

# CONTENTS

IN MEMORIAM: DIETRICH LANGE .....	G. N. Rysgaard	Page 1
RECORD FLIGHT OF SANDHILL CRANES .....	W. H. Nord and W. J. Breckenridge	Page 2
THE MINNEAPOLIS AUDUBON SOCIETY .....	Gustav Swanson	Page 5
A SUBMARGINAL POPULATION OF RUFFED GROUSE.....	Dean Tanner	Page 7
NOTES OF INTEREST .....		Page 10

---

---

## THE FLICKER

*Organ of the MINNESOTA ORNITHOLOGISTS' UNION*

Published Quarterly in March, May, October and December

Edited by Arnold B. Erickson and G. N. Rysgaard

Minneapolis, Minnesota

---

Twin City Regional Editor.....Horace Paul, Minneapolis  
St. Cloud Regional Editor.....Ralph Sauer, St. Cloud  
Duluth Regional Editors.....Olga Lakela, Mrs. W. C. Olin, Duluth

---

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

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

---

### OFFICERS OF THE MINNESOTA ORNITHOLOGISTS' UNION

*Honorary President*—T. S. Roberts M.D., Minnesota Museum of Natural History, University of Minnesota.

*President*—G. W. Friedrich, St. Cloud Teachers College, St. Cloud, Minn.

*Vice-President*—Milton D. Thompson, Public Library, Minneapolis, Minn.

*Secretary-Treasurer*—Mary Elwell, Duluth Teachers College, Duluth, Minn.

*Editors*—A. B. Erickson and G. N. Rysgaard, University of Minnesota, Minneapolis, Minn.

# THE FLICKER

VOLUME 13

MARCH, 1941

NUMBER 1

## In Memoriam: Dietrich Lange

By G. N. Rysgaard

All who came within the influence of Mr. Dietrich Lange mark his passing on November 18, 1940 with sincere regret, knowing well that conservation has lost one of its true and energetic supporters.

Born in Germany on June 2, 1863, Mr. Lange came to America and settled in Minnesota when eighteen years of age. For 53 years he was associated with the St. Paul Schools in one capacity or another, and he was constantly employing his educational medium to instill a sympathetic attitude toward wildlife among the youths with whom he was so closely bound. In each he saw a potential supporter who would carry on his aims of the conservation of nature.

Mr. Lange is not to be termed a scientist but rather a naturalist with a love of all life, an unequalled curiosity, and a mind keen and ready to translate nature into a language pleasing and understandable to all.

In all his years never did he lose his youthful vigor, and his outings afield were most frequently in company with his students, many of whom were unable to keep up the pace set by their senior. His genial nature, knowledge of Indian lore, and inexhaustible supply of stories made him one of the most sought after companions for any field excursion.

Long will he be remembered in the hearts of us all as the author, teacher, and conservationist. *Minnesota Museum of Natural History, University of Minnesota.*

# Record Flight of Sandhill Cranes

By W. H. Nord and W. J. Breckenridge

THE sight of even a single sandhill crane today is an event in the life of any ornithologist, and yet as late as 40 or 50 years ago there were considerable flights of these huge birds passing over the state in migration. Dr. T. S. Roberts records in *The Birds of Minnesota* that Thomas Miller in April, 1898, wrote from Heron Lake that "sandhills were going north all the afternoon!" The following year Mr. H. J. Jaeger in Redwood County noted their arrival on April 9 and "for about two weeks the country was flooded with them. Sometimes hundreds would congregate in pasture or meadow like a large flock of sheep."

T. Martin Trippe in 1870 found the sandhills breeding commonly in the extensive swamps, and Dr. Roberts related finding numbers of the birds offered for sale in the Minneapolis markets only a few years later. It is interesting to note in Keating's *Narrative of an Expedition to the Source of St. Peter's River* in 1823 that "The party had frequent opportunities of remarking the difficulty which exists, to determine with accuracy the nature or size of objects seen at a distance. Sandhill cranes, seen on the prairie, were by some of the company mistaken for elks."

Since those early days the cranes have dwindled steadily in numbers until now they figure hardly at all in accounts of the bird life of this region. However, those old days of abundant game were recalled recently by an interesting influx of sandhill cranes numbering in the thousands into the vicinity of Moorhead during October of last year (1940).

Notwithstanding the fact that the sandhill crane presents a noble and stately picture to those interested in bird life, the residents throughout the western parts of the state, taken as a whole, seem to know little or nothing about it. Be-

cause of its scarcity in normal years, coupled with the fact that it prefers the unbroken, primitive, prairie habitat and usually passes over populous areas at great heights during its migration, this is not surprising. Since the advent of man, however, and his planting of corn, cranes have ventured into fields to feed, sometimes with not too much concern over the farmer's crop. The crane's appetite for cultivated grains must have appeared very early in the development of the western country, since *Scribner's Monthly* for October, 1879, carried an old wood engraving depicting the shooting of cranes in the cornfields from corn shock blinds.

Numerous reports of damage to corn at Moorhead, Minnesota, by huge flocks of cranes reached Warden Robert Streich in October, 1940. His subsequent reports to the Department of Conservation and the Minnesota Museum of Natural History of the University of Minnesota, resulted in a photographic expedition by the authors to that area. Arriving at Moorhead on October 23, 1940, we immediately contacted Warden Streich for information of the cranes' habits, locations visited most frequently, and the possibilities for photography of the birds. During our visit, Mr. Streich showed us a captive adult crane with a broken wing.

On October 24, we accompanied Warden Streich to a game refuge located southeast of Hawley, Minnesota. Between two and three hundred ducks, including mallards, pintails, bluebills, green-winged teal and gadwalls were making a marvelous duck pass of the strip of land separating the lakes.

About 10 a.m. we proceeded on to Felton, 30 miles northeast of Moorhead, where we began to see small flocks of cranes. Within the next hour, counts were made of flocks totaling 126, 250,

and numerous smaller groups of 10 to 20. These birds were, for the most part, feeding in corn fields, some of which were unharvested, while other birds seemed to be resting in open, grassy swales.

A young boy was herding cattle in the vicinity, and Mr. W. J. Breckenridge made arrangements to use his pony as a ruse for a closer approach to one of the flocks. After some resentment on the part of the pony in the form of flying hoofs, an approach to within approximately 150 yards was made. At this point the birds became wary of the strange combination of horse, man, and tripod and took wing, affording an opportunity for but a few flight shots with a telephoto lens. After the departure of the flock, small groups of 3 to 15 or 20 birds kept coming in from the north-northwest at short intervals and proceeded on south to a brushy spot on the prairie where some flowing springs afforded watering places.

Our wanderings next took us on north to a corn field where a cornshock blind was built. Several hours were spent in this blind without success. But we had long since learned how a few failures add to the satisfaction of later successes, and we immediately set about making new plans. Observation and analysis of and deduction from an animal's habits and habitat cannot be too critical in deciding how to outwit one's quarry with the camera. In this same field the carcass of a dead crane was found, the major part being saved for future study.

