up and around at the same level for awhile. Soon the Krider's hawk stooped toward the ground. Immediately the other went into a dive, dropping after the first hawk with legs and talons outstretched, hoping to surprise the Krider's hawk as it hit the prey which I suspected was a ground squirrel. Just above the ground, however, the white hawk pulled out of its dive and side-slipped deftly as the red-tail bore down upon him. Both hawks again soared up to a safe height.

After three or four similar strikes, with the birds alternating the roles of attacker and attacked, they went separate ways, high aloft.

**October 3, 1951.** Dodge County. What percentage of hawk's sorties are fruitless? Many of them, at the least. A red-tailed hawk dropped straight down from his perch atop a telephone pole, with wings held above his back in readiness for the sudden braking of flight or quick change of direction. At the last instant, his right wing opened a bit and his left leg flashed sideways grasping at some fleeing form as he hit the ground. He nearly lost balance, but his wings thrown forward against the ground braced him. With his leg still clutching far out to the left he leaned back and looked at the fistful of vegetation, pulled himself together with a vigorous shake and flew off to another perch.

**October 12, 1951.** Wabasha County. The fields on the ridges run close to the bluffs along the Mississippi Valley in southern Minnesota, and where the fields end, the oak forest begins, covering the steep hillsides down to the cleared fields of the valley farmers.

Above the bluffs the air currents are good for soaring. A few buzzard hawks sailed along one such bluff and occasionally a Cooper's or sharp-shinned hawk passed. Finally one red-tailed hawk spied something of interest in a nearby leafless oak tree, and he dropped forward, gaining speed in a dive as the hawk swept through the bare branches, he struck at the one remaining clump of leaves, brown and withered. And, as he swept upward again above the woods, he brought his clenched foot forward and peered at it. He slowly opened the talons and from them floated several leaves. The red-tail circled again, maneuvered for position, and swooped in again at the clump of leaves. This time he grabbed only air. He tried once more with no better results. Was there a squirrel hidden there amid the only clump of leaves remaining, or was the hawk mistaken?

**October 28, 1951.** Dodge County. Four red-tail hawks and one Krider's red-tail were seen feeding on dead chickens which had been thrown out upon the field with manure. The red-tails flew warily when our auto stopped 100 yards away; the Krider's hawk remained for awhile.

**October 31, 1951.** Winona County. As the car rounded a curve a sharp-shinned hawk flew up from the roadside carrying a small bird, apparently a junco. Just across the road, the lifeless prey fell to the ground, and the hawk continued on into the trees without a backward look.

**November 1, 1951.** Winona County. A red-tailed hawk soared back and forth around a small clearing on a hillside. Clutched beneath him was most of the remains of a fox squirrel, and fluttering behind was the long tail of the squirrel. The hawk flew in this manner for several minutes, apparently undecided, or wishing to settle down again to his meal, but unwilling to risk the presence of an intruder.

After awhile two more red-tails appeared. These two joined in the circling flight, causing the first hawk some concern. He screamed in defiance a few times and finally lit in a tree. The other hawks circled away out of sight.

**December 22, 1951.** Dodge County. A short-eared owl drifted westward, hunting, dropping earthward several times as it spied possible prey. Soon

another short-ear came by and passed westward. Then a third owl came from the east, lost altitude to begin hunting. He turned south, starting across a stubble field adjacent to the road. A few yards from the dividing fence he dropped quickly to the ground breaking through the light crust of snow. Half-buried in snow he blinked around a few moments. Sensing no enemies, or having formulated his flight plans, he flew to the nearest fence post with a meadow vole clutched in one foot.

The owl paused only a few seconds before tearing at the mouse with his beak. After several pulls, he swallowed some little pieces and deliberately dropped two pieces to the ground. The two pieces were later found to be the stomach and the intestines of the mouse. Immediately after discarding them, the owl swallowed the mouse whole.

—William H. Longley, Kasson, Minnesota

**BIRDS OF THE QUETICO-SUPERIOR WILDERNESS RESEARCH AREA.** During my botanical excursions in the Quetico-Superior Wilderness Research Center May 14-16, 1949, and May 15-18, 1952, I recorded the species of birds that came to my attention. Numerically the two lists are identical, 45 species, but taxonomically they differ slightly, making the combined record 48 different species.

Mr. Clifford Ahlgren, the resident forester of the Research Center brought to my attention several records made by other observers. His own list of winter and spring birds 1948-9 includes 27 species. Mrs. Helen Bebb with members of her family made a list of 18 species, July 6-9, 1949. An important contribution made by Mr. Sig Olson with his associates during a canoe trip July 15-28, 1950, along the border lakes and into the Quetico area. During that period a daily listing of birds seen was made. The daily average of birds with 22 species, 35 being the greatest number for a single day, July 16 in the Crooked Lake and Moose Bay area; 7 species was the least recorded on July 7, in Bagley Bay area. Their observations include 66 different species. Mr. James Beer with Fred Priewart published an illustrated article, *Some Observations of Birds in Basswood Lake, Flicker* 23 (4), 61-68, 1951. This study was incidental to the mammal survey of 21 islands in Basswood Lake. It contains information of their observations on behavior, habits and nesting of several of the 47 species recorded.

In the light of these observations it seemed advisable to compile the record for publication, with hopes that observers in the future will make further contribution to knowledge of wilderness values.

Checking of these records points out clearly a constancy of occurrence of a several species in the bird population of the area. For example, loon, herring gull, flicker, pileated woodpecker, phoebe, blue jay, crow, black-capped chickadee, red-breasted nuthatch, robin, hermit thrush, red-eyed vireo, yellow warbler, myrtle warbler, pine warbler, oven-bird, redwing blackbirds, purple finch, junco, chipping sparrow, white-throated sparrow, song sparrow were seen most frequently by Mr. Sig Olson with his associates, and by most observers. Notable are the differences in the species seen. Not observed by others, Mr. Olson's list contains pied-billed grebe, red-tailed hawk, whip-poor-will, ruby-throated humming-bird, wood pewee, olive-sided flycatcher, winter wren, catbird, evening grosbeak, the last marked with ?.

Mr. Beer and Mr. Priewart recorded ring-necked duck, goshawk, pigeon hawk, sora, black-billed cuckoo, great horned owl, bay-breasted warbler,

Grinnell's waterthrush, not observed by others. The Bebb's list adds red-start with a nest at picnic point. Their wood thrush record, possibly an error, is not included in the check-list. Mr. Ahlgren adds to the species white-breasted nuthatch, Hudsonian chickadee, scarlet tanager, redpoll, and pine grosbeak. Finally, this observer recorded lesser scaup, hooded merganser, golden-crowned kinglet, parula and Tennessee warbler, rose-breasted grosbeak, pine siskin and goldfinch. The record of solitary sandpiper was made at Burntside Lake, bordering the wilderness area. The only sandpiper recorded is the spotted sandpiper by Mr. Olson and Mr. Beer.

Thus each observer and group added to the common record, of 100 different species, as seen in the appended check-list.

- |                               |                                  |
|-------------------------------|----------------------------------|
| 1. Loon                       | 42. Wood pewee                   |
| 2. Pied-billed grebe          | 43. Olive-sided flycatcher       |
| 3. Great blue heron           | 44. Tree swallow                 |
| 4. American bittern           | 45. Barn swallow                 |
| 5. Mallard                    | 46. Canada jay                   |
| 6. Black duck                 | 47. Blue jay                     |
| 7. Ring-necked duck           | 48. Raven                        |
| 8. Lesser scaup duck          | 49. Crow                         |
| 9. American golden-eye        | 50. Black-capped chickadee       |
| 10. Hooded merganser          | 51. Hudsonian chickadee          |
| 11. American merganser        | 52. White-breasted nuthatch      |
| 12. Turkey vulture            | 53. Red-breasted nuthatch        |
| 13. Goshawk                   | 54. Brown creeper                |
| 14. Sharp-shinned hawk        | 55. Winter wren                  |
| 15. Red-tailed hawk           | 56. Catbird                      |
| 16. Broad-winged hawk         | 57. Robin                        |
| 17. Bald eagle                | 58. Hermit thrush                |
| 18. Osprey                    | 59. Olive-backed thrush          |
| 19. Pigeon hawk               | 60. Golden-crowned kinglet       |
| 20. Canada spruce grouse      | 61. Ruby-crowned kinglet         |
| 21. Ruffed grouse             | 62. Cedar waxwing                |
| 22. Sora                      | 63. Blue-headed vireo            |
| 23. Spotted sandpiper         | 64. Red-eyed vireo               |
| 24. Solitary sandpiper        | 65. Black and white warbler      |
| 25. Herring gull              | 66. Tennessee warbler            |
| 26. Black-billed cuckoo       | 67. Parula warbler               |
| 27. Great-horned owl          | 68. Yellow warbler               |
| 28. Short-eared owl           | 69. Connecticut warbler          |
| 29. Barred owl                | 70. Black-throated blue warbler  |
| 30. Whip-poor-will            | 71. Myrtle warbler               |
| 31. Nighthawk                 | 72. Black-throated green warbler |
| 32. Ruby-throated hummingbird | 73. Blackburnian warbler         |
| 33. Belted kingfisher         | 74. Chestnut-sided warbler       |
| 34. Flicker                   | 75. Bay-breasted warbler         |
| 35. Pileated woodpecker       | 76. Pine warbler                 |
| 36. Yellow-bellied sapsucker  | 77. Oven-bird                    |
| 37. Hairy woodpecker          | 78. Northern water-thrush        |
| 38. Downy woodpecker          | 79. Connecticut warbler          |
| 39. Kingbird                  | 80. Mourning warbler             |
| 40. Phoebe                    | 81. Yellow-throat                |
| 41. Least flycatcher          | 82. Canada warbler               |

83. Redstart
84. Red-winged blackbird
85. Baltimore oriole
86. Bronzed grackle
87. Scarlet tanager
88. Rose-breasted grosbeak
89. Evening grosbeak
90. Purple finch
91. Pine grosbeak
92. Redpoll

93. Pine siskin
94. Goldfinch
95. Slate-colored junco
96. Chipping sparrow
97. White-throated sparrow
98. Lincoln's sparrow
99. Swamp sparrow
100. Song sparrow

**Olga Lakela, University of Minnesota, Duluth Branch.**

**A CASPIAN TERN COLONY NEAR SAN FRANCISCO, CALIFORNIA—**

To a native Minnesotan who had never seen more than four Caspian terns in an entire year, a colony located about 30 miles south of San Francisco has been a great thrill to me. This colony is located on a levee between salt pools of the Leslie Salt Company in lower San Francisco Bay. A census of this levee, not over 400 feet in length and 14 feet wide, gave us the following totals: Nests 1 egg—52; 2 eggs—75; 3 eggs—11; 1 egg and 1 young—27; 2 young—23; empty—66; Fledglings out of the nest—202; Adult birds—253 counted, 350 in addition by estimation. Grand Total—262 eggs, 275 young, and 254 nests.

This colony has been in existence many years, and any M. O. U. visitor to California, who would like to visit it on any weekend between June 1 and August 1, if they will contact the Sather's we will be glad to guide them. As we are in the field at every opportunity it would be wise to write in advance.

**Carlyle Sather, 1290 Grove St., Apt. 204, San Francisco 17, California.**

**LIVING WITH GREAT BLUE HERONS** — After spending June 26 through the 29th with the Great Blue Heron Colony in Island Number Two in Lake Koronis, I'm thoroughly convinced that they are noisy, unsightly, foul-smelling creatures when visited in their native haunts. In the future I will be content to let them have sole possession of the island and confine my relations with this picturesque bird from binocular distance.

In this colony there were 139 occupied nests with approximately 392 young. Fourteen nests were blown down by wind storms killing 31 young. All nests were located in elm trees 40 to 50 feet from the ground. Of particular interest was the lone American egret's nest located in the midst of the colony 42 feet from the ground in a box elder. It had five young before the wind storm had blown one to its death.

**—Robert Galati, Umatilla, Oregon.**

**AN UNUSUALLY TAME LONG BILLED CURLEW**—On May 9, while photographing long billed curlews during their nesting in the meadows around Echo, Oregon. I was quite amazed and thrilled at one who refused to leave its nest. It was unconcerned with any of the tactics that I used in trying to scare it up so that I could get some pictures of its eggs or young. After stroking its back and bill, and raising one end of it to see whether there were eggs or young in the nest, I departed, leaving it to its job of incubation.

**—Robert Galati, Umatilla, Oregon**

A LIST OF BIRDS COMPILED AT THE 1952 ANNUAL MEETING OF THE MINNESOTA ORNITHOLOGISTS' UNION—The following list of birds is the composite list of some 190 M. O. U. members who attended the annual meeting at Frontenac, Minnesota on May 17 and 18, 1952.