Our next move was to set up a blind in the marshy meadow where southward-flying birds had alighted for water. Warden Streich made the remark that he had repeatedly seen the birds resting and drinking in that area. In order to work into an advantageous position it was necessary to flush several hundred birds from the field. In a hay stack which served as a blind Mr. Breckenridge remained buried from noon until 3:30 p.m. Three cranes alighted at 2:15 p.m. but remained at a distance of 200 yards—consequently, no pictures.

The latter part of the afternoon was spent in the cornshock blind, again without success. Toward evening, the birds began to move, and a total of 145 cranes, flying mostly in small flocks, passed northward. They trumpeted incessantly during flight, and at times they mounted in great circles until they were almost out of sight. The musical call, however, still remained distinctly audible. In flight cranes form the characteristic V of geese and ducks; their wings, however, appear to be more centrally placed than in the larger waterfowl because of their long outstretched legs and necks.

When we returned to Moorhead, we contacted Warden Streich to learn of his inquiry as to numbers of birds at Dow's place, 35 miles southeast of Moorhead. He had counted a flock totaling 600 cranes, and Mr. Dow told him that the large flock *had left Sunday!* According to the report they roosted in an enormous sheep-cropped pasture and spread out on immense flats during the day. Mr. Streich found no good location for photography, so we decided to return to Felton the following morning.

The following are additional bird notes of our first day. Hungarian partridges were surprisingly numerous in spite of a recent open hunting season. Six flocks of 2, 12, 9, 13, 16, and 15 or a total of 67 were noted throughout the day. The flock of 16 came out on the road within 100 feet of the car, the birds darting here and there, the whole performance having all the earmarks of true play. Their belly markings ranged from a full crescent on the larger birds to a short bar or none at all on the smaller individuals. Surprisingly enough, only six pheasants were counted. Although no actual count was made, jack-rabbits appeared numerous, and we noted four or five red-tailed hawks that had been killed by hunters. Several marsh, American rough-legged, and red-tailed hawks hunted in the vicinity. Thousands of Lapland longspurs were passing through, and one large flock of starlings flew by.

At 6:30 a.m. on October 25, we returned to the watering place east of Felton to

construct a blind. As the car rolled to a stop, a movement in the road attracted our attention. A very alert young crane, with a broken wing was attempting to sneak away. After pursuing it for several hundred yards, we were able to bring it to bay. To subdue a fighting crane when one is shaking from exhaustion is a ticklish proposition to say the least. Its darting beak, its thrashing wings, and its clawing feet were finally secured; and it was made captive in the trunk of the car. Then we returned to our task of building the blind. A pit two feet deep was dug into the muck, and the bottom was filled with dry hay for a floor. The roof of the blind consisted of a surrounding series of stakes united by a cobweb-like lacing of string onto which matted hay was piled. Its final appearance was that of a low, weathered haycock.

Shortly after 8:00 a.m. about 100 cranes came in and alighted 75 yards east of the blind, where no observation hole had been prepared. Soon more alighted north and northwest of the blind. After the first attack of buck fever had passed, a number of shots in kodacrome were taken with a telephoto lens. Presently three birds flew up, then set their wings and sailed to within 50 feet of the camera. The camera's buzz and the glassy stare of the lens visibly disturbed them, and they left when only a few feet of film had been exposed. Before long the major part of the flock suddenly departed for no apparent reason. The remaining cranes tarried for a time; then they too took wing. No more birds approached the blind that morning although we waited for several hours.

At close range we heard two distinct calls from the flocks: one, the loud rolling bugle; the other, a sharp whistling peep. This latter call we found to be that of the young of the year, and it was the only call given by the young birds that we captured. The birds of the year differed from the adults in having more

brown on the scapulars, wings, and the back of the head and neck. That portion of the head which in the adults is unfeathered and red was in the young still covered with brownish feathers. The eye color of immature birds appeared to be reddish brown rather than bright yellow-orange as in the adults. From the observations that we made on October 25, we concluded that the crane population of the Felton area numbered about 300 birds.

On the following day, October 26, two more young cranes with similar wing breaks were captured. These birds, together with one seen and not captured, increased the number to five which had identical breaks in the wrist joints. This unusual condition led us to believe that the birds were injured while fighting among themselves and were not the victims of illegal shooting.

Our final conclusion regarding the population of cranes in the Moorhead region, reached after a three day study, was that about 300 birds were observed in the Felton area and that about 600 were seen near Rothsay 60 miles to the south. All farmers interviewed were unanimous in the opinion that the large flocks had passed south.

After many thanks to Warden Streich for his help, we wrestled two of the injured, but by no means helpless cranes, into the trunk of the car and returned to Minneapolis where arrangements were made to turn the birds over to the Como Zoo Gardens in St. Paul. And thus with photographs as evidence we can convince even the most skeptical bird student of the presence again in Minnesota of crane flights at least suggesting the old days. We hope that the opportunity which we have had to see a large flight of cranes will not be the last of these impressive migrations of what might be called Minnesota's most aloof bird visitor. *Minnesota Museum of Natural History.*

# The Minneapolis Audubon Society

By Gustav Swanson

WHEN the Minneapolis Audubon Society voted unanimously at its November, 1940, meeting to become affiliated with the Minnesota Ornithologist Union, it brought to six the number of local groups in the state-wide organization. This seems an appropriate time to review briefly the history of the oldest, and without a doubt also the most vigorous and influential local bird club in Minnesota; and since the writer has not been a member of the Minneapolis Audubon Society for several years, it should be possible for him to do this from the unprejudiced viewpoint of an outsider.

Organization of the Audubon Society was discussed at a meeting on February 18, 1915, in the Woman's Club, when Mrs. Phelps Wyman, who had called the meeting, and Dr. T. S. Roberts outlined the objectives and a plan for organizing. At the first formal public meeting three weeks later on March 10, the following slate of officers was elected: Mrs. Wyman, president; Mrs. Frank Commons and Mrs. Charles Keyes, vice-presidents; Mrs. J. H. Hayden, secretary; and Miss Mathilde Holtz, treasurer. The program for the meeting was a talk by Dr. T. S. Roberts who has been a constant friend and advisor of the group throughout the years. He has addressed some meetings of the Society almost every year since that first occasion, and was the main speaker at the 25th anniversary meeting in 1940.

On April 14, 1915, the newly organized group decided to affiliate with the National Audubon Society, and has maintained that tie ever since. During the first year there was also an affiliation with the Woman's Club, in the parlors of which all meetings were held. On March 29, 1916, this connection was severed, however, and the meetings have been held independently since that time in the meeting rooms first

of the Fourth Avenue Branch Library, and for some 15 years now in the Walker Branch Library. The "declaration of independence" from the Woman's Club has facilitated the inviting of men to membership, and a great many have belonged, although the active members have usually been largely women.

One of the great prides of the Audubon Society is its fine collection of mounted birds and bird skins, which now totals about 1000 specimens, permanently housed in the Walker Branch Library, where they are available to members and others to aid in their field studies of birds. Gifts from Mr. Thomas Libby and Mr. William L. Wolford made up the bulk of the collection, but a few specimens have been presented by others also. On several occasions the birds from the collection have been used in public exhibits. April 3 to 9, 1916, was declared "Bird Week" and an extensive exhibit was held on the fourth floor of Dayton's store. In 1923, 1926, and 1934 the Society also put on public exhibits of the birds from its collection. In 1936 the Society became incorporated in order to meet more effectively the problems attending ownership of the collection.

These bird exhibits were only a small part of the educational work the Society has done. As early as 1917 the group reported the organizing of Junior Audubon Clubs in 30 Minneapolis schools. These clubs, now well known to thousands in Minnesota and throughout the country, have been a very important influence for interesting young people in birds. Each student member received an attractive membership button and several educational leaflets, each illustrated with a colored picture of the bird described and an outline drawing which could be colored. Well does the writer remember how he cherished these bird leaflets when he belonged

to the Junior Audubon Clubs. It is quite likely that the junior club to which he first belonged was one of the 30 organized in 1917 by the Minneapolis Audubon Society. In each of the groups the teacher in charge received a year's subscription to *Bird-Lore*, so that she had a reminder throughout the year of her obligations to her Junior Audubon Club.

In 1922 Miss Tillisch, one of the officers, gave a series of 16 weekly lectures on birds to a group of 34 public school teachers, and ever since the first year of its existence, when the Woman's Club purchased a projector for lantern slides to be used for the purpose, the Society has furnished speakers for illustrated talks before school classes. The Society has a fine collection of colored slides used for these lectures. In 1923 a series of five radio broadcasts on bird life was given, and the following year several more.

On a number of occasions the Society has sponsored special meetings with outside speakers. In 1922 there was an evening lecture by Henry Oldys, in 1924 one by R. Bruce Horsfall, the bird artist, in 1930 a reception for Dr. A. A. Allen, in 1936 a dinner for and talk by Executive Secretary John H. Baker of the National Audubon Society, and finally, in November, 1940, the Society was an important factor in making the Minneapolis meeting of the Wilson Ornithological Club successful.

Aside from its regular monthly meetings the most important activity of the group has been its spring bird walks, of which three a week for nine weeks are held. The walks are led by competent bird students familiar with the area to be visited, so that members are given excellent assistance in their birding. Sometimes Christmas censuses and mid-May censuses have been held also. In some years over 200 species have been recorded on the

spring bird walks. As an aid in the migration studies the Society has for many years published its own daily field checking lists and migration record forms.

Although the Society has always existed primarily to foster the interest of its own members in their pleasurable study of birds, it has annually aided in the support of some worthy cause in bird conservation. Its annual contribution as an affiliate of the National Audubon Society aids in the fine work of that group, and in addition there has always been made a special contribution to the Sanctuary Fund of the national group. For several years a contribution to the Jack Miner Sanctuary was made, and in recent years the same has been done for the Hawk Mountain Sanctuary.

An excellent membership has been maintained throughout the years. As early as 1922 the report showed 75 annual and 8 life members. Apparently the highest total was in 1923 when 96 members were recorded. The present membership is 65, and the present officers are the following: Mrs. D. B. Green, president; Miss L. M. Aler, vice-president; Mrs. I. A. Lupient, recording secretary; Mrs. C. R. Nelson, corresponding secretary; Mrs. J. A. Thompson, field secretary; Mrs. W. H. Sowden, treasurer; Mrs. L. W. Chamberlain, auditor; and additional member of the board, Mrs. R. H. Wells.

The information in this sketch was obtained in part from Mrs. Wells, who as president at the time of the 25th anniversary assembled it for that ceremony, and in part from the annual reports of the Society, published almost every year between 1917 and 1934 in *Bird-Lore*. The Minnesota Ornithologists' Union is honored to welcome a group with such a rich background. *Division of Economic Zoology, University of Minnesota, St. Paul.*

# A Submarginal Population of Ruffed Grouse

By Dean Tanner

THE present study was made on portions of section 12 and adjoining sections 14 and 11 in Anoka Township, Anoka County, Minnesota. The field work was done in connection with a course in the wildlife management curriculum of the University of Minnesota. Eight trips were made to the area during the spring, summer, and autumn of 1940; and a cover map was drawn showing the location of drumming logs and coverts inhabited by ruffed grouse.

The terrain is of the flat, sandy type characteristic of the county as a whole and known to geologists as glacial outwash plain. Open bur oak and northern pin oak woodlands, interspersed with wide expanses of dry prairie, occupy most of the land; but here and there on lower ground are stands of quaking aspen, willow, and bog birch mixed with speckled alder in the wetter places. A small stream known locally as Sandy Creek drains part of the area flowing between steep, eroding banks, evidence of the dredging operations of some 20 years ago.

The heavily grazed prairie and open bur oak (*Quercus macrocarpa*) woodland support more coarse herbaceous plants such as lead plant (*Amorpha canescens*) and gum plant (*Grindelia squarrosa*) than native prairie grasses, but a sparse growth of Canada bluegrass (*Poa compressa*), sand grass (*Calamovilfa longifolia*), bunch grass (*Koeleria cristata*), mesquite grass (*Bouteloua hirsuta*), big blue-stem, (*Andropogon furcatus*), little blue-stem (*Andropogon scoparius*), and panic grass (*Panicum Lindheimeri*), manages to hold its own.

The sections studied have been settled by farmers since about 1912, but settlement has resulted in neither an increase

nor a decrease in the ruffed grouse population. According to Mr. Roy Hodson, resident farmer on the area since 1912 and an accurate observer, the birds are about as abundant now as when he first began farming there. No appreciable decrease in wooded land has occurred during the five years of my acquaintance with the area. Although the entire tract studied is within a state game refuge, poaching has often occurred in the past and is the most evident if not the most important cause of mortality among the grouse population.

Ruffed grouse were found to occupy four more or less definite areas or coverts on the 650 acre tract. Ranging in size from approximately 3 to 12 acres, the coverts differ from surrounding woodlands in that they include low ground occupied by quaking aspen (*Populus tremuloides*) and hazel (*Corylus americana*), and high-ground supporting northern pin oak (*Quercus ellipsoidalis*). Unlike the bur oaks, the pin oaks retain their dead leaves throughout the winter and thus may be used as relatively safe roosting places at any season of the year.

Alder (*Alnus incana*) is a conspicuous tree in all the grouse inhabited areas except covert III where it is entirely absent, but it is particularly abundant in covert II where shallow depressions between hummocks at the bases of the leaning trunks are used as hiding places and protection from snow in the winter.

Covert I is used, apparently, only in winter and then only occasionally. It differs from the other more populous coverts by being more open and separated from the pin oak woodland by a strip of grassland about 50 feet in width. In addition to the ever present aspen and hazel there are many willows (*Salix sp.*), alders and



bog birches (*Betula pumila*) in the thicket as well as a few scattered paper birches (*Betula papyrifera*) and panicked dogwoods (*Cornus candidissima*). The ground in the interior of the thicket is wet, broken by hummocks, and well covered with a tangle of Canada blue-joint grass (*Calamagrostis canadensis*), sedge (*Carex riparia*) and bulrushes (*Scirpus pedicellatus*).

Covert II is the autumn, winter and early spring habitat of probably six ruffed grouse, which represents nearly the entire population of the 650 acres studied. All six were flushed there in the latter part of October. This covert is predominantly an alder thicket but also contains all the plants found in covert I except willow and paper birch which are replaced by red-berried elder (*Sambucus pubens*) and red-osier dogwood (*Cornus stolonifera*). The attractions of this thicket seem to draw birds from surrounding woodlands every fall and hold them there for the duration of winter.