Loon	Mourning Dove	Robin
Pied-billed Grebe	Yellow-billed Cuckoo	Wood Thrush
Dble-cr. Cormorant	Black-billed Cuckoo	Olive-backed Thrush
Great Blue Heron	Barred Owl	Gr.-cheeked Thrush
Green Heron	Whip-poor-will	Veery
Mallard	Nighthawk	Bluebird
Black Duck	Chimney Swift	Bl.-gray Gnatcatcher
Bl.-winged Teal	Rq.-thr.-Hummingbird	Gold.-cr. Kinglet
Wood Duck	Kingfisher	Cedar Waxwing
Redhead	Flicker	Migrant Shrike
Scaup	Pileated Woodpecker	Starling
Ruddy Duck	Red-bellied Woodpecker	Yellow-thr. Vireo
Turkey Vulture	R.-headed Woodpecker	Blue-headed Vireo
Sh.-shinned Hawk	Yel.-bellied Sapsucker	Red-eyed Vireo
Cooper's Hawk	Hairy Woodpecker	Philadelphia Vireo
Broad-winged Hawk	Downy Woodpecker	Warbling Vireo
Marsh Hawk	Kingbird	Bl. and White Warbler
Duck Hawk	Cr. Flycatcher	Prothonotary Warbler
Sparrow Hawk	Phoebe	Tennessee Warbler
Ruffed Grouse	Least Flycatcher	Cape May Warbler
Hungarian Partridge	Wood Pewee	Orange-cr. Warbler
Bob-white	Ol.-sided Flycatcher	Nashville Warbler
Pheasant	Horned Lark	Yellow Warbler
Virginia Rail	Tree Swallow	Bl.-Thr. Blue Warbler
Sora	Bank Swallow	Myrtle Warbler
Coot	R.-winged Swallow	Cerulean Warbler
Killdeer	Barn Swallow	Blackburnian Warbler
Bl.-bellied Plover	Cliff Swallow	Chest.-sided Warbler
Sp. Sandpiper	Purple Martin	Black-poll Warbler
Sol. Sandpiper	Blue Jay	Palm Warbler
Ruddy Turnstone	Crow	Oven-bird
Pectoral Sandpiper	Blk.-capped Chickadee	N. Water-thrush
Least Sandpiper	Tufted Titmouse	La. Water-thrush
Red-backed Sandpiper	W.-breasted Nuthatch	Mourning Warbler
Herring Gull	Brown Creeper	Yellow-throat
Ring-billed Gull	House Wren	Wilson's Warbler
Bonaparte's Gull	Carolina Wren	Canada Warbler
Forster's Tern	Long-b. Marsh Wren	Redstart
Common Tern	Short-b. Marsh Wren	Eng. Sparrow
Caspian Tern	Catbird	Bob-o-link
Black Tern	Brown Thrasher	E. Meadowlark

W. Meadowlark  
Yellow-h. Blackbird  
Red-w. Blackbird  
Baltimore Oriole  
Brewer's Blackbird  
Bronzed Grackle  
Cowbird  
Scarlet Tanager  
Cardinal

Rose-br. Grosbeak  
Indigo Bunting  
Purple Finch  
Goldfinch  
Red-eyed Towhee  
Nelson's Sparrow  
Vesper Sparrow  
Lark Sparrow  
Chipping Sparrow

Clay-col. Sparrow  
Field Sparrow  
Harris' Sparrow  
White-cr. Sparrow  
White-thr. Sparrow  
Lincoln's Sparrow  
Swamp Sparrow  
Song Sparrow

—Whitney Eastman, Minneapolis,  
Minnesota.

# Call Notes

A newspaper report dated August 5, stated that Robert Henry Smith and Everett L. Sutton, two United States Fish and Wildlife Service workers, spotted two adult whooping cranes north of Great Slave Lake in Canada on July 11 and 12. This discovery may have solved a mystery that has baffled ornithologists for years, the nesting place of this almost extinct bird.

Another newspaper clipping, sent in by Russel Burget, Perrysburg, Ohio, tells of a homing experiment done with Manx Shearwater. This sea bird was captured on Skokholm, a remote island off the coast of Wales, and was transported by air to Boston by Rosario Mazzeo. Here the bird was released, and it returned to its burrow 12 days, 18 hours later, finding its way over 3000 miles of ocean.

The Manx Shearwater has been celebrated a long time as a homing bird. In a recent experiment one of them flew from Milan, Italy to its burrow on Skokholm, a distance of 1000 miles. This was an over-land flight, and the shearwater is seldom on land save on its breeding grounds.

The incubation period of the Manx shearwater is said to be 54 days long.

With the death of F. Max Davidson, The Flicker has lost a friend. Mr. Davidson was in charge of the print shop at the St. Cloud Reformatory where The Flicker is printed. The delay of the June and this issue was due in part to Mr. Davidson's death.

September and October brings the fall migration of hawks through Minnesota. Various members of the M. O. U. will cooperate with the Fish and Wildlife Service in charting these flights. The Duluth Bird Club recorded over 4000 hawks in one day last year.

Bell's Vireo has been found nesting in Minnesota by Brother Theodore. A complete report of the nesting will be found in the December issue of The Flicker.

Two officers of the Duluth Bird Club, Evelyn Palmer and Catherine Lieske, spread their birding activities to the Hudson Bay region at Churchill, Manitoba.

A pair of Evening Grosbeaks has visited the John Bero Feeding Station regularly this summer. As yet, there are no records of a nest of the evening grosbeak in Minnesota.

The Alaskan eagle bounty has ended with a federal regulation which forbids the killing of the Alaskan Bald Eagle.

President Miguel Aleman of Mexico has recently been instrumental in putting in effect a new code which will place his nation in the ranks of the conservation-minded people to northward.

The various state conservation magazines provide us with much material for this section. We have drawn liberally from the Louisiana Conservationist, a fine state publication, for this issue.

It appears that Canada is considering the drainage of 152,000 acres in Manitoba's Pasquia Triangle. Let us hope that they do not repeat the mistakes of the United States.

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A meeting of the Policy Committee was held on August 16 at the home of President Joseph H. Reisinger, St. Paul.

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Send in your nesting records as soon as possible. They may be sent to the editor, the Museum of Natural History or to Miss Vera Sparkes, secretary of the M. O. U.

This issue of *The Flicker* is the first for many years that has been published commercially. If it becomes necessary to continue commercial production of the magazine some adjustment will have to be made either in its cost or its content.

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Last year's record of migrating hawks over two Duluth lookouts was surpassed this year. On two weekends, 13,336 hawks of 15 different species were recorded. The "big day" was on September 20 when 5646 hawks were seen at one lookout, and 1441 at another.

# The Student's Page

**BIRDS AT CAMP**—Last Summer I was at Camp Miller as a counselor helping out with nature study, especially birds. We saw many interesting birds and we could watch them day after day, especially the pair of mallard ducks with their four young and the pileated woodpecker who would cling to the tree and make the chips fly most of the day. I am especially interested in woodpeckers as I helped with the care of "Woody" an injured pileated in our school room, and took him home over the weekend. I belong to the school conservation club and Duluth Bird Club. I wish all children could have a chance to go to camp.

—Marty Mattson, Grade 9, Washington Jr. High, Duluth.

**THE MERGANSER**—One evening, last October, my dad told me that an immature merganser had hit a bus, and was wounded, and was at his work shop. The next day my dad brought the bird to school. We found that something was wrong with its neck, right wing and right leg. It wouldn't eat by itself, so we had to force bits of fish down its throat. We kept the bird for a few days and then decided to take it to the zoo. We all hope its injuries will heal.

—Bob Cohen, Washington Jr. High, Grade 7, Duluth.

**BIRDS AT SKIBO MILLS**—I have belonged to our school conservation club for three years, and I like to be in the woods. On a fishing trip at Skibo Mills, 85 miles north of Duluth, I saw seven deer, a bittern, many hawks, crows, redwing blackbirds and swallows. We saw an owl carrying a rabbit and made him drop it. We found the head and neck had been chewed off. We also saw millions of tent caterpillars, and where they had been the trees looked like they do in the winter. In some places the leaves were growing back on the trees by June 1.

—Wally Najjar, Washington Jr. High, Grade 9, Duluth

**JOE THE SEAGULL**—Some fishermen going out to lift their nets in Lake Superior saw a seagull on a log with a broken wing. They fixed the wing, and when the gull was better he flew away. The next time they went out they saw the gull and threw him some fish. This gull always comes to their boat, and they call him Joe.

—William Engles, Washington Jr. High, Grade 7, Duluth.

**BIRDS IN OUR SCIENCE ROOM**—During the first six weeks of school in the fall of 1951, a variety of birds were brought into our science room. Among these were a junco, greater yellowlegs, Wilson's snipe, palm warbler, immature merganser, black duck, blue heron, pied-billed grebe and the cedar waxwing. Most of these were either sick, stunned or injured. The Du-

luth Zoo was kind enough to nurse some of them back to life after which they were released to go back to their own habitat. The black duck stayed all winter. Those that died we had mounted. On November 1 a slate-colored junco was brought in minus its tail. In less than three weeks the tail had grown out. We had it banded and let it go. It is most interesting to see these birds at close range and help care for them.

—Joan Shoberg, Washington Jr, High, Grade 7, Duluth.

**SURPRISE VISITOR**—One Sunday my bird club secretary called me and said there had been a brown pelican reported near the steam electric plant in St. Louis Bay. She took me and others out to look for him, and we did locate him, and got within ten feet before he swam away. We could hardly believe it as the brown pelican lives in the Gulf of Mexico. We thought he came during the smelt run. Later we were told he had escaped from the Duluth Zoo.

—Douglas Tyacke, Washington Jr. High, Grade 7, Duluth.

**TENT CATERPILLARS**:—Last weekend our family went up to Bemidji by way of Chippewa National forest. We were amazed to see everything covered with tent caterpillars, even the beaver dams. You can hear the caterpillars munching on the trees. The only way to kill them is by spraying which we hope only destroys these enemies, but will not harm the birds. I am a member of the conservation club.

—Gail McManus, Washington Jr. High, Duluth.

## Club Affiliations

There has been some misunderstanding of Article IV of our new constitution, particularly in regard to club affiliation. First of all, the dues as they are stated for club affiliation are over and above individual dues. The club receives one copy of **The Flicker**, but individual members of the club do not, unless they have paid their individual dues of one dollar to the M. O. U. In other words, because you are a member of an affiliated club, that does not mean that you are a member of the M. O. U. Affiliation or non-affiliation does not mean the loss of individual membership. Members who join as individuals or from non-affiliated clubs will be listed as members-at-large.

The policy committee felt that affiliation should mean something special. It does, in that with affiliation dues the member club is on record as contributing to the support of the M. O. U. publication. We know that many small clubs will find it a hardship to pay the extra five dollars, but we also feel that these dues are a distinct contribution to the promotion of ornithology in Minnesota. In order to weigh the advantages of club affiliation, let me make these points:

### An affiliated club

1. is listed in each issue of **The Flicker**, thus the club and its officers are given state recognition. This recognition has provided many newcomers with a means of contacting other people interested in birds.
2. is known to exist as a functioning organization.
3. is represented on the Policy Board, the governing body of the M. O. U.

4. is represented on the editorial board of **The Flicker**.

5. has contributed in a tangible way to the promotion of ornithology in the state.

If you find that your club is interested in becoming an affiliate of the M. O. U., please instruct your treasurer to send in the affiliation dues as soon as possible to the treasurer of the M. O. U. Beginning with the December issue only affiliate clubs in good standing will be listed.

—Joseph H. Reisinger, President

### OMISSION

Inadvertently the name of the author for the articles, **A Trip Through Northeastern Minnesota and Food of Owls**, was omitted. A. E. Allin wrote both of these notes.

Pacific mound-building birds lay their eggs in piles of vegetation, scratchings and mixed dirt, and leave them alone. The heat generated by the decaying vegetable matter hatches the eggs.

The color of the male bird has much to do whether or not he helps with brooding the eggs. If he is inconspicuously colored like the female he takes his regular turn. If he is brilliantly colored, he stays away from the nest.

There have been two instances in the state of Michigan of an owl killing itself by pouncing upon a porcupine. Who said an owl is wise?

The neck of a bird has greater freedom of motion than that of a snake. The tiny neck of a sparrow has 14 vertebrae while the neck of a giraffe has only seven.

CHANGES IN THE M. O. U.  
CONSTITUTION

At the annual meeting of the Minnesota Ornithologists' Union held at Frontenac, Minnesota, on Saturday, May 17, the revised Constitution and By-Laws, which were printed in the March issue of the *Flicker*, pages 3-5, were officially adopted with the following changes:

**Article IV—Annual Dues.**

5. Affiliated club members—25 members or less \$5.00, etc.  
Changed to read:

5. Affiliated member club—25 members or less \$5.00.

Paragraph 2: "Club members in good standing" — should be change to read: Member clubs in good standing".

**Article VIII—Union Publication—  
The Flicker**

Last sentence: "It shall be sent free of charge to all members of the union in good standing."

Add: "As provided in Article IV."

**Article IX—Annual Meeting**

2nd sentence: "Notice of the Annual Meeting shall appear in the March issue of *The Flicker*."

Change, to read: "Notice of the Annual Meeting shall appear in the preceding issue of *The Flicker*."

Please make the above corrections in your copy of the Constitution, so that you will have a copy of the Constitution and By-Laws as officially adopted at the last annual meeting.

The following corrections should be made to the paper "Waterfowl of Three Prairie Potholes" by William H. Marshall as published in Volume 24, number 2, pages 60-68, June 1952.

Table 1 columns 2, 3, 4 and 5 should be headed Areas (acres) and columns 7 and 8 should be headed Water Depths (inches).

On page 67 line 22 the figure "50 acres" should read "80 acres".

On page 68 line 8 should read "this are not entirely satisfactory. The data indicate possible productivity of such a pothole area."