Nearly a mile to the northeast of coverts I and II, are located the other two ruffed grouse habitats. Unlike those just described, these coverts are not sufficiently moist to support bulrushes or other water-loving plants. Blueberries (*Vaccinium canadensis*), ferns of several species, blackberries (*Rubus sp.*) and poison ivy (*Rhus toxicodendron*) grow abundantly in covert III. Besides the three species of trees and shrubs characteristic of all the coverts there are American barbery (*Berberis canadensis*) shrubs, willows and bush honeysuckles (*Diervilla lonicera*). Covert IV, a small area of about five acres in extent, was inhabited by ruffed grouse during the entire period during which field trips were made, but never were more than two birds flushed from the thicket. Blueberries and poison ivy made up the principal ground cover and aside from the usual trees there were alders and bog birches.

The four coverts supply abundant food at all seasons of the year but cover is far less satisfactory, being plentiful in summer but scarce in winter when it is most needed.

It seems probable that covert III was the territory of one male grouse with drumming headquarters on a small wooded "island" of pin oaks surrounded by an aspen and willow thicket. This can not be stated as a certainty, since it is based on the assumption that the ruffed grouse and droppings seen on the area were this one bird and his sign. It is, however, borne out by the fact that from early April to late October no more than one bird was flushed from that vicinity on any one occasion nor were grouse flushed in the 3/16 of a mile between covert III and covert IV.

The ruffed grouse population on the area studied certainly did not exceed nine birds during the latter part of October and only six were recorded by actual count. These six birds were recorded from the three acre alder thicket known as covert II.

Because of the inconvenience involved in obtaining transportation to and from the area only over-night trips were made. The first visit was made on April 27. On this trip I hoped to find a drumming log and set up a blind, but unfortunately the attempt was unsuccessful because of bad weather. A 40-mile-an-hour gale from the southwest continued all night bringing heavy showers about dawn. At 4:30 a.m. I reached covert III, but as is usually the case in bad weather, not a ruffed grouse was drumming. The woods were silent except for the clash of branches and pattering of rain on the oak leaves. The day was a failure as far as grouse observations were concerned.

One week later drumming was in progress when I arrived at the covert at 4:30 a.m. and continued at intervals of about two minutes until 5:30 a.m. After a brief search a drumming log was discovered, and a blind was set up 30 feet away so that all would be in readiness for observations on the next visit.

At the time of the third trip to the area on May 19 the leaves on the hazel bushes were large and so obscured the log that nothing could be seen from the

blind. Moreover, the grouse was using another and undiscovered log. The morning was cold, with the temperature at 42° F., and a thick fog reduced visibility to about 30 feet. From my position I heard the male drumming in covert III, and some distance to the northeast I heard a strong roll. Still another loud drum was audible in the northwest a few minutes later. Thus three ruffed grouse were recorded. Drumming continued steadily until 6:07 a.m. at which time rain clouds rolled up in the eastern sky.

One who has observed ruffed grouse drumming logs in northern Minnesota forests would be surprised at the small size of logs used in the Anoka woodlands. Three of the four logs at covert III were old decaying aspens ranging from four to five inches in diameter, while the other was an old pin oak eight inches across. The only other log discovered was much larger, a pin oak 18 inches in diameter.

No nests or young were discovered although several trips were made to the area on Sundays in June and July.

Because of the small population, no birds were collected for food habits study. Droppings, however, were collected and examined. The chief disadvantages of fecal examination results from the fact that the contents of droppings do not represent foods in the volumes in which they were eaten, and that some items may be too thoroughly digested to be identified. The data recorded here were obtained by examination of 53 ruffed grouse droppings collected on September 29, October 20, and October 27, 1940, and 20 droppings collected on April 28, 1940, from drumming logs and dusting places at coverts

II and III. Those collected in the spring were old and probably represent foods eaten in late winter and early spring.

Aspen bud scales occurred in 9/10 of the spring droppings and hazel catkins occurred in 3/5 of them. Many small twigs were also present, but they were considered to be twigs to which buds and catkins had been attached, taken accidentally rather than for their food value. Hazel catkins was the principal food discovered in the autumn droppings, being found in 2/3 of them. These catkins were identified by comparing the triangular scales and stamens found in the droppings with those from known hazel catkins. Small fragments of unidentified leaves, probably succulents, were present in about 1/3 of the droppings; and poison ivy seeds occurred in more than 1/4 of the droppings. Rose seeds occurred in 6 droppings, grape (*Vitis vulpina*) seeds in 5, panicked dogwood seeds in 3, black nightshade (*Solanum nigrum*) seeds in 3, Solomon's seal (*Polygonatum biflorum*) seed in 2, bear-berry in one, and gravel in one. The seeds of poison ivy, rose, grape, panicked dogwood, Solomon's seal, and bear-berry, which passed through the digestive tract unbroken, are hard enough to take the place of gravel at the season when they are available, but how the birds grind their food at other times is difficult to understand since gravel is practically nonexistent on the area. The complete absence of American barberry from the 53 droppings may be significant since numerous heavily laden shrubs of that species were present not 30 feet from the spot where the droppings were collected. *St. Paul, Minnesota.*

*All members of the Minnesota Bird Club whose dues were payable January 1, 1941 and who have not yet paid, are urged to do so at once. Members of the other affiliated clubs are likewise asked to pay their dues promptly when due. If The Flicker is to average about sixteen pages per number and to be issued four times a year, not only must dues be paid promptly, but each club in its own vicinity must recruit new members in order to build up the subscription list.*

# NOTES OF INTEREST

**RED SQUIRREL VICTIM OF HAWK.** It is seldom that one has the opportunity to observe a raptor kill in the wild. I considered it a red letter day, therefore, on April 19, 1934, when I happened on to the scene of a kill just about the time that the actual predation occurred.

As I approached a narrow winding creek in the Cloquet Forest Experiment Station, I suddenly heard a peculiar, half-whistled, half screamed noise coming from somewhere in the underbrush on the opposite side of the stream. I had just begun to cross over on an old log when a single red-tailed hawk flushed from the underbrush bordering the creek about 75 yards from me. The noise stopped at this time, and I continued on, stepping off the log onto the ground just as a second red-tailed hawk flushed from exactly the same spot and winged off into the adjacent jack pine woods. This time I had made a note of the exact location from which the bird had flushed and proceeded immediately to a small opening beneath several tall spruces and a jack pine. There on the ground lay a mangled red squirrel (*Tamiasciurus*) with head, neck, and front legs already torn off. Fresh blood was sprinkled about on the grass and the animal's body was still warm. The two red-tails had apparently just attacked and caught the red squirrel, which was screaming as I approached. Detecting my presence, one of the birds flew off immediately; but the other, either less wary or more hungry, chose to remain a few seconds and tear off enough meat to satisfy its lust for fresh blood. *Marius Morse, Robbinsdale, Minnesota.*

**PIGEON HAWK RECOVERED.** On July 10, 1939, I took a young pigeon hawk from its nest on the Canadian side of Lake Saganaga north of Minnesota. Biological Survey band bearing the number 38-539,109 was placed on its leg. The bird was taken to Minneapolis, Minnesota and kept in captivity until August 28, 1939, at which time it escaped. Three and a half months after banding it was shot by D. R. W. Todd at Houma, Louisiana, about 1,000 miles from its natal home. *James A. Struthers, Minneapolis, Minnesota.*

**BAY-BREADED WARBLERS.** During the spring of 1940, May 19-27, I was surprised to observe comparatively large numbers of bay-breasted warblers migrating through the tree tops on the north shore of Crystal Lake in Robbinsdale. Having seen the bay-breast only once before, I naturally considered this record a real treat. It appeared to me that the warbler migration was nearly a week later than usual, due probably to the unseasonably late cold weather. A single bay-breast was first noted in a bur oak on May 19. Upon closer observation of the tree tops, several other individuals were noted. During the following week, bay-breasts seemed to be nearly as common as several of the other warblers such as redstart, black-poll, Wilson, and chestnut-sided. At one time as many as 10 bay-breasts were seen on a single half-acre area of wooded lake shore adjacent to human habitation. *Marius Morse, Robbinsdale, Minnesota.*

ENGLISH SPARROW NESTS. The purpose of this investigation was two-fold. First, to determine the nature of the material a sparrow uses in building its nest; secondly, to establish the cruising radius of the sparrow when in search of materials for a nest. Four nests were taken from selected areas, and these were examined to establish the identity of the materials used by the sparrows. Nest I was taken from an awning at 2344 Doswell Avenue, St. Paul, Minnesota on June 2, 1940. Nest II was taken from a telephone pole near 1847 Stanford Avenue, St. Paul, Minnesota on June 7, 1940. Nests III and IV were taken on October 4, 1940 at the Howland Brothers' farm where there was a flock of about 800 chickens. The farm is located three miles north of Northfield, Minnesota.

Nest I was made up primarily of feathers; however, enough grass (unidentified) was present to bind the feathers together and make the nest substantial. The nest material also included willow bark, a small piece of gauze (when rolled up it was about the size of a walnut), one blue jay feather, 213 pheasant feathers, 123 poultry feathers, 5 pigeon feathers, 1 flicker feather, and held two eggs. Feathers seemed to be used as lining for the nest, but with a total of 542 feathers it is obvious the nest proper utilized many of them. The large number of pheasant feathers may have been obtained from several vacant lots three-tenths of a mile distant where food and cover for pheasants existed. I assumed from the droppings in the area that the pheasants roosted there frequently. Along the road bed of a railroad siding in the immediate vicinity of this pheasant cover I found four pheasant dusting grounds. The nearest poultry, however, were between six-tenths and seven-tenths of a mile from the nest.

Nest II was constructed primarily of quack grass (*Agropyron repens*), it was lined with feathers although in much smaller numbers than Nest I. The nest contained quack grass (*Agropyron repens*), a dandelion leaf (*Taraxacum officinale*), pepper grass (*Lepidium apetalum*), string, tinfoil from a candy bar, 25 poultry feathers, 5 tree swallow feathers, and 2 pieces of millinery feather. This nest was located in a residential section of St. Paul, so that chicken feathers were not within easy reach of the sparrows. I found one chicken coop two miles from the nest and another, one and seven-tenths miles away. The feathers, however, were probably picked up on Cleveland Avenue three blocks away, where they may have been blown from trucks transporting livestock and poultry.

Nests III and IV were constructed largely of foxtail grass (*Setaria sp.*), but they were lined with poultry feathers. Nest III had 52 feathers while Nest IV had 41. The fact that the nests were taken from a silo on a farm where about 800 chickens were kept indicated that obtaining feathers for a nest was not a problem.

From these few examinations it seems evident that the English sparrow constructs the bulk of its nest of grass and that it prefers to line its nest with feathers. I feel that the English sparrow will travel about a mile in search of building material. This figure is based on the fact that it was absolutely necessary for the birds at Nest I to travel nearly that distance to obtain the large number of poultry feathers found in their nest. It is difficult to ascertain from where the birds in Nest II got the feathers, but I believe that it is highly improbable that they traveled one and seven-tenths miles to procure them. I feel that Nest I with its 542 feathers was an exception. I can see no reason why this bird used such a large number of feathers, but if this were the rule rather than the exception, why were there not more feathers in Nests III and IV when the feathers were so plentiful? Further investigation will be necessary to determine the cause for the varying amounts of feathers in a nest and the radius that sparrows will cruise in order to obtain them. R. Huff, St. Paul, Minnesota.

**MIGRANT SHRIKE** On the week-end of June 7 and 8 Mr. Whitney Eastman and I, with our wives, took a trip to Duluth and return for the express purpose of seeing birds. We had a very successful and enjoyable trip. But during the entire route from Minneapolis and the next day from Duluth to Superior to Taylor Falls and back to Minneapolis we saw only one Migrant Shrike on the wires during the entire trip, all of which was made in daylight. During all of the trip a conscious effort was made to observe and record birds.

Two weeks later on Thursday, July 18, I had the opportunity to take a bird trip with Mr. Feldman of Milwaukee and his son to Heron Lake with the purpose of observing the bird life along the way. The trip from Minneapolis to Mankato to Heron Lake and back to Mankato, over 280 miles, was made in daylight and on this entire trip only two were observed, and these were seen while we were still in sight of Minneapolis. The bird is usually so common that one can observe them every two or three miles. I have never known them to be as scarce as they seem to be this season. *Milton D. Thompson, Minneapolis, Minnesota.*



**A FIELD KEY TO OUR COMMON BIRDS.** By Irene T. Rorimer. The Cleveland Museum of Natural History, Cleveland, Ohio, 1940: 6¾x4¼ in., 160 pp., text figs., 18 plates (4 colored, 14 halftone). \$1.50.

Another field guide intended as an aid to the beginning student residing in the north-eastern section of the United States has been added to the swelling list of this type of publications. The pocket size volume is divided almost equally, the first half being devoted to a habitat key; and the latter portion supporting concise notes on characters, status, and habitats. To those who claim that Roger Tory Peterson's *A Field Guide to the Birds* is somewhat too far advanced for the beginner, this volume may find itself welcome.

The habitat key, upon which hinges the merit of this guide, will undoubtedly serve well to identify many species for the beginner. However, the reviewer remains dubious of the value of such a key in determining species which frequent rather divergent habitat types, and feels that in such instances the key will fail its purpose. *G. N. Rysgaard.*

# THE FLICKER

VOLUME 13

MAY, 1941

NUMBER 2



*Published Quarterly by*

THE

MINNESOTA ORNITHOLOGISTS' UNION

MUSEUM OF NATURAL HISTORY

UNIVERSITY OF MINNESOTA

MINNEAPOLIS, MINNESOTA

# CONTENTS

ADVENTURE WITH A DUCK HAWK .....	Cyril W. Plattes and Ralph A. Woolsey	Page 13
WINTER BIRD CENSUS .....	John Tidball	Page 15
BOOK REVIEW .....		Page 17
NOTES OF INTEREST .....		Page 18

---

---

## THE FLICKER

*Organ of the MINNESOTA ORNITHOLOGISTS' UNION*

Published Quarterly in March, May, October and December

Edited by Arnold B. Erickson and G. N. Rysgaard

Minneapolis, Minnesota

---

Twin City Regional Editor..... Horace Paul, Minneapolis  
St. Cloud Regional Editor..... Ralph Sauer, St. Cloud  
Duluth Regional Editors..... Olga Lakela, Mrs. W. C. Olin, Duluth

---

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

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

---

### OFFICERS OF THE MINNESOTA ORNITHOLOGISTS' UNION

*Honorary President*—T. S. Roberts M.D., Minnesota Museum of Natural History, University of Minnesota.