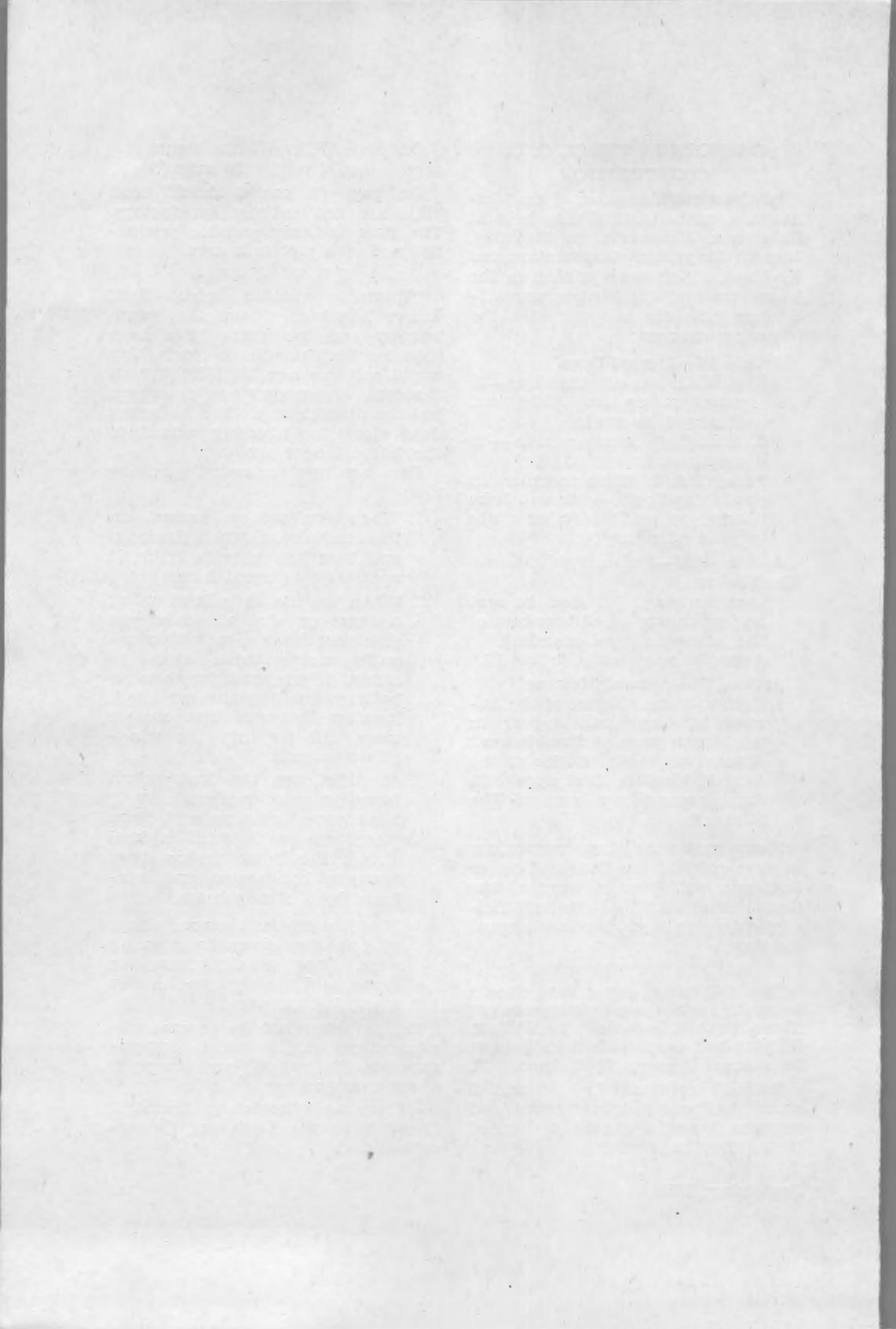
"There is another bright-light killer, however, whom the game warden and the game laws have thus far been unable to touch. You might call this new 'Jack-lighter' an innocent or unconscious destroyer, but the number of victims he leaves dead along the highway, attests to the harvest he reaps.

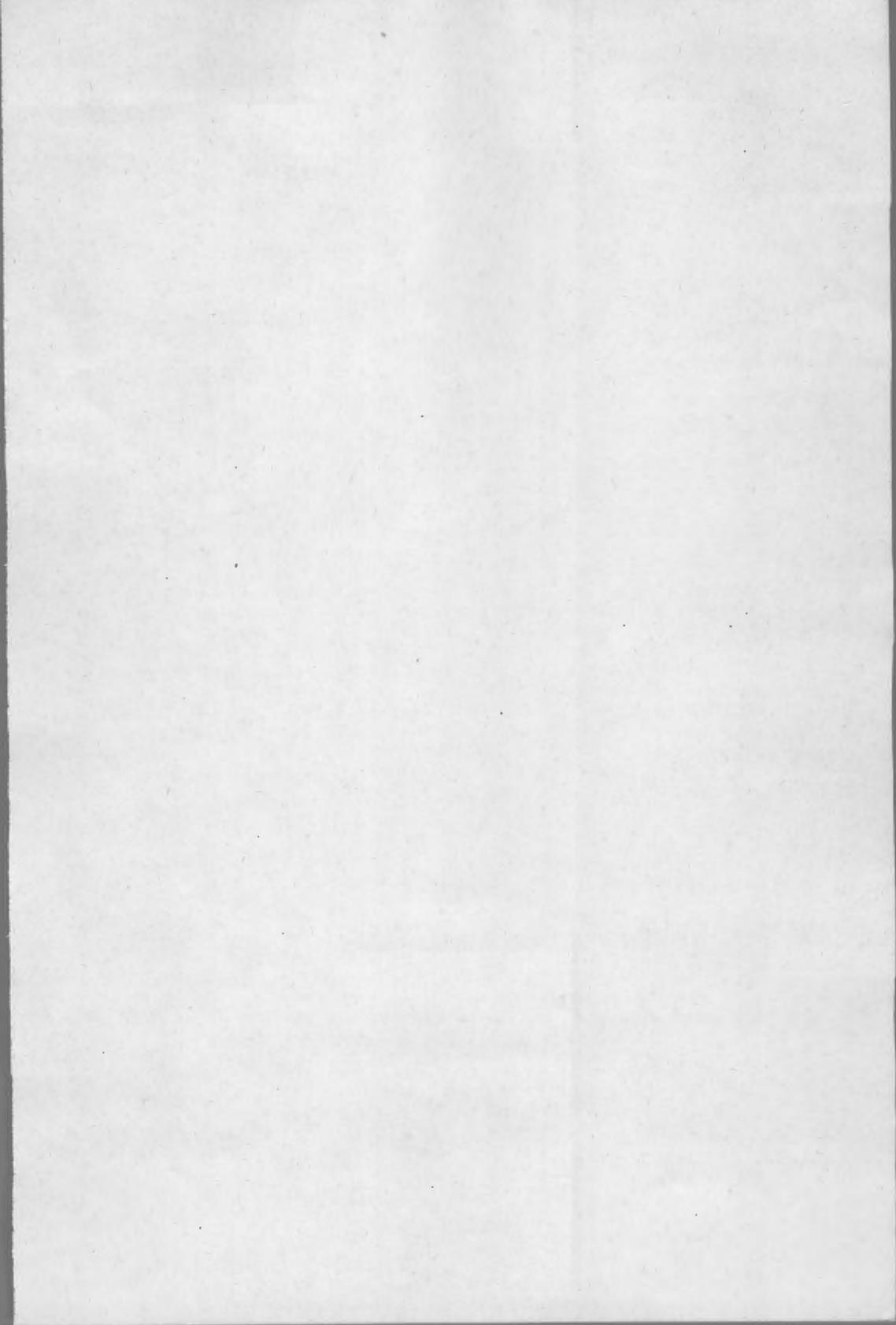
Here are one naturalist's driving tips:

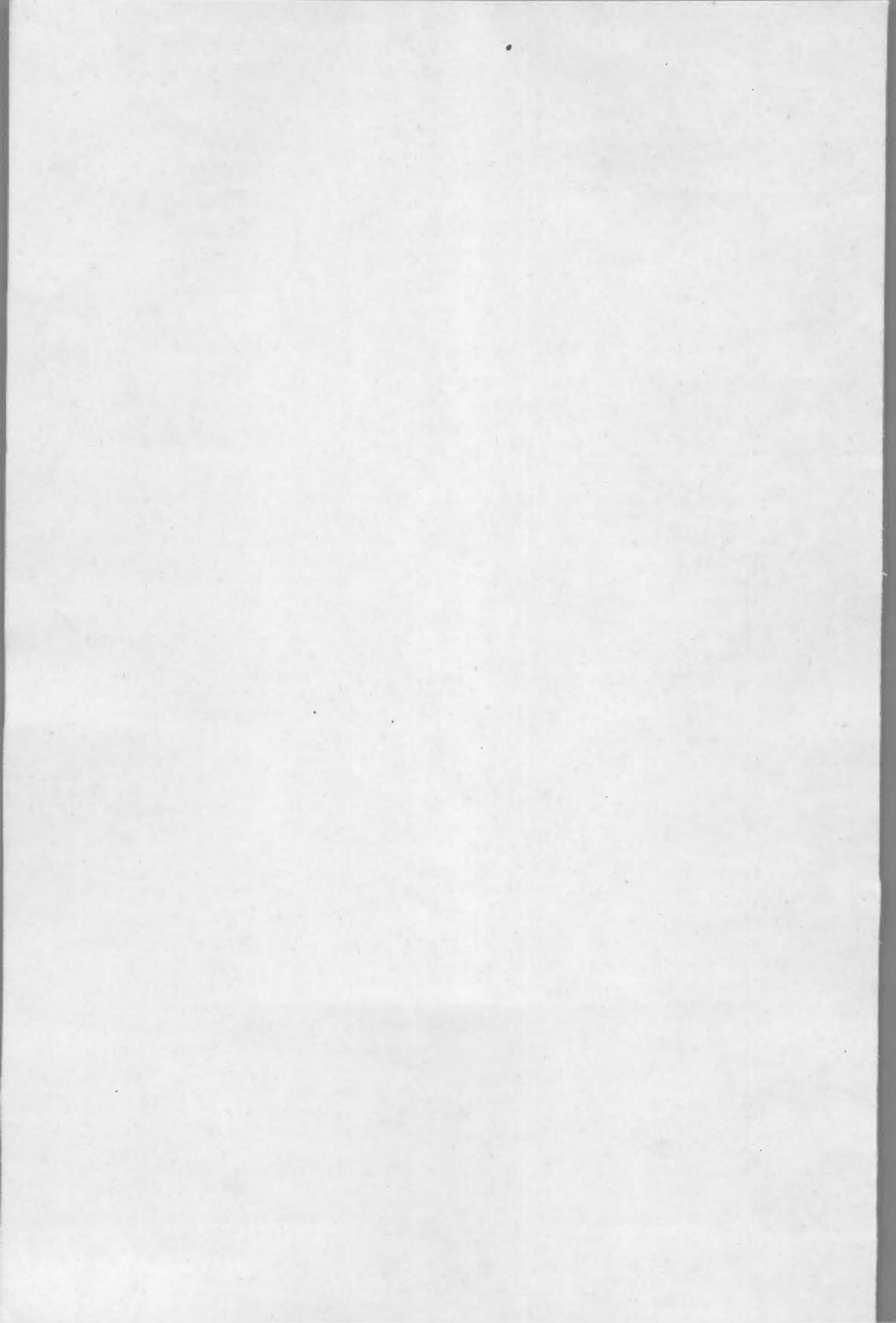
1. When you see an animal on the road ahead, touch the horn and turn the wheel a trifle, if necessary, to avoid him.
2. When you see birds lined up on a fence or wire ahead of you give your horn a toot. This usually scares them away to safety. If you wait for them to be frightened by the car itself, it often happens that one or more will fly into the windshield or grill.
3. At night, use the foot switch found in most modern cars to blink your lights up and down when you see a small animal ahead. For some reason they seem to be dazzled and confused by a steady beam.
4. If a deer crosses the road ahead of you, slow down to a snail's pace. Deer usually travel in herds, and the next one in line may hit your car.

Try to appreciate in general, the value of our wildlife and its importance to the nation, and spare it where ever you can.

—From an editorial by Ernest S. Clements in the *Louisiana Conservationist*.







# Minnesota Ornithologists' Union

## Affiliated Societies

### DULUTH BIRD CLUB—

Officers: President, M. O. Finseth; Vice President, Evelyn Palmer; Secretary, Catherine Lieske; Treasurer, Mr. Harvey Putnam; Field Chairman, Mr. Joel Bronoel; M. O. U. Representative, Mr. O. A. Finseth.

Meetings are held at the University of Minnesota, Duluth.

### J. J. JAGER AUDUBON SOCIETY—

Officers: President, Mrs. George Peterson; Vice President, Mr. Robert Kaul; Secretary, Mrs. H. A. Northrop; Treasurer, Mrs. John P. Zimmerman; M. O. U. Representative, Mrs. H. A. Northrop.

Meetings are held the fourth Monday at the Owatonna Public Library.

### MINNEAPOLIS AUDUBON SOCIETY—

Officers: President, Mrs. Whitney Eastman; Vice President, Mrs. George O. Ludeke; Treasurer Florence Messer; Recording Secretary, Mrs. Edgar Bedford; Corresponding Secretary, Mrs. E. W. Joul; Field Secretary, Mrs. J. A. Thompson; Auditor, Mrs. E. D. Swedenborg; M. O. U Representative, Mrs. I. S. Lindquist.

Meetings are held at the Walker Branch Library.

### MINNEAPOLIS BIRD CLUB—

Officers: President, Mrs. Boyd Lien; Vice President, Mr. W. S. Quam; Secretary, Florence Messer; Treasurer, Amy Chambers; Membership Chairman, Mrs. Whitney Eastman; Program Chairman, Vera E. Sparks; Field Trip Chairman, Mr. John Futcher; M. O. U. Representative, Amy Chambers.

Meetings are held at the Minneapolis Public Library.

### MINNESOTA BIRD CLUB—

Officers: President, Mr. Forrest Lee; Vice President, Mr. Dwain Warner; Secretary, Jessie Richardson; Treasurer, Lucille Hunter; M. O. U. Representative, Mr. W. J. Breckenridge.

Meetings are held at the Minnesota Museum of Natural History.

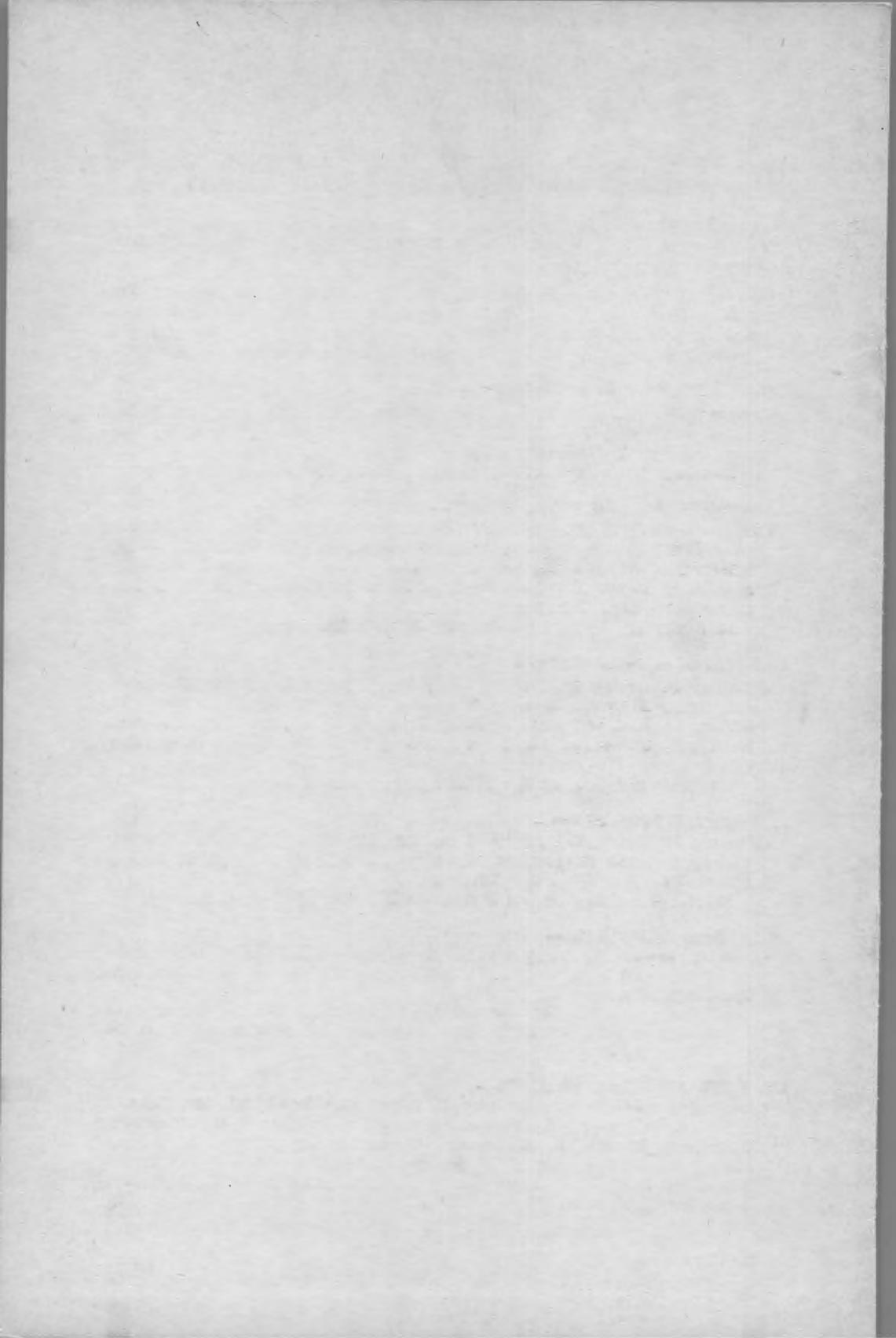
### ST. CLOUD BIRD CLUB—

Officers: President, Cecyl Bemis; Vice President, Mrs. Alys Mayman; Secretary-treasurer, Loretta Rosenberger; M. O. U. Representative, Monica Misho.

Meetings are held in the Science Museum of the St. Cloud State Teachers College on the first Wednesday of each month from October to May.

### ST. PAUL AUDUBON SOCIETY—

Officers: President, Mrs. Charles E. Hart; Vice President, Mr. John A. Hall, Sr.; Corresponding Secretary, Mrs. Nanele Kees Wells; Recording Secretary, Mrs. E. L. Kerncamp; Treasurer, Mr. Marvin H. Adams; Directors-at-Large, Mr. J. H. Reisinger, Mr. John Hoog, Mr. Harold Piper, Mr. R. A. Kortmann, Mrs. Kenneth O'Leary. M. O. U. Representative, Mr. J. M. Rice.



# THE FLICKER

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## The Flicker

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# The President's Page

In 1951 the Minnesota Ornithologists' Union was asked by the Fish and Wildlife Service to participate in a nation-wide survey of the hawk migration. Several groups in the state set up observation posts so that they could participate in this survey. The Duluth Bird Club was one of these participating groups, and they received a great thrill when in four days they saw nearly 10,000 hawks. The survey was repeated in 1952, and this time the Duluth club counted over 13,000, 5,000 of them in one day. The Duluth Flyway promises to be the "Hawk Mountain" of the Midwest.

The magnificence of these birds attracts the attention of even the uninitiated, and flights such as those witnessed in Duluth may be of importance to the tourist industry of Minnesota. Beyond this, it lays open a field of research which may answer many of the puzzling questions about the flight and the hawks themselves. With this in mind, the University of Minnesota at Duluth has set out to establish a program of research and public education—a program, we hope that will stimulate other research interests in this part of the state. We hope that by this fall the research program will be progressing in four directions: 1. through education by a lecture and movie series, 2. through publicity, 3. through continual watches from observation posts to determine the extent, direction, formation, and dispersal of the flight, and 4. through a banding and photography station to determine origin of the flight, and such aspects as the molt of some of these Raptores.

The program is ambitious. It will take money and a good deal of cooperation from many individuals. One of the items involves the establishment of a permanent observation post on the Duluth Campus, a post so-designed that facilities for visiting research men will be provided. A second project involves a prospective meet or exhibition of the ancient art of falconry.

A few issues ago we were ordering 450 copies of *The Flicker* each month, we are now having the printer send us 600 copies. There has been no sudden resurgence of interest in ornithology, the interest has been there all of the time, but we are just beginning to reach those interested people who have been unaware of the existence of Minnesota Ornithologists Union. We believe that it is through public services that such an organization is sold. The booth at the State Fair, operated by the Minneapolis Bird Club, was one of these public services. We believe that the hawk flyway may prove to be another. Article II of our constitution says "The object of the Union shall be the promotion of a broad program of conservation primarily in the field of ornithology. To achieve this broad objective, the Union urges and promotes interest in field studies and observations of birds by individual members and affiliated Bird Clubs."

P. B. Hofslund, Editor



**BELL'S VIREO NEST. PHOTOGRAPHED JULY 4, 1952 AT WINONA, MINNESOTA**

**By Brother Vincent.**

# BELL'S VIREO IN WINONA COUNTY

by

Brother I. Theodore, F. S. C.

My summer assignment brought me from Chicago to St. Mary's College, Winona, I had no special duties so with the encouragement of Brother H. Charles, F.S.C. and Brother I. Vincent, of the Biology department. I undertook a summer bird survey of the college property and the nearby country-side. Up to the middle of August, I had a list of 128 species on St. Mary's property and the surrounding environs within a radius of 10 miles.

What I consider my most exciting find took place on July 3. Returning toward the college after a morning bird-hike, I heard a strange husky song on a hillside of one of the valleys, repeated often enough to suggest a vireo. Making my way toward the source of the song, I located a male Bell's vireo with a worm in his mouth. I watched him fly down to a patch of dogwood surrounding a dead tree. Soon the female also came with food and went down into the same clump of bushes. When I went near the dogwood the two birds sat in the dead tree above scolding me with their vireo-like alarm note. As soon as I would withdraw about 12 feet from the tree, the male would once more resume his husky unvireo-like refrain, **Cheedle, cheedle, cheedle, chee? Cheedle, cheedle, cheedle, chu!**, more often using the answer than the question. Not wishing to disturb the birds more than necessary, I decided to return later with Brother Vincent to locate the nest and photograph it.

About 100 yards further along the slope nearer the College, I heard an-

other Bell's vireo singing. At first I was not sure if there were two males or only one, but when both started singing from different parts of the side-hill, I knew I had located at least two. Later in the day, Brother Vincent and I returned and found the pair nearest the College feeding at least three young out of the nest. We then went on to the clump of dogwood and Brother Vincent found the nest and took pictures, using both colored and monochromatic film. There were three young about seven days old and one unhatched egg. On Tuesday, July 8, I returned to find the young being fed out of the nest. Both pairs were still on the hillside. I collected the nest and egg at the request of Dr. D. W. Warner for the University of Minnesota Museum.

On July 12, I walked up the Stockton Hill road. About two miles south of where I had found the two pairs, near the Dominican Monastery, I turned off the highway to follow the old road near the top of the hill. I heard another Bell's vireo singing and after watching for some time I saw both male and female carrying food but on this occasion I was unable to find either the nest or young.

As I was walking up the same highway, on July 15, about five mile from St. Mary's and a mile from the first site, I heard the Bell's vireo again on the lower side of the road. I walked down the hillside through the brush and weeds, and soon the female began to scold me. She stayed a small distance from me while scolding, of-

ten landing on the telephone wires that ran along the hill. Soon I heard a young bird answering her, and in a small locust tree about eight feet up was a juvenile. As I shook the tree the young bird flew down lower, and I caught it.

The young vireo was light gray, being a little darker on the head than on the back or underneath. There was a slight yellow wash on the sides; it showed no evidence of the white wing bars and very little of the white spectacles. Its tail was still short; its mouth very wide, and as it could not fly well, I judged that it was not long out of the nest. The male and female both came near me scolding while I held the captive, but as soon as the bird was released they came to feed it; and the male resumed his singing. By searching the nearby trees and bushes I succeeded in locating four immatures within an area of 20 feet in diameter, but I could not find the vacated nest.

In each of these nesting records the sites were a considerable distance from water, at least a mile from the first site and from two to three miles in the second two. The hillside site of the first two pairs was predominately oak and birch with a few poplars interspersed. The lower fourth of the hill where the nest were located was a rank tangle of dogwood, blackberry and black raspberry bushes, tall grass, and quite a few small dead trees. Just below the hillside was a field of oats.

The nest, located near the edge of a patch of *Cornus racemosa* about six feet in diameter, was semi-pendant, three feet from the ground, and attached to two small branches very near the main stem. A typical vireo nest, it was composed of birch bark, leaf stems, grasses and rootlets, lined with fine rootlets and grass, 2 ½ inches

deep and two inches across, the top widening somewhat toward the bottom. The outside depth was about 3 ½ inches.

The third nesting site was also small thick vegetation: dogwood, sumac, poplars, blackberry bushes, and tall grass, near the top of a hill adjoining tall oak trees.

The fourth site below the highway was typical roadside growth: large locust trees on the lower side, bordering sumac, small locusts, weeds, tall grass and berry bushes nearer the road.

On the morning of July 19 I went up the valley to check on the first two nesting pairs. Both adults and young were feeding on the side-hill. I saw a female Bell's carrying a worm and watched her go into a dogwood at the foot of a birch tree. Here I found another nest with one young bird ready to fly. It was a good thing that Brother Leo Thomas and I came to photograph it the same day, for the bird had flown by the next morning. This nest was much the same as the one described above, but was located in a small low-hanging branch of the birch hid among the dogwood.

On the same morning almost at the closed end of this valley, about two blocks from the first nest I found, I saw a sixth pair of Bell's vireo feeding young out of the nest. I could not locate the nest in the heavy growth of blackberries, sumac and dogwood, but I saw three juveniles in addition to the two adults.

Up to July 29, I made occasional trips up the valley to check and always found both adult and young. On August 3, I took Tim Knopp up to see his first Bell's vireo; we found two males singing in the same tree—the only two we saw. The next day Tim

and I were walking along the creek about a mile below the valley of the nesting sites, when we heard and saw a number of Bell's feeding in the willows along its banks. At first I thought I had missed some nesting vireos in these lowlands—there were both adult and immatures—but a further check on all the original hillside sites revealed no Bell's vireos there. Evidently after raising their broods they had moved down along the creek to feed their young. Up to August 15 they were still to be found near or among the willows. All the bird guides I have checked mention Bell's vireo as nesting near water, so I wonder if my

experience is unique, or if the birds nest away from water and when the young are able to fly well they are taken to the bottom-lands to feed. Incidentally the males were still singing up to August 15 when I left for Chicago.

Since to the best of my knowledge only one previous nesting record of the Bell's vireo exists in Minnesota, these six nesting records, within two miles of each other at St. Mary's College in Winona county, should be of interest to readers of **THE FLICKER**.  
**St. Mary's College, Winona, Minnesota.**

How fall it, oriole, thou hast come to fly  
In tropic splendor, through our northern sky?

—Edgar Fawcett

# A Nesting Study at Hayden's Lake Hennepin County

by

John A. Jarosz

During the spring and summer of 1951 I undertook, as part of my work at the Minnesota Museum of Natural History, the collecting of nestling birds of determined age and plumage development for the Main Collection of Scientific Study Skins. Work commenced May 2, 1951 and finished July 24, 1951. Approximately 38 days were spent in the field. These were mostly full days (8-10 hours) except for several shorter days early in the season.

The study area, about 17 miles north of Minneapolis, southwest of Champlin, Hennepin County, Minnesota, was approximately 120 acres in extent and was located at the south end of Hayden's Lake. It consisted of a variety of habitats—upland forests (elms, oak, basswood and hackberry), low flood plain forests (soft maple, elm, black ash and willow), both dry and wet meadows and alfalfa fields.