*President*—G. W. Friedrich, St. Cloud Teachers College, St. Cloud, Minn.

*Vice-President*—Milton D. Thompson, Public Library, Minneapolis, Minn.

*Secretary-Treasurer*—Mary Elwell, Duluth Teachers College, Duluth, Minn.

*Editors*—A. B. Erickson and G. N. Rysgaard, University of Minnesota, Minneapolis, Minn.



DUCK HAWK AND NEST:  
NORTH SHORE OF LAKE SUPERIOR  
FROM A GROUP CONSTRUCTED BY W. J. BRECKENRIDGE  
Courtesy Dr. T. S. Roberts, Director Minnesota Museum  
Natural History



# THE FLICKER

VOLUME 13

MAY, 1941

NUMBER 2

## Adventure With a Duck Hawk

By Cyril W. Plattes and Ralph A. Woolsey

**A**MONG the birds of prey, the duck hawk, *Falco peregrinus anatum* Bonaparte, stands alone as an adacious hunter, a bold master of flight, with the ability to kill swiftly and cleanly. The authors had a brush with this uncommon Minnesota resident last summer. It might be added that the duck hawks ended up the victors.

In mid-May, 1940, while on a joint field trip along the St. Croix River, we discovered the presence of the peregrine falcons. The shrill cries of the alarmed birds gave evidence of the presence of a nest somewhere along the rugged sandstone cliffs that front the serpentine St. Croix in that locality.

Woolsey clambered up and down the dusty rock ledges for several hours. Using the outraged cries of the parent birds as a guide, he finally located the nesting site on a ledge about four feet wide, perilously located 12 feet down the side of the cliff. Huddled on the projection were four downy young. Around them were assorted bones of small birds and mammals—mute evidence to kills made by the parent birds.

Fronting this ledge at a distance of about 30 feet was a crotch of a 60 foot

elm tree that had fastened its gnarled trunk to the earthen slope that slanted about 75 feet from the base of the cliff. It appeared to be an ideal location for a photographic blind.

On Memorial Day the authors returned to the scene, laden with abundant building paraphernalia. Woolsey scaled the tree to the rather precarious perch on the swaying branch. Using a block and tackle, Plattes hoisted lumber and other building material for the platform blind. For two days the work proceeded with operations suspended at intervals of two hours to permit the parent birds to return and brood their young. Over the platform was draped a cover of green cambric with portholes for using the motion picture camera in the direction of our quarry. A tripod was affixed to the branch, and a rope ladder attached from the platform to the ground. Everything was in shipshape order for an exciting color film record of the peregrine falcons. But the falcons had it otherwise.

On three successive mornings the writers returned to the scene. Each time, before daybreak, photographer Woolsey groped his way to the swaying platform. In each instance, to simulate a departure, Plattes started the automobile and drove away

from the parking place located some distance back of the dropoff. But likewise, with each try, the parent birds wheeled into the air and with short powerful wing beats lashed the air about the blind, screeching angrily at the intruders. No amount of deception could dupe this pair of cagey falcons.

Operations were made more difficult by the short period of favorable lighting conditions. The cliff had a southeastern exposure which afforded good photographic opportunities between 6:30 and 10 a.m. daily. After that hour a shadow appeared over the ridge and color pictures were impossible.

The third and final attempt, made in mid-June, proved the most discouraging of all. In addition to the constant bedlam produced by the prattle of the enraged adults, the young took to exercising their wings and feet on the ledge. They ran from what was formerly the brooding place on the ledge to a point some 40 feet

away, just outside photographic range from the blind. Here they cowered together in a compact group, while the photographer vainly attempted to get pictures. The sum total of the three days' operations was about 50 feet of film showing the fledglings together in the former nesting place. This was secured on the first trip.

On the fourth visit, which occurred in late June, the long feared departure had taken place. Plainly disgusted with their eavesdroppers, the duck hawk family had vacated the cliff and moved on down the river about a mile. They made their presence known about 10 a.m. that fateful sunny morning with a chorus of familiar screeches that echoed between the bluffs far to the south. The duck hawks, particularly the parent birds, had foiled two well meaning photographers. Meanwhile preparations were begun for another attempt in 1941. Will the falcons win again? Perhaps we will have a report for you later. *St. Paul, Minnesota.*



*Each year since 1938, members of the M. O. U. have collected general information on the nesting habits of Minnesota Birds. Each year, too, these data have been published in The Flicker. Important and interesting finds have resulted from these studies, but there is still much to be learned about some of the rarer Minnesota nesting birds and those suspected of nesting in the state, as well as of some of the commonest species.*

*Each member is asked to make nesting studies again this year and to send his data to the secretary of his club by September 1, 1941. The secretaries of the individual clubs will check over the nesting records and mail them to the editors by September 15, 1941. The name of the species, number of eggs or young, date observed, and the name of the observer should accompany each observation. It is suggested that this information be placed on 3x5 cards, one card for each observation.*

# Winter Bird Census

By John Tidball

THE summary of the several bird censuses made by members of the Minnesota Ornithologists' Union which follows was compiled from 14 separate reports of eight localities.

PRESTON. Richard Daggy, Harold Peters, James Struthers, Dana Struthers, George Rysgaard, and Arnold Erickson conducted a census on December 27 and 28 in the Cannon and Root River watersheds from Mazeppa to Preston and Lanesboro in southeastern Minnesota. More than 100 miles of road were covered by car and about 10 miles on foot. An icy crust covered the snow which lay 10 inches deep; temperature 15° F.; no wind; slight snow on December 28.

Species observed: red-tailed hawk, 6; Krider's hawk, 1; sparrow hawk, 1; great horned owl, 1; barred owl, 1; belted kingfisher, 1; red-bellied woodpecker, 2; hairy woodpecker, 2; downy woodpecker, 4; blue jay, 5; crow, 6; blackcapped chickadee, 15; white-breasted nuthatch, 1; starling, 24; eastern meadowlark, 1; cardinal, 12; many slate-colored juncos. 16 species, 1 subspecies, and 102 individuals.

MINNEAPOLIS. Byron Harrell and William Cummings submitted the following report of their observations along the Mississippi River from Fort Snelling to the Bass Pond westward to the National Cemetery on December 29 between 7:30 a.m. and 2:30 p.m. Sky overcast; new fallen snow; little wind; temperature 32° F. to 35° F.

Species observed: pied-billed grebe, 1; mallard, 150; gadwall, 1; shoveler, 1;

quail, 15; ring-necked pheasant, 35; coot, 1; belted kingfisher, 1; hairy woodpecker, 2; downy woodpecker, 3; blue jay, 2; crow, 4; black-capped chickadee, 8; white-breasted nuthatch, 10; goldfinch, 1; tree sparrow, 1. 17 species, 236 individuals.