The following is a report of nesting birds found in the locality. The bulk of nests were found in the flood plain forest along Elm Creek which empties into Hayden's Lake. Finding of nests can be accidental, but the careful observing of the actions of adult birds with binoculars is the most productive method of locating nests. Patience and time are the greatest factors, especially for the elusive types. Birds are most active during the early hours of the

morning. However, at nest building time they are active throughout the day.

The most abundant nesters were the American redstart and ruby-throated humming-bird.

Earliest nesting of the American redstart was May 21, latest July 6. Of the 20 nests found, 13 were destroyed and two parasitized by cowbirds. Species of trees preferred for nesting were: elm, 8 nests; ash, 4; boxelder, 2; maple, 2; basswood, 1; and one nest was found in a woodbine vine. They seemed to prefer small trees.

Height of nests—4.5 ft. to 30 ft.

Nest building time—2-3 days, by the female Clutch of 3 to 4 eggs—incubation 14 to 15 days. Young leave nest at 9 days of age.

Earliest nesting of the ruby-throated humming-bird was June 7, latest July 24. All nests were located in the flood plain forest. Of 14 nests found, 6 were destroyed; 4 were so situated as to be impossible to check; 4 hatched successfully. Species of trees preferred were; soft maple 7, black ash 4, boxelder 2, elm 1. Heights of nesting—5 feet to 30 feet. About 50 per cent nested in trees adjacent to the creek, or on branches overhanging the creek. Elm seeds as a substitute for lichen were used on the outside of one nest. Two of the new nests were built within 10 feet of last year's nests.

**Red-winged Blackbird**—A complete check was made on one nest from the first wisps of material used to the time the young left the nest. May 28th—nest building began, wet material, being placed in crotch of a small black ash  $3\frac{1}{2}$  feet high in a shallow marsh.

- May 30th—nest completed
  - June 1st—1 egg laid
  - June 2nd—2 eggs
  - June 3rd—3 eggs
  - June 4th—4 eggs
  - June 5th—4 egg, female incubating
  - June 13th—4 eggs
  - June 15th—3 young and 1 egg
  - June 23rd—3 young
  - June 25th—nest empty (young left nest)
- Nest—completed in two days
- Egg laying—one a day for four days, clutch of four.
- Incubation—11 to 12 days
- Young stayed in nest—10 to 11 days.

**Destruction of Nests.** Of the many nests destroyed, probably by predators, the most interesting example was that of a yellow warbler. On checking a yellow warbler nest on June 11 in a wolfberry bush two feet high, I found the female and five young had been killed. The back of the neck of the female was chewed, the head of one young was bitten off, one young was disemboweled, and there were tooth marks through the skin at the base of the skull of the others. I suspected it to be the work of a weasel.

**Nesting Oddities.** On June 1 a phoebe nest with three young was found in a farm shed in the area. This species uses horse hair commonly for nesting material. The leg of one of the young

was found knotted to the nest by a horse hair. It was rescued, however, before any injury resulted.

**An Unusual Nesting Record** was that of the brown creeper which normally nests farther north. On June 13, 1951, Franklin Willis and I observed three young huddled together and two adults 30 feet high in a very large cottonwood. The young had tails about half grown and were being fed regularly by the adults.

**Unusual Nesting Sites.** A yellow-billed cuckoo's nest was found 30 feet above the ground. They normally nest in low bushes. One mourning dove nest was situated on the ground, whereas doves usually nest in trees or bushes.

**Unusual Nest Building Behavior.** On May 21, a warbling vireo's nest was found in a grove surrounded by meadow. On May 28, while I was checking this nest, the male and female arrived. The female removed material from the outside of the nest then both birds flew across the meadow to trees at the creek, 30 yards away, where the female began building a new nest in a maple. This procedure was repeated regularly during the 10 minutes they were under observation.

**Unusual Plumage Development.** The young of the black-billed cuckoo at about 6 days of age were found suddenly to become completely feathered. A careful check showed that the feather sheaths break open in as short a time as from one to two hours. They start to leave the nest at seven days by climbing from limb to limb while still unable to fly.

The food of the young is chiefly caterpillars, plus some beetles and, oddly enough, a few particles of their own egg shells.

Species found nesting in area

broad-winged hawk .....	1
spotted sandpiper .....	1
mourning dove .....	3
yellow-billed cuckoo .....	1
black-billed cuckoo .....	3
ruby-throated hummingbird .....	14
downy woodpecker .....	1
crested flycatcher .....	1
phoebe .....	1
least flycatcher .....	5
wood pewee .....	6
bank swallow .....	3
rough-winged swallow .....	1
1 renest	
black-capped chickadee .....	1
white-breasted nuthatch .....	1
house wren .....	3
catbird .....	3
brown thrasher .....	1
robin .....	1
veery .....	2
yellow-throated vireo .....	1
red-eyed vireo .....	1
yellow warbler .....	4
American redstart .....	20
bobolink .....	1
meadow lark .....	2
red-winged blackbird .....	1
indigo bunting .....	2
dickcissel .....	1
vesper sparrow .....	4
song sparrow .....	4

Area investigated—120 acres

The total number of nests found—96

The total number of nests destroyed

—45

The total number of nests parasitised by cowbirds—10 as follows:

American redstart .....	2
indigo bunting .....	2
song sparrow .....	2
vesper sparrow .....	1
veery .....	1
red-eyed vireo .....	1
yellow-throated vireo .....	1

Other Wildlife in Area

A painted turtle was observed laying eggs, and two nests of the snapping turtle were found, each with 31 eggs. Garter snakes were common, and one which was chased into the water, I believe stayed beneath the surface for at least 10 minutes.

Evidence of raccoon was abundant. Fox deer, muskrat, and striped skunk were seen occasionally. Mink and woodchuck were seen with young.

Intensive work on a small area can yield surprisingly large amounts of information, as is shown by this report, which has covered only the highlights of my experiences while working in this area. University of Minnesota, Minneapolis, Minn.

# TWENTY-ONE YEARS OF BIRD RECORDS

By  
Meyers Peterson

This paper is a summary of significant data from the records of Mr. George Friedrich and Mr. Harry Goehring of the St. Cloud Teacher's College.

This file of information is mostly concerned with spring migration although some work was done at other times of the year. It was compiled by ornithology classes at the College in cooperation with the T. S. Roberts Ornithology Club and under the direction and supervision of Mr. Friedrich and Mr. Goehring. It was begun by Mr. Friedrich in 1931 and continued by Mr. Goehring when Mr. Friedrich left the College, thus it covers a span of some 21 years.

In the course of this summary I shall mention Mr. Nestor Hiemenz on several occasions. Mr. Hiemenz is a former student of St. Cloud who has since done graduate work in ornithology at Cornell University. Because of his fine record, and because of his observations of a number of rare varieties, several of which were verified by collections, it is felt that his contributions are significant.

Fifteen birds have been chosen for mention. They might be divided into the following groups: (1) birds that are very rare in central Minnesota, (2) those that are becoming less common in central Minnesota, (3) those that are abundant some years and not

in others, and (4) birds that are advancing their range farther northward.

Among the records there is a number of birds that have been sighted only once or twice in the 21 years. Of this group I will mention seven; red-shafted flicker, ferruginous rough-legged hawk, European widgeon, red-throated loon, mountain bluebird, American magpie and northern raven.

Two of the birds that are recorded only once were both seen in 1950. The red-shafted flicker was seen in May a few miles east of St. Cloud. On November 3, 1950 a northern raven was found wounded and unable to fly. It was collected and brought to the College where a study skin was made. The bird was found by a St. Cloud student about five miles west of Forest Lake.

The American magpie was seen for the first time in the St. Cloud area in April of this year. The normal range is western United States. A few wander east in the winter to Minnesota, Nebraska, and occasionally farther.

A rare bird east of the Mississippi River is the ferruginous rough-legged hawk. It is known chiefly in the western prairie portion of Minnesota. There are but a few records east of that section. It was seen by Mr. Hiemenz in May of 1942 just south of St. Cloud.

A casual visitor to North America is the European widgeon. It has been seen along the Atlantic and Pacific

1. Read at the 1952 M. O. U. annual meeting.

coasts and in a number of interior states such as Minnesota, Wisconsin, Michigan, Ohio, Nebraska, Indiana and Missouri. The widgeon breeds in the northern part of the Eastern hemisphere and winters in the British Isles, southern Europe, northern Africa and southern Asia. When seen in North America it is usually in migration time, either fall or spring. It reaches the United States by two migration routes, the Atlantic Coast through Greenland and the Pacific Coast by way of the Aleutian Islands. This "Old World" bird was recorded by Mr. Hiemenz and the ornithology class in April, 1937. The bird was approached to within 20 feet but the following day, when attempts were made to collect it it could not be approached.

The red-throated loon is seen casually in Minnesota Iowa, Idaho, Montana and Nebraska. Its wintering grounds are along the sea coasts, although it is sometimes a winter visitor on the Great Lakes. The breeding area is in northern North America from Alaska across northern Canada to Greenland and south to Great Slave Lake and New Brunswick. It is rare in the interior, but was recorded twice in St. Cloud. The first record was on April, 1936 at Clear Lake, with no observer recorded. The next sight record is by Mr. Hiemenz at Sartell in February, 1942.

A pair of mountain bluebirds were collected in April of 1935 by Mr. Hiemenz and Mr. Friedrich. The bluebirds were sighted one day and were collected the following day. This pair of mountain bluebirds is now in the museum at the St. Cloud Teacher's College.

The turkey vulture is not seen in the St. Cloud area any longer, and it is becoming less common in Minnesota.

They are still seen in pairs or in small parties in the Red River Valley, along the bluffs of the Mississippi River below Red Wing, and along the St. Croix River. It was observed in 1931, 1933, and 1935 in St. Cloud. Since the removal of a slaughter house that was located on the T. C. Islands these large birds have gone elsewhere for their food supplies. The fact that the smaller slaughter houses are disappearing seems to have an effect on the number of these birds.

Chiefly a winter visitor and rarely a summer resident, is the goshawk. It has been found nesting in Minnesota in Hennepin County, Roseau County, St. Louis County, and at Cloquet. The goshawk is more abundant some years than others. At St. Cloud it has been recorded five times; in 1931, 1935, 1940, 1949 and 1951. All but one of these was in April or May. One fall record was made in 1940.

The evening grosbeak has been recorded six times in these years. They were seen in the following years. 1933, 1937, 1946, 1949, 1950, and 1952. In 1949 and 1950 a flock wintered in St. Cloud. They were last seen in May. Very little is known about the breeding range of the evening grosbeak. It breeds, for the most part, in western Canada. So far as known, the nest of the evening grosbeak has not been found in Minnesota, although there have been observations of mature and young birds feeding together.

There are comparatively few definite records of the yellow rail in Minnesota. It is a summer resident in the western section and perhaps throughout the state. This bird is very difficult to observe, for it hides in the grass and is quite reluctant to fly. Mr. Hiemenz observed the yellow rail in May of 1935 at Little Pine Lake. It was also observed in the spring of 1950.

The red-breasted nuthatch is chiefly a spring and fall migrant south of the evergreen forests though it is a winter resident in much reduced numbers. Mr. Goehring banded three of the red-breasted nuthatch in November of 1951. These birds were again observed twice in the first week of December. They have been recorded only twice at St. Cloud, in 1949 and 1950.

There are a number of birds that are extending their ranges northward. Three that are noticed especially are the eastern cardinal, cerulean warbler and the red-bellied woodpecker.

The eastern cardinals were observed in 1933 for the first time in this area and then not again until 1941. They have been seen quite regularly since as permanent residents. In 1950 a nest was found. Mr. Goehring has banded several, and they have been recaptured a number of times.

The cerulean warbler, a rare summer resident of southeastern Minnesota some years ago, is extending its range northward. By 1930 the University Museum had only 30 records of the bird in Minnesota. In 1933 a colony of these birds was found at Linwood Lake in Anoka County. In 1935 Mr. Hiemenz records the cerulean warbler as being

fairly common at Grand Lake. They were first noted there in 1934. In 1945 it was seen at St. John's University. In 1949 and 1950 it was seen west of St. Cloud and in 1950 the building of a nest was observed a few days after the bird was first seen.

Another bird which was rare in Minnesota is the red-bellied woodpecker. It was unknown in 1892. The first specimen was collected in 1893. Since then it has extended its range northward from the extreme southeastern part of Minnesota, and is also increasing in numbers. This woodpecker was first recorded in St. Cloud in the spring of 1940. It was seen several times then. The next record was ten years later in May of 1950. In November of 1951, it was observed by Dr. and Mrs. Partch as it fed from an ear of corn at their home in east St. Cloud.

These records are not conclusive in themselves, but along with data from other sections of the state they may prove to be of great interest. We will know more about our bird population, and in future years, it may help to show a movement of birds to a new area.

T. S. Roberts Bird Club. Teachers College, St. Cloud.

# Seasonal Report

by

Mary Lupient

September weather in southern Minnesota was the hottest since 1931. For several days during the middle of the month temperatures ranged in the lower 90's but by October there were light and killing frosts at night in most sections. One inch of snow fell October 6 in northern areas, but otherwise there was practically no precipitation during the period covered by this writing, August 10 to November 12. Beautiful days bright and sunny made up the weather, but the state experienced the driest autumn in more than 90 years. The fire hazard was so great that it nearly became necessary to postpone the opening of the hunting season on waterfowl. Hunters got the limit the first few days, shooting the local ducks, mostly mallards and blue-winged teal. Then the numbers began to diminish and to date the big northern flights have not materialized. Among several species of ducks, canvas-backs and scaup were observed from Long Point, Lake Pepin, October 9. According to Joel Bronoel the duck migration in Duluth was erratic and no big flights were seen. He reported a few golden-eyes November 2. On this date Sally Davidson and Paul Murphy saw about 200 golden-eyes and several hooded mergansers on lakes in the Hill estate near St. Paul.

Canada geese flew over Redwing October 9. Robert Janssen reported a flock of about 35 blue geese and snow geese that flew over the Minnesota River bottoms, October 11. Also in the same area he saw a white pelican standing motionless for a con-

siderable length of time, possibly injured by hunters. Between four and five-hundred Canada geese swam on Silver Lake, Rochester November 12. With them was one immature snow goose and 200 mallard ducks. While under observation the ducks courted and nodded. They were very fat, and so tame that they came to the cars of spectators looking for food, while the geese with a little less confidence hopefully loitered a few yards away. Their low mellow honking mingled in delightful contrast with the quacking of the ducks. Each year geese and ducks spend the winter on Silver Lake and at Mayowood about four miles distant.

A juvenile surf scoter was shot at Pickerel Lake, Freeborn County, October 23, 1952. This, a very unusual record, was reported by Russ Sether, Albert Lea.

In his report Joel Bronoel mentioned that a wounded whistling swan had been brought to the Duluth Zoo, evidently shot by hunters.

Records of American egrets seen in the vicinity of the Twin Cities and along the Mississippi and Minnesota Rivers were sent by several observers. The number of birds was small in each instance. The latest date was reported by Robert Hanlon who saw one American egret November 1, in a slough a mile north of Shakopee. Records of American egrets were sent by Mrs. C. E. Peterson, Madison as follows: August 10, near Appleton, 5; August 11, near Montevideo, 11; August 28, near

Benson, 1; September 11, southwest of Madison, 56; September 23, south of Madison 23; September 28, south of Madison, 2. American egrets usually leave when hunting season opens. For the past few years they have appeared from the south in varying numbers after their young were raised, to roam about the sloughs and marshes until autumn.

The hawk migration in the state was checked September 13-14 and September 20-21. From the ridge back of Duluth over 13,000 hawks were counted during the two week-ends, and Mr. Bronoel reported that the large hawks were still migrating, November 12. At the time of the census the number of migrating hawks along the St. Croix, Mississippi, and Minnesota River valleys was small. A detailed report of the census will be found elsewhere in this issue. There were a few records of pigeon hawks and duck hawks in September and October seen along the North Shore and in the Twin City area.

Ruffed grouse were reported to be plentiful but early in the season hunters found it difficult to bag them due to heavy cover. Ring-necked pheasants were numerous in southern parts of the state but somewhat scarce in other sections. Ron Anderson reported a prairie chicken seen at St. Clair, Minn. September 23.

A few large concentrations of shore birds were seen in late August and early September. A few shore birds lingered late, there were two records of the black-bellied plover, November 2. One of these was reported by Joel Bronoel at Duluth, the other by Mrs. M. E. Herz at the Isaac Walton Bass Ponds. More than the usual number of stilt sandpipers were reported in the fall migration. A knot was seen at Fisher's Lake near Savage, Sept-

ember 6 by A. C. Rosenwinkel and others. At Osseo, August 28, Dr. Walter J. Breckenridge saw a northern phalarope. A golden plover at Shakopee, September 15 was reported by Robert Janssen. Joel Bronoel's report contained the following, "Shore bird migration was heavy during the first week of September in the Duluth area. Black-bellied plovers, golden plovers, red-backed sandpipers, ruddy turnstones and many of the smaller birds observed."

The autumn migration was notable because of the influx of Franklin's gulls into eastern Minnesota. Until the past few years very few of these gulls migrated along the Mississippi valley. In recent years small flocks were observed in September, but 1952 brought flocks of hundreds. In some instances they followed the farmer's plow as they do in the West. About 200 stood in a compact mass on a garden plot within the city limits of Minneapolis September 21. The earliest record was sent by Robert Janssen. Between four and five-hundred were on mud flats near Shakopee, September 15. During the last two weeks of September, hundreds of Franklin's gulls flew over areas adjacent to the Mississippi, Minnesota, and St. Croix Rivers.

The migration of swallows, flycatchers and thrushes was normal. Eastern bluebirds, flocking in larger numbers than usual, were seen north of Minneapolis, September, 25.

The earliest record for warblers was the first week in August. Theo Zickrick reported a huge wave of Blackburnian, Cape May, bay-breasted and chestnut-sided warblers. They passed through Grand Marais in such large numbers that they appeared to be everywhere. Robert Janssen reported successive waves near Minneapolis on the following dates; August 17-24,

September 3-6-17. Sally Davidson reported a wave of myrtle warblers near Afton, September 24. Except for these waves the movement of warblers apparently was singly or in small bands.

Blue jays in large numbers migrated September 20.

A large concentration of sparrows including white-throated, Harris, Lincoln and tree was reported by Sally Davidson near Afton, September 21. The usual large number of slate-colored juncos was present during the autumn migration.

Five purple finches were seen at Frontenac, October 9.

American pipits were abundant this autumn. There were many records from various sections.

At Duluth, Joel Bronoel recorded a heavy migration of northern horned larks the second week in September. This writer found them abundant, September 29 along the North Shore as far as Grand Marais, feeding on the shoulders of the highway. Lapland longspurs in small flocks were present also. They walked on the bare ground around the parked car, so close that their spurs could be seen. In Washington County A. C. Rosenwinkel found a concentration of hundreds of Lapland longspurs, November 8.

Ravens were observed along the North Shore between Duluth and

Grand Marais, September 29.

Evening grosbeaks appeared in Duluth, September 7, according to Mr. Bronoel who reported also that hundreds of pine siskins and a few redpolls were seen at Encampment Forest, October 26. Well over one hundred pine siskins were seen near St. Paul by A. C. Rosenwinkel, October 4.

At Goose Lake near White Bear a flock of about 50 snow buntings was observed by R. E. Cole, October 22. They fed on weeds along the lake shore.

Last autumn a Carolina wren came to the home of Dr. and Mrs. George Bantle, St. Paul and stayed all winter. October 25 of this year a Carolina wren appeared again, and at date of this writing November 12 it is still there. Mrs. Bantle says that it has all the actions and mannerisms of the one that spent the winter with her last year. It looks for food in the same spots where she formerly hid it from the other birds that went to her feeders. It was seen October 28 by this writer, and was a sprightly healthy appearing bird. It would be interesting to know whether or not it is the same bird, and if it nested and where Mrs. Bantle would prefer to have it go south, because she will be concerned for its welfare during the intense cold and heavy storms. However it lives in a tangled thicket in a deep ravine where there is plenty of shelter. — Minneapolis Minn.

# THE CANADIAN LAKEHEAD

*Edited by*

A. E. Allin

## LATE SUMMER AND FALL

Durning the late summer and fall of 1952 more birds and more species of birds were seen at the Canadian Lakehead than ever before. Rare visitors included **stilt sandpipers** and **buff-breasted sandpipers**, two birds new to the local list, as well as numerous other species previously recorded on only a few occasions. Late summer is often considered a time of little interest to ornithologists, a period when many birds are silent and moulting, although thrushes and finches may be raising their second broods. Actually it is also a time when many species, having completed their breeding activities, are returning south. This was well demonstrated durning the late summer of 1952.

During the latter part of July and August we holidayed in Kenora and Southern Manitoba. A small flock of migrating nighthawks was noted on July 31, five days later than we had first seen them moving southward in 1951. Both years, however, they were present in smaller numbers than the great flocks seen August 6, 1948 and August 5, 1949, in the same area. August 6 was spent at the Wildlife Institution Station at Delta, at the south end of Lake Manitoba. Migrating yellow warblers were present in numbers exceeding anything we had previously recorded. Two heavy waves of migrants appeared at the Lakehead in August. One on August 17, included robins although the local birds were still attending late broods at that date. Chipping

sparrows, purple finches, Tennessee, Nashville and black and white warblers were also present. A second wave on August 31, consisted principally of myrtle, Nashville and Tennessee warblers, but red-breasted nuthatches were also common.

But the above species were not the earliest migrants. As usual shore birds were in the van of the vast hordes which would return south during the following four months. The first of these, a greater yellow-legs, was noted at Kenora on July 23. At Delta, on August 6, we found semipalmated and solitary sandpipers and semipalmated plovers. The Lakehead experienced heavy rains during the latter part of July and the first half of August. This resulted in ideal conditions for shore birds, and more species and more individuals were present during the next few weeks than had previously been recorded. On August 13, David Allin reported large numbers of sandpipers on a local golf-course. These included 50 least, three pectoral and three buff-breasted sandpipers. During the remainder of the month solitary, least and pectoral sandpipers, greater and lesser yellow-legs and sanderlings were frequently seen. G. E. Garton reported black-bellied plover on August 31. On the same date Keith Denis noted a flock of golden plover, but this species failed to appear in their usual numbers during subsequent weeks. Garton added the **stilt sandpiper** to the local list when he saw one at Port Arthur on

September 6. He reported three present in the same area on the following day.

September was unusually clear, dry, and warm following a killing frost on September 2. Precipitation of 1.46 inches contrasted with the 5.95 inches of rain which fell in September, 1951. Migrating birds were abundant all month, especially myrtle warblers. The latter were present in two contrasting locations—birch trees on our city streets which were heavily infested with aphids and the wild-rice beds of Whitefish Lake which were also invaded by an insect pest. These warblers remained throughout September and were not uncommon in early October. One was still present in Fort William on October 29 (David Allin). Garton and Denis reported palm warblers abundant during September in Port Arthur. American pipits arrived over the week-end of September 13-14, and were reported by observers in widely separated areas. Garton reported one flock consisting of 600 birds on September 13. Horned larks, an uncommon migrant locally appeared on September 16, and were present in numbers until October 17. The majority appeared to belong to the northern subspecies, but some were Hoyt's. Both Lapland longspurs and tree sparrows appeared on September 20, and were present in their usual numbers until mid-October. White-crowned sparrows were more common than usual during the last week of September and early October. Harris's sparrow occurs so rarely as a fall migrant we had never seen one in fall plumage, but this year they were not uncommon from September 26 to October 13. A major wave of migrants on September 21 included slate-colored juncos, red-breasted nuthatches, and veerys.

The hawk migration was disappointing to members of the Thunder Bay

Field Naturalists' Club which joined with associated clubs of the Federation of Ontario Naturalists in studying the movement of these Raptores over the week-ends of September 14 and 21. As in previous years, we failed to note any flights, only the occasional hawk of several species being seen. It is possible we missed a major flight of broad-winged hawks due to it occurring in mid-week for C. E. Garton reported hundreds of these birds migrating along the lakeshore, Port Arthur, on September 17, 18 and 19. A small flight of sharp-shinned hawks was observed by Allan Gordon, 20 miles southwest of Fort William on September 6.

October was a month of contrasts with a high temperature of 68.8° on October 23 and a low of 10.0° on October 17. The mean temperature for the month was 37.2°. Rainfall amounted to a trace and 0.8 inches of snow was reported for the Lakehead. Outlying districts however, experienced heavier snowfalls including one on October 2 and another on the 18th. Marshes and small lakes were temporarily frozen by the low of 10°, and these periods of severe cold and storms undoubtedly affected migration. We saw the first rough-legged hawk on October 17, and for the next few days they were not uncommon. On October 20, R. Philpot reported 40 or more at Silver Islet moving steadily along the shore. Snow buntings appeared on October 13, and occurred in unprecedented numbers throughout the month and into November. Northern shrikes were seen on October 20, 23 and 28. Common redpolls appeared on October 25. Pine grosbeaks were first seen and heard on October 15 and are now present in small numbers throughout the district. Since there is a very heavy crop of rowan berries these birds should be abundant during the winter months.

Many unusual observations were reported during the fall. Dr. E. N. Wright was given a little brown crane which had been wounded near Port Arthur on October 9. This is the eighth local record and one of the few specimens obtained in Ontario. Colonel L. S. Dear shot a ruddy duck on October 4, and a surf scoter on October 12. He reported a flock of eight wood ducks on September 25. All were on Whitefish Lake. An Oregon junco noted on October 12 by Keith Denis is a second local record. Late dates include a black-billed cuckoo noted by P. Addison at Mac Diarmid on October 9. Addison also saw a red-wing blackbird and an olive-backed thrush east of Port Arthur on November 2. On October 12 R. Strong found a night hawk in good condition caught in a screen. On being released it readily flew away. He felt it had been caught only a short time.

The migration of ducks and geese was unusual. On August 31, Garton reported the presence of green-winged teal and shovellers at Port Arthur—an unusually early date for the teal, and one of the few local records for the shoveller. They remained until the end of September when they disappeared, probably due to a combination of weather conditions and shooting pressure. Only a few redheads, pintails and baldpates were noted. Mallards and blacks were present until mid-September when local birds moved out. They remained scarce until the last few days of October when large flocks were reported. American golden-eyes were uncommon as were the three species of mergansers. The severe weather of early October produced a few buffle-heads, and they were present in their usual numbers until the end of the month. Ring-necked ducks are common summer residents, their numbers being augmented throughout September by early migrants. The arrival

of great flocks of these "marsh blue-bills" usually coincides with the storms which are commonly encountered the last few days of September or the first few days of October. This fall they arrived on October 2 following a snow storm and a low temperature of 21°. Lesser scaups are not expected except in very small numbers until the second week in October, but in 1952 their appearance coincided with that of the ring-necked ducks. Both species remained for only a brief period although ordinarily they do not leave until the marshes are permanently frozen. We believe greater scaups, migrating from the north west, leave the larger lakes of Northern Manitoba when forced out by the onset of winter. Moving southeast to Lake Ontario and the Atlantic coast they pass in numbers over the Canadian Lakehead, although the apparently miss all of Minnesota except its northeastern angle. We have learned to expect them about the end of October, although some years we have failed to see them. This year they arrived in large numbers on October 18, accompanying the cold and storms of that period. Although the smaller marshes were still open until November 8, only a few greater scaups remained on Whitefish Lake at the end of October.