MINNEAPOLIS. Mrs. J. A. Thompson and Mrs. R. H. Wells conducted a census on December 26 in the cemetery and wooded area north of Lake Harriet south to the Minnesota River on Lyndale Avenue, west to Mudbaden Sulphur Springs and return by way of Long Meadow and Fort Snelling. Sky overcast; light wind; temperature 34° F.; snow on hill-sides melting. Total of 75 miles by car and five miles on foot.

Species observed: pied-billed grebe, 1; great blue heron, 1; mallard, 150; baldpate, 2; shoveler, 1; ring-necked pheasant, 35; coot, 1; red-bellied woodpecker, 1; hairy woodpecker, 4; downy woodpecker, 7; blue jay, 8; black-capped chickadee, 8; white-breasted nuthatch, 4; brown creeper, 3; cedar waxwing, 30; starling, 10; goldfinch, 15; slate-colored junco, 6. 19 species, 287 individuals.

MINNEAPOLIS. Miss Lulu Aler, Miss Gene Fornell, Mrs. E. H. Jensen, Miss Anna Johnson, Mrs. I. Lupient, Mrs. C. R. Nelson, and Mr. and Mrs. William Ure, traveling on foot in four parties censused the narrow, mile-long stretch of Glenwood Park along the city limits from Wayzata Boulevard to 6th Avenue and the Native Plant Reserve and Bird Sanctuary on December 27 between 9:15 a.m. and 12 noon.

Species observed: ring-necked pheasant, 25; barred owl, 1; hairy woodpecker, 7; downy woodpecker, 8; blue jay, 2; black-capped chickadee, 3; white-breasted nuthatch, 10; brown creeper, 4; cardinal, 2; goldfinch, 50; purple finch, 5. 12 species, 117 individuals.

FRIDLEY. Mr. and Mrs. J. S. D. Clark, Joan and Niel Clark, Mr. L. B. Gilbert, Brad Gilbert, Mrs. Preston Haglin, Paul and Preston Haglin, Mr. Milton Thompson, Miss Severena Holmberg, Mrs. C. C. Wilson, Alice and Howard Wilson, Helen Towle, Florence Nelson, David Cohen, William Longley, Byron Harrell, and Arthur Shuldberg censused the area along the Mississippi River near Fridley. Sky overcast; temperature 31° F.; snow falling most of day.

Species observed: golden-eye duck, 32; ring-necked pheasant, 10; hairy woodpecker, 3; blue jay, 6; crow, 3; white-breasted nuthatch, 7; goldfinch, 75. 9 species, 141 individuals.

INDEPENDENCE. Carl Fredrickson submitted the following observations from the vicinity of Independence December 24:

Species observed: hairy woodpecker, 1; downy woodpecker, 1; blue jay, 1; black-capped chickadee, 7. 4 species, 10 individuals.

WARBA. Mr. Karlot Sherman made a census of the birds near Warba, Itasca County, on December 27 and 28. Sky clear; light wind; temperature 25° F. to 34° F.

Species observed: ruffed grouse, 12; ring-necked pheasant, 1; hairy woodpecker, 1; blue jay, 2; crow, 1; black-capped chickadee, 3. 6 species, 20 individuals.

SPRING VALLEY. Miss Fern Zimmerman censused birds on a two hour trip on the morning of December 26. Temperature 30° F.

Species observed: red-bellied woodpecker, 2; hairy woodpecker, 1; downy woodpecker, 1; blue jay, 6; crow, 3; black-capped chickadee, 3; white-breasted nut-

hatch, 8; starling, 2; cardinal, 1. 9 species, 27 individuals.

ST. CLOUD. Eight members of the T. S. Roberts Ornithology Club cooperated in a winter census along the Mississippi River to Clearwater and return on January 2. Brisk wind; cold.

Species observed: golden-eye, American merganser, rough-legged hawk, ring-necked pheasant, hairy woodpecker, downy woodpecker, blue jay, crow, black-capped chickadee, white-breasted nuthatch, cedar waxwing, northern shrike, starling, western meadowlark, slate-colored junco. Except for the golden-eyes, American mergansers, starlings, and juncos, only one of each observed.

DULUTH AND NORTH SHORE. Mr. Marius Morse was afield on several occasions from December 21 to 30 in the vicinity of Duluth.

Species observed: American golden-eye, ruffed grouse, prairie chicken, herring gull, ring-billed gull, owl (species ?), black-capped chickadee, Hudsonian chickadee, red-breasted nuthatch, starling, pine grosbeak, redpoll, and hoary redpoll.

DULUTH AND NORTH SHORE. Dr. Olga Lakela recorded the bird life on Minnesota Point, at Fond du Lac, and Duluth on 14, 22-25.

Species observed: American golden-eye, 30; American merganser, 2; prairie chicken, 1; many herring gulls; hairy woodpecker, 2; downy woodpecker, 11; blue jay, 10; black-capped chickadee, 19; white-breasted nuthatch, 1; brown creeper, 2; many starlings; evening grosbeak, 3; pine grosbeak, 3; redpoll, 183; snow bunting, 43. 15 species, 310 individuals.

DULUTH AND NORTH SHORE. Dr. Olga Lakela, Miss Hulda Adams, and Mr. and Mrs. Madden traveled from Duluth along the North Shore to the Palisade, about 60 miles, and returned on December 27. Sky cloudy, temperature 28° F.

Species observed: American golden-eye,

20; many herring gulls; glaucous gull, 1; hairy woodpecker, 1; downy woodpecker, 2; crow, 1; black-capped chickadee, 3; red-breasted nuthatch, 5; robin, 14; northern shrike, 1; evening grosbeak, 2; pine grosbeak, 3; and a flock of redpolls. 13 species, more than 50 individuals.

#### DULUTH AND NORTH SHORE.

Richard Bateman surveyed the region about Lester Park, Bass Pond, Lake Superior near mouth of Lester River and for 15 miles along its course on December 2.

Species observed: golden-eye, 5; ruffed grouse, 1; herring gull, 3; hairy woodpecker, 2; downy woodpecker, 7; arctic three-toed woodpecker, 1; Canada jay, 1; blue jay, 1; black-capped chickadee, 2;

red-breasted nuthatch, 14; starling, 1; pine grosbeak, 5; redpoll, 7. 13 species, 50 individuals.

#### DULUTH AND NORTH SHORE.

On December 26 and 27 John Tidball censused the bird life at Duluth, along the North Shore to Two Harbors, and northwest to Drummond.

Species observed: golden-eye, 29; ruffed grouse, 7; many herring gulls; Canada jay, 5; black-capped chickadee, 8; robin, 1; starling, 4; snow bunting, 2. 9 species, about 76 individuals.

Betty Waterson observed a bluebird on December 1 and a robin on December 9 at Duluth, Minnesota. *Duluth, Minnesota.*



BIRD-HOUSES, BATHS AND FEEDING SHELTERS; HOW TO MAKE AND WHERE TO PLACE THEM.—By Edmund J. Sawyer. Cranbrook Institute of Science, Bloomfield Hills, Michigan. Third ed., December, 1940, 35 pp., text figures, 9 plates. \$0.20.