Ruffed grouse are still abundant. A year ago we reported them budding following the snow storms of October 26 and inferred that this was a result of the snow-covered ground. One should not jump to conclusions so quickly, for this year with no snow present they commenced budding on November 1. The spruce grouse has declined in numbers from a year ago. The introduced Hungarian partridge persists in small numbers in favourable localities and appears to be spreading to a limited extent. Due to the activities of the Thunder Bay

Field Naturalists' Club and the Thunder Bay District Fish and Game Association there is a closed season on these exotics. Twenty years ago the latter organization introduced ring-

necked pheasants, but as would be expected, winter conditions here are unfavorable, and they are now extinct in this region—. Fort William, Ontario.

Unfortunately photo credit for the pictures of the thistle-nesting goldfinches in the September, 1952 issue of *The Flicker* was omitted. These pictures were taken by Harvey Gunderson, assistant scientist at the University of Minnesota's Museum of Natural History.

# Notes of Interest

**DULUTH BLUEBIRD TRAIL-1952.** During the month of April, 1952 the Duluth Bird Club built and set out 65 birds houses of the Musselman type for the purpose of attracting more bluebirds to this territory. The houses were placed approximately a half-mile apart on fenceposts along the Jean Duluth, Arnold, Howard-Gneisen, and Rice Lake Roads north of Duluth for a distance of about 15 miles. A few were placed in the recreation area on Minnesota Point. The boxes were spread over a driving distance of about 75 miles. The houses were built by J. K. Bronoel and Harvey Putnam, and placed by J. K. Bronoel, O. A. Finseth, Sam Cox, James Felton, and P. B. Hofslund.

The first nesting in the boxes were as follows:

Tree Swallow	34
House Wren	12
Bluebird	2
Houses unoccupied	7
Houses removed	10
	65

Individual records were maintained on each box. The boxes were checked at least five times, and some of them six times during the nesting period.

The unoccupied houses were apparently placed too close to the ground, or too close to wooded areas, and will be moved to more suitable sites. The houses removed were no doubt taken by private parties for their own use, and perhaps, all or most of them were occupied.

Bluebirds occupied Houses 42 and 44 on the Arnold Road. Each laid five eggs and reared five young. House 44 had a second nesting of three eggs, and on later inspection two young were observed.

The number of eggs observed in nests of tree swallows and wrens were as follows:

TREE SWALLOWS		WRENS	
<u>Eggs</u>	<u>Nests</u>	<u>Eggs</u>	<u>Nests</u>
2	1		
3	4	3	3
4	7	4	2
5	7		
6	7	6	3
7	1	7	2
Tree Swallows Banded	47		
Bluebirds Banded	5		

Box 7 was observed on June 4 with seven tree swallow eggs. On June 12 we found the box taken over by wrens. In at least four instances house wrens made their second nestings in boxes where tree swallows had nested and raised their young.

First check of houses was made on May 22 at which time one box contained three tree swallow eggs, and many more that contained nesting material. On May 25 three bluebird eggs were discovered in Box 42.

The boxes were checked at periods of a week or more, and no attempt was made to check the period of incubation. **J. K. Branoel, Duluth Bird Club.**

**AN UNSUCCESSFUL EARLY ROBIN NEST**—On April 20, 1950, a robin began building on our second floor window sill where a two-inch frame on the outer edge made a firm location. She work feverishly and by noon was beginning to bring mud. By nightfall she had a well formed, but thin cup. The next day she added much more dry material, mostly grass stems and leaves.

For the next three days she made only occasional dabs at the nest and on April 25 the first egg was laid. Early that evening we had a fall of four or five inches of snow which piled up around and over the robin as she sat on the nest. At 4:00 a.m. she was beside the nest instead of on it. Thinking that she was chilled I started to open the window to bring her in, but at the first movement she flew off.

The second egg was laid during the next forenoon, two more in the next two days. One hatched before 6:00 a.m. on May 10, another about the same time the next day. On May 7 I timed her flights for four hours. From 6:00 to 8:00 a.m., with a temperature of 40°, she was off five times, from 0.5 to 7.0 minutes. From 1:30 to 3:30 p.m. at 50°, she was off four times from 3.0 to 7.0 minutes. The average of all was 2.8 minutes but the 0.5 was probably a disturbance. The male was not seen at the nest during incubation.

On May 11 the day-old nestling seemed to have doubled its size, and it opened its mouth for food. The male came, but did nothing. The female fed a small piece of earthworm. At 6:00 p.m. the male fed both young while the female was away an unusually long time.

On May 13 the oldest bird was beginning to show pin feathers, but on May 18 the nest was deserted. The next day it was removed. The first nestling weighed 33 grams, the second 13 grams. The two remaining eggs were examined and both found infertile.—**O. A. Stevens, Fargo, North Dakota.**

**GOLDFINCHES CHOOSE ODD NESTING SITES**—Of the hundreds of goldfinch nests I have seen, the most common choices for nesting have been: thistles, box elders, willows, elms, and dogwood. This summer at St. Mary's College, Winona, I located one nest each in five unusual locations: two feet from the ground in a clump of goldenrod, at the top of a nine foot Norway pine, in a small ash tree, at the edge of a patch of ragweed, and in a bushy stand of swamp sneezeweed.—**Brother I. Theodore, F.S.C. Chicago, Ill.**

**KENTUCKY WARBLER IN WINONA COUNTY**—Almost every day while at St. Mary's College, Winona, I hiked up the valley comprising Knopp's farm once

or twice a day—it was always teeming with bird-life throughout the summer. There were a number of northern yellow-throats, nesting there, and one day (not expecting the Kentucky warbler so far north), I heard what I thought was a yellow-throat singing the wrong kind of song. He was in a large patch of thick ragweed, and all I could do was chase him from one spot to another; he never showed himself, but would move only a few feet and sing again. Finally it occurred to me this was no yellow-throat singing part of his song; it must be either a Carolina wren or a Kentucky warbler. Since I couldn't flush him, and I hadn't heard either of the above-mentioned birds sing for several years, I decided to get help. Brother Leo Thomas, who is well acquainted with the Kentucky warbler in the Memphis, Tennessee country, returned with me later in the day. Brother at once recognized the song of the Kentucky. Prodding around the ragweed produced a yellow-throat, but the Kentucky kept singing from within—between us we couldn't bring him into sight. Although he sang every day, it was several weeks before I got a good look at him. One day tired of playing hide-and-seek, I crawled into the ragweed, sat on the ground and waited. Making a sound with my lips against my hand, I attracted him within a few feet of me—a beautiful male Kentucky warbler. In all the weeks of observation, I had very few glimpses of him; I saw no female, nor did I find a nest or young.—**Brother I. Theodore, F. S. C., No. 1 N. Kildare Ave., Chicago, 24, Ill.**

**CURLEW SANDPIPERS AT LAKE WINONA**—On the afternoon of July 28, at the Lake Winona mud-flats, I spotted five curlew sandpipers. As they were feeding with a few lesser yellow-legs and red-backed sandpipers, I had an excellent chance for comparison. Their bills were slenderer and curved throughout the entire length, unlike the red-backed; they were buffier and less streaked on the breast than either the yellow-legs or the red-backed. I threw a chunk of dirt at them and when in flight, I noticed the white band of feathers extended all around the rump. I had seen some white-rumped sandpipers a few days earlier; they were smaller, more streaked and less buffy on the breast, and their shorter bills were not decurved. Since I had never seen the curlew sandpiper before and I realized the rarity of the species in the mid-west, I asked Brother Leo Thomas to accompany me the next day. We again observed the five birds at rest and in flight and he confirmed my identification as the curlew sandpiper. I believe this is the first sight record in the state.—**Brother I. Theodore, F.S.C. No 1 N. Kildare Ave., Chicago, 24, Ill.**

**SHOREBIRDS AT WINONA, MINNESOTA**—The west end of Lake Winona was being dredged this summer, and what was once a marsh became a series of sand and mud flats, separated by sand-dikes and several drainage ditches. During the last two weeks of July, and continuing through August 15, when I left Winona, I saw hundreds of migrating sandpipers. The first week there were mostly peeps and a few lesser yellow-legs, but during the four weeks, I saw 17 species of shorebirds: killdeer, semipalmated and black-bellied plover, one Wilson's phalarope, one ruddy turnstone, and 12 species of sandpiper. Each day after looking over the flats I would sit down on one of the dikes in a likely spot and wait for the birds to approach me. Since I could study them without, as well as with, my binoculars, I was able to identify all four common peeps: semipalmated (most common), least, Baird's and in the last week a few western.

The latter were identified with regular army binoculars (7x50), as well as naked eye at about ten feet. The drooping tip of the larger bill, the coloration generally grayer on the head and rustier on the back than the semipalmated with which they were feeding marked them as western. Almost every day there were spotted red-backed and lesser yellow-legs. One stilt sandpiper stayed a few days in the company of seven or eight white-rumped. On only two days I saw the curlew sandpiper, but quite often I saw pectoral and solitary, making 12 species in all—Brother I. Theodore, F.S.C. Evanston Bird Club.

**BIRD NOTES ON SHERBURNE COUNTY**—On Sunday June 28, 1952, Bill Pieper and I took a half-day trip to an area about nine miles west of Zimmerman, Minnesota in Sherburne county. We visited the Sand Dunes State Forest and observed several pairs of lark sparrows. Other fringillids in the area were red-eyed towhee, vesper, clay-colored, and field sparrows.

On the way back to Zimmerman, we sighted a male and female orchard oriole. It is interesting to note that Roberts in *Birds of Minnesota* also records two orchard orioles at Zimmerman.

Later we heard a loud, clear song that was new to both of us. The song was tracked down to a pair of Bewick's wrens. The pair was obviously nesting, although there were no wren houses in the near vicinity. This is probably the northernmost record for Bewick's wren in Minnesota.

Several pairs of western kingbirds, another bird relatively new to the area, were sighted in this region.—John Futcher and William Pieper, Minneapolis Bird Club.

**AUTUMN BIRDING ON THE "NORTH SHORE"**—The week-end of September 20 and 21 spent on the "North Shore" proved both restful and interesting for bird watchers. While stopping at Two Harbors for a brief lunch we observed a small hawk migration. Some 40 to 45 hawks were circling above, drifting south-westward. Among the 40 or more broadwings were four huge redtails. Where the highway crossed over larger flat clearings, we saw an occasional small flock of Lapland longspurs, flocks of juncos, and a few horned larks. Later, in the clearing behind our cabin, along the rocky, pebbly beach of Lake Superior, and in other larger flat fields adjoining the lake shore, Lapland longspurs in small, scattered numbers and a few American pipits were frequently heard, giving their respective typical calls. I watched the pipits along the shore as they walked briskly along near the waters edge, teetering almost furiously and picking up food particles. Often a bird would follow the receding water and then scurry "land-wards" as the waves washed up the shore line. The longspurs kept farther from the beach and seemed attracted by the gravelly road behind our cabin. We could approach quite closely before the birds would flush. After a few minutes, however, they were back again feeding in the same spot.

We watched on interesting and never-ending feud between a pair of persistent sparrow hawk "wire-sitters" and a pair of sharp-shinned hawks which were hunting over a larger clearing, across which telephone and light lines were strung. When attacked by the sharpshin, the sparrow hawk would wait until the aggressor was almost upon him. Then he would fly away with the sharpshin in

hot pursuit. However, no one ever got hurt, it seemed for after a minute or two the sparrow hawk was back on his wire perch and the sharpshin retired into the adjoining woods, only to reappear later. Twice I saw the sharp-shin carry off a mouse, proving that he is obviously of considerable value to the farmer in spite of his objectionable habits.

The frequent nasal trumpeting of the little red-breasted nuthatch, the chip-chip-chipping of juncos, the cackling of a flock of herring gulls waiting for the refuse thrown out by the commercial fishermen, the cawing of crows, and the soft "tsip's" and "chep's" of the palm and myrtle warblers helped to complete an entirely enjoyable atmosphere of fall-nature at its best.

A. C. Ronsenkinkel

**EASY PICKINGS**—Cold Springs Game Refuge in Umatilla County, Oregon seems to be the concern of hunters eagles, and hawks every fall. As the ducks, teal, and geese enter and leave the game reserve, they run through a gauntlet of gun fire instigated by the awaiting hunters. Many of them are not concerned with the law that requires them to cease hunting one hour before sunset. At times guns can be heard after dusk. Many of the waterfowl are injured and become grounded inside the refuge where bald and golden eagles, as well as red-tailed and American rough-legged hawks prey upon them as their appetites demand. Occasionally hunters can be seen molesting the waterfowl inside the refuge in an attempt to get them to fly in the direction of their sportsmen pals who are impatiently waiting outside the reserve. Hunters! Why not play the game fair!—Robert Galati, Umatilla, Oregon.

**The 1952 Hawk Migration Count at Duluth**—The four day (September, 13, 14, 20, 21) count of migrating hawks by the Duluth Bird Club in cooperation with the United States Fish and Wildlife Service national survey totaled 13,123 birds. Over 5000 birds were counted in one day. Fourteen species. turkey vulture, goshawk, sharp-shinned hawk, Cooper's hawk, red-tailed hawk, red-shouldered hawk, broad-winged hawk, American rough-legged hawk, bald eagle, marsh hawk, osprey, duck hawk, pigeon hawk, and sparrow hawk, were included in this total.

Krider's red-tail and Harlan's hawk were seen at times other than the official count days, and a tentative sight identification of an immature gyrfalcon was made, but is not included in the official totals. Many ravens and other birds also were recorded in migration during the census.

The results indicate that the Duluth Flyway is one of the largest in the United States. Its possibilities for scientific research and the promotion of hawk conservation seem boundless. The fullest support should be given to future studies of this flyway by M.O.U. members. P. B. Hofslund, University of Minnesota, Duluth.

**1952 CENSUS OF KNIFE ISLAND**—Since 1948 the Duluth Bird Club has had as one of its projects the census of the herring gull colony on Knife Island in Lake Superior. In 1950 the club began a banding project on this colony, 23 nestlings being banded in 1950, 300 in 1951, and 500 in 1952. Returns from Quebec

and Louisiana indicate the nestlings wander far their first year. Further study of the banding operation will eventually give a picture of the distribution of this interesting bird after it leaves the nesting grounds.

	1948	1949	1950	1951	1952
	June 19	June 18	June 17	June 16	June 14
Nests	187	228	312	250	150
Eggs	62	40	151	55	75
Living Young	267	405	338	359	503
Dead Young	5	8	3	11	—
Banded Young	0	0	23	300	500

P. B. Hofslund, University of Minnesota, Duluth.

**BREWER'S BLACKBIRD COLONY ON MINNESOTA POINT, DULUTH**—Roberts (*Birds of Minnesota, 1936*) mentioned that the Brewer's Blackbird had only recently invaded the coniferous region of Minnesota, and that before many years it would probably be generally established in this region. It then should be of interest to Minnesota ornithologists that a colony of these birds have been found nesting on Minnesota Point, Duluth. The first nests in this area were found on May 20, 1952 by my ornithology class. Only three nests were found, but judging from the number of birds present at this time the colony was undoubtedly larger. All nests were on the ground, two under cover, and one in the open. P. B. Hofslund, University of Minnesota, Duluth.

**EARED GREBE AT DULUTH**—As Roberts (*Birds of Minnesota, 1936*) noted, the range of the eared grebe in Minnesota coincides with the extent of the prairie and semi-prairie regions. Records of it in the northeastern section of the state even during migration are rare. Dr. Olga Lakela saw one in Duluth on April 30, 1938. Apparently there have been no other records of this bird from the northeastern section until May 29, 1952 when the University of Minnesota, Duluth ornithology class saw an adult in spring plumage swimming in the harbor off Minnesota Point.—P. B. Hofslund, University of Minnesota, Duluth.

**THE 1952 CENSUS OF TOM'S ISLAND**—The Duluth Bird Club has been censusing the great blue heron—double-crested cormorant colony on Tom's Island in the Rice Lake Refuge, Aitken County for three years. The 1952 census was taken on June 15. Twenty-three heron nests and 28 cormorant nests were counted. The contents of three great blue heron and 15 cormorant nests were determined:

#### Great Blue Heron

- 1 young—2 nests
- 2 young—1 nest

#### Cormorant

- 3 eggs—5 nests
- 2 young—4 nests
- 2 eggs, 1 young—1 nest
- 3 young—3 nests
- 1 young—1 nest
- 1 young, 1 egg—1 nest

Ten cormorant and two herons were banded. There have been two returns from the previous year's banding. One cormorant return was from Warroad, Minnesota, and a second from Tampico, Mexico.—P. B. Hofslund, University of Minnesota, Duluth.

**SIXTH ANNUAL HARBOR ISLAND CENSUS**—As it has been done for the past five years, the Duluth Bird Club conducted its census of the common tern colony located on Harbor Island, St. Louis Bay, Duluth. The comparative results of the six years are shown in the following table:

	1947 June 29	1948 June 18	1949 June 11	1950 June 24	1951 June 17	1952 June 7
Mallard			1		1	
Blue-winged Teal					1	3
Piping Plover	1	10	2	1		1
Spotted Sandpiper			6	6	3	1
Killdeer			6	6	8	2
Common Tern	9	20	16	17	49	33
Catbird		1		2		2
Brown Thrasher		1	2	1	2	4
Yellow Warbler			3	2	1	2
Red-winged Blackbird		7	8	2	10	12
Song Sparrow	1		1		1	7

P. B. Hofslund, University of Minnesota, Duluth.



A common tern nesting on Harbor Island.

Photo by A. D. Dubois, Excelsior, Minn.

# Call Notes

Edited by  
Franklin Willis

The 1952 annual meeting of the A.O.U. was held at Baton Rouge, Louisiana from Oct. 20th to 25th. Minnesota representatives attending were: Dr. and Mrs. O. S. Pettingill, Carlton College, Northfield and Dr. W. J. Breckenridge and Dr. D. W. Warner of the University of Minnesota. Officers elected for the coming year were: Pres., Josselyn Van Tyne; Vice Pres., Alden Miller; Sec., Albert Wolfson; Treas., Allen Moser and Editor of the Auk, Robert Storer. Mr. Irby Davis of Harlingen, Texas, introduced an interesting innovation in the presentation of his paper on the taxonomy of a species, the chachalaca. The entire report was recorded with calls of the chachalaca interspersed. Mr. Davis stood by to point out locations on a map, and answered questions in person following the paper.

Byron Harrell's thesis, *The Birds of Rancho del Cielo* is being translated into Spanish for publication by the Department of Forests and Game of the Mexican government. It is an ecological study of the birds of a heavy mountain forest area located about half way down the Pan American Highway to Mexico City.

Leo B. Pospichal has completed his thesis, *A Field Study of Sora Rail and Virginia Rail Populations in Central Minnesota*. It was written in partial fulfillment of requirements for the Master of Science degree from the University of Minnesota. Mr. Pospichal is now working on waterfowl problems with the Michigan Conservation Department.

Jim Clements has been released from the Navy and is now making his home in Santa Monica, California.

*An Outline for Teaching Conservation in High School*, published by the Education Section of the Soil Conservation Service will be of interest to science teachers. It has been prepared in a form whereby the conservation subject can be interwoven with the physical and social sciences commonly taught in the classroom.

Two Minnesota men have recently broken into print in national magazines. Milton Stenlund, Game Biologist at Ely, is the author of an interesting and informative article on deer starvation and management in the November, 1952, *Outdoor Life*. Harvey L. Gunderson of the Minnesota Museum of Natural History offers suggestions to ruffed grouse hunters on how to take some of the guesswork out of their hunting in the October, 1952, *Sports Afield*.

Dr. W. J. Breckenridge will be on an Audubon Screen Tour from Jan. 26 to Feb. 4 presenting his film, *Paul Bunyan Country*. The film will not be shown in Minnesota, but will be presented in South Dakota and Iowa with the last showing at Madison, Wisconsin on Feb. 4. The film is an all year tour of Minnesota, and includes shots of the North Shore in winter and the goose migration.

The Minnesota Museum of Natural History is again offering their free public programs on Sunday afternoons. The films and lectures presented deal with many phases of natural history.

A printed program of the complete series may be obtained by writing to Minnesota Museum of Natural History, University of Minnesota, Minneapolis 14, Minnesota.

Just recently our attention has been called to another excellent bird column in a daily newspaper. A. G. Lawrence writes one called *Chickadee Notes* for the *Winnipeg Free Press*. I have only seen one, the June 6, 1952 issue, but if this is a fair sample it is certainly an excellent column. Incidentally, Dr. A. E. Allin has a note in this particular column about the M.O.U. meeting at Frontenac.—P. B. H.

The *Winona Republican—Herald* on Friday, November 7 had a fine write-up on the attempts to save an injured whooping crane. Ross Hanson, a Wildlife Refuge pilot, flew the wounded bird from Weyburn, Sask. to Texas. Write-ups such as this reach the general public and do worlds of good for conservation.—P. B. H.

The *Minneapolis Bird Club* sponsored an exhibit on bird conservation at the State Fair this year. The exhibit attracted a great deal of attention. We need more such public service projects.—P. B. H.

With this issue we have a new editor of the *Call Note* section. If you have any news about members of the M.O.U.

or club projects will you please send them to Franklin Willis at the University of Minnesota's Museum of Natural History.

A few Sundays ago the New York Philharmonic Symphony presented a program of bird call records, slowed down to such speeds that one could analyze the components of the song. A recording was made of this particular part of the program which is available for distribution to interested people. Unfortunately, I missed the price and the place of distribution of this excellent recording. If any of *The Flicker* readers did get this information I would appreciate receiving it.—P. B. H.

We have received rumors that Dr. O. S. Pettingill, Jr. will soon leave the teaching profession for work with the Walt Disney Studios. If this is true, ornithology has lost one of its finest teachers.—P. B. H.

The *Minnesota Ornithologists' Union* is extremely fortunate that the St. Cloud Reformatory again has agreed to print *The Flicker*. This means that we will still be able to keep our dues at a minimum, and still publish a journal of similar size to what we have been doing. It's a good feeling to know that the officials recognize the worth of such a publication.—P. B. H.

Only a few reports have been received from the M.O.U. 1952 heron colony survey. If you have any information on any heronries please send it to the Museum of Natural History.

# The Book Page

A new nature book by John and Jean George, *Meph, the Pet Skunk*, is destined to become a children's classic according to a recent review in the *Minneapolis Sunday Tribune*.

A book that should be in the library of M.O.U. members interested in nature photography is Ormal Sprungman's *Photography Afield*, published by The Stackpole Company. The book is divided into two sections; the first devoted to stills and the second to movies. Its cost, \$7.50.

Gertrud Hess's *The Bird: its Life and Structure* is represented by its reviewer in *The Auk* as a "primer textbook" of ornithology.

For those of us who have been looking forward to a guide to the mammals similar to Peterson's *Field Guide to the Birds* should find Burt and Grosenheider's *Field Guide to the Mammals* just what we have been looking for.

The Museum of Natural History soon should be putting out a new edition of *The Mammals of Minnesota*.

A recent article in volume 47 of the *American Midland Naturalist* contains information on the purple martin that should be read by everybody who has a martin house in his yard. It is Robert W. Allen and Margaret Nice's

*A Study of the Breeding Biology of the Purple Martin (Progne subis)*.

In volume 23 of *Bird-Banding* there is an article on *Bird Photography for Bird Banders*.

For the bird bander, particularly those who are engaged in the banding of game birds or some of the colonial nesters, an article, *Mechanical Aids for Bird Banding* in volume 38 of *The California Fish and Game* is extremely valuable.

M.O.U. members who are participating in the Fish and Wildlife Service's mourning dove banding program will get good information out of Wendell shenk's article, *Trapping and Marking of Adult Nesting Doves*, in volume 16 of the *Journal of Wildlife Management*.

The library at the Museum of Natural History is undergoing an extensive house cleaning. If any of the M.O.U. members are interested in any of the articles mentioned in this column the staff at the Museum will be able to find them for you.

Many of the *Flicker* readers are probably unfamiliar with the *Minnesota Naturalist*, a relatively new publication. It is one of the most attractive magazines of its type that we have ever seen. For information about the society and its publication, write to Harvey Gunderson at the Museum.

Christmas census reports should be mailed as soon as possible to the editor, or to the Museum of Natural History.

# Minnesota Ornithologist's Union

## Affiliated Societies

### Albert Lea Bird Club

Officers: President, Charles F. Flugum; Vice-president, Iva M. Loy; Recording Secretary, Loes Scott; Corresponding Secretary, Olive Johnson; Treasurer, Maybelle S. Thompson.

### Duluth Bird Club

Officers: President, O. A. Finseth; Vice-president, Evelyn Palmer; Secretary, Catherine Lieske; Treasurer, Harvey Putnam; Field Chairman, Joel K. Bronoel; M.O.U. Representative, O. A. Finseth.

Meetings are held the second Thursday at the University of Minnesota, Duluth.

### H. J. Jager Audubon Society

Officers: President, Mrs. George Peterson; Vice-president, Robert Kual; Secretary, Mrs. H. A. Northrop; Treasurer, Mrs. John P. Zimmerman; M.O.U. Representative, Mrs. H. A. Northrop.

Meetings are held the fourth Monday at the Owatonna Public Library.

### Minneapolis Audubon Society

Officers: President, Mrs. Whitney Eastman; Vice-president, Mrs. George O. Ludeke; Treasurer, Florence Messer; Recording Secretary, Mrs. Edgar Bedford; Corresponding Secretary, Mrs. E. W. Joul; Field Secretary, Mrs. J. A. Thompson; Auditor, Mrs. E. D. Swedenberg; M.O.U. Representative, Mrs. I. S. Lindquist.

Meetings are held at the Walker Branch Library.

### Minneapolis Bird Club

Officers: President, Mrs. Boyd Lien; Vice-president, W. S. Quam; Secretary, Florence Messer; Treasurer, Amy Chambers; Membership Chairman, Mrs. Whitney Eastman; Program Chairman, Vera Sparkes; Field Trip Chairman, John Fletcher; M.O.U. Representative, Amy Chambers.

Meetings are held at the Minneapolis Public Library.

### Minnesota Bird Club

Officers: President, Forrest Lee; Vice-president, Dwain Warner; Secretary, Jesse Richardson; Treasurer, Lucille Hunter; M. O. U. Representative, W. J. Breckenridge.

Meetings are held at the Minnesota Museum of Natural History.

### St. Paul Audubon Society

President, Mrs. Charles E. Hart; Vice-president, John A. Hall, Sr.; Corresponding Secretary, Nanele K. Wells; Recording Secretary, Mrs. E. L. Kerncamp; Treasurer, Marvin H. Adams; Director-at-large, J. H. Reisinger, John Hoog, Harold Piper, R. A. Kortmann, Mrs. Kenneth O'Leary. M.O.U. Representative, J. M. Rice.