Bulletin Number 1 of the Cranbrook Institute of Science, *Bird Houses*, by the widely-known nature artist and writer, Edmund J. Sawyer, is nicely printed and tastefully illustrated, as are so many of the Institute publications. It is a bulletin that will be of much use to the person interested in establishing a small sanctuary, to the person interested in attracting birds to his yard and retaining them their, and to the teacher of nature study and biology. It contains a fund of information on the reactions of birds to bird houses, the types of houses best suited to the various species, instructions on how to build houses, baths, and feeding shelters, and many hints which, once known, increase one's chances of attracting and retaining birds manifold, but which if not known or ignored or neglected, greatly reduce one's success. The booklet also contains a section on discouraging undesirable tenants and directions for attracting birds of western United States.—*Arnold B. Erickson.*

## NOTES OF INTEREST

CANADA SPRUCE GROUSE ALONG THE GUNFLINT TRAIL.—In Minnesota the Canada spruce grouse, *Canachites canadensis canace*, is found chiefly in the extreme northeastern corner of the state, in the Canadian Zone. While working at the Gunflint C.C.C. camp, 26 miles north of Grand Marais on the Gunflint Trail, I frequently had the opportunity to observe the Canada spruce grouse. I found it not abundant but still quite common along the Gunflint Trail. Surprising enough, many hunters did not distinguish between the spruce grouse and the ruffed grouse; both were shot indiscriminately during the open season on ruffed grouse during the fall of 1939.

The unusually warm weather and lack of snow during the fall of 1939 permitted the spruce grouse to feed upon clover and to continue other activities usually associated with early fall, until late in December. During the second week in December, 1939, a small flock of spruce grouse consisting of one male and four females was observed along the Gunflint Trail picking up grit and eating bits of clover. This particular day was bright and sunny with the temperature slightly above freezing. While photographing the little flock I was much surprised to see the male spread his tail, extend one wing, erect the feathers on his throat and breast, and display in front of one hen after another. The red combs on his head appeared to be raised, and he continued to display for three or four minutes. Whether these actions were intended as courtship displays is not known, but they do constitute a part of the mating performance as recorded in Bent's life history of the species. It is possible that the unusual weather stimulated the spruce grouse to perform a partial mating display at this early date. *Clair T. Rollings, St. Paul, Minnesota.*

THE VARIED THRUSH IN DULUTH.—The varied thrush, one of the rarest of winter visitants in the interior of the continent, has found its way to Duluth. Mrs. W. S. Telford first observed and identified a bird of this species on the grounds of her residence in Congdon Valley terrace on February 7, 1941. There is no previous record of this species from Minnesota.

The varied thrush is a bird of western North America, breeding from northern California to the limit of the spruce forest in Alaska. The eastern breeding limit is centered in the mountains of British Columbia, Idaho and possibly western Montana. During migration this species has been reported as occurring accidentally in parts of Canada, and as far east as New York and New Jersey.

In the West the bird is popularly known as the Oregon robin. The epithet seems to be wholly appropriate, for the bird is startlingly robin-like in form and manner. In color detail it differs from the robin in having the wings barred and spotted and the upper breast marked with a broad dark band.

Ever since early February a varied thrush has visited Mrs. Telford's feeding station nearly every day. It has cultivated a liking for nut meats. Only one individual has been observed. It is interesting to speculate how long the bird will remain here separated from its kind. *Olga Lakela, Duluth Teachers College, Duluth, Minnesota.*

NESTING OF FORSTER'S TERN IN HENNEPIN COUNTY.—Since the normal breeding range of the Forster's tern (*Sterna forsteri*) is about 70 miles west of the Twin Cities, I was somewhat surprised to find two Forester's terns scolding me from overhead as I rowed a duck-boat across one of the shallow, river bottom lakes along the Minnesota River directly south of Minneapolis, on June 20, 1940.

The birds acted as if they were disturbed by my presence, suggesting the possibility of a nest with eggs or young. I decided to keep my eyes open. The following morning I was again scolded while out on the lake, this time by three individuals. As I proceeded toward the eastern part of the lake, the terns became more vociferous, emitting a characteristic warning call and swooping down in great arcs toward my head. It seemed evident that I was approaching the nest, but was unable to find it from that position. Changing my course, I rowed off about 100 yards, lay down in the bottom of the boat, and remained quiet. The terns soon ceased their scolding, and one of them dropped down into a clump of *Sagittaria* about 100 yards away. Lining up this spot with a tree on the shore beyond, I rowed toward it and soon flushed the tern from a low muskrat house. In a depression on the top of the house were three eggs—tan and spotted with dark brown. The nest was scarcely four inches above the level of the lake.

I did not visit the nest the following day, June 22, nor June 23, and during this period several heavy rainstorms raised the water-level of the lake about three inches. On June 24, I visited the nesting site again, but the muskrat house was entirely under water and the eggs had disappeared. Evidently the rise in water level and the high waves during the storms had submerged and washed away the top of the muskrat house, and the eggs had either been carried away by the waves or sunk to the bottom of the lake. Although the adults were still present near the nesting site on June 24, and five individuals were seen on June 25, no additional nests were found in the area. Adult Forster's terns were still present when I left the area on July 17.

An additional 1940 record of a Forster's tern nesting in Chisago County is known to the writer. The discovery of these two nests may indicate an eastward extension of the breeding range of this species. It is possible, of course, that they have nested sparingly in this region for some time and have been merely overlooked. In any event, it will be interesting to note further breeding in the eastern part of the state in years to come. *Earl T. Mitchell, Division of Economic Zoology, University of Minnesota, St. Paul.*

RUFFED GROUSE VICTIMS OF SNOWSTORM.—On March 29, 1941 in Lester Park, Duluth, I found two ruffed grouse that apparently died during the blizzard of March 15 and 16. One of the birds lay in a snow drift immediately in front of a baseball backstop in the center of the park, and the other lay in a wooded region nearby. Since the wind velocity during the storm reached an intensity of 70 miles an hour, the grouse may have been blown into the snow. The first bird was probably blown against the backstop and stunned, and then rapidly covered by drifting snow, while the other may have sought shelter in a drift. The bird which lay near the backstop showed no bruises or wounds of any kind. However, there was some frozen mucous around its bill and on the snow near its head. The general facial features plus the bloody mucous suggested that the bird had suffocated. Farmers in the Lakeside area of Duluth reported finding dead ruffed grouse in the snow along fence lines and in other sheltered places. *Edwin L. Dery, Minneapolis, Minnesota.*

BLUE AND SNOW GEESE VISIT EASTERN MINNESOTA.—It is by no means news to many bird seekers to be told that western Minnesota and the eastern Dakotas lie within the northern spring migration route of the snow and blue geese. Yet it is a surprise to many people who have more than a passing interest in birds when they learn of the great numbers of these geese that are seen each year in the vicinity of Big Stone and Traverse, those two long, narrow, shallow lakes that lie along the extreme western border of Minnesota.

Several of the more enthusiastic bird watchers make annual pilgrimages to this region to observe the great concentration of geese. Returning, they tell of the impressive morning flights from the lakes to the feeding grounds in the fields and of the late afternoon and evening flights when the geese return to the lakes to rest and spend the nights. They also tell of the vast flocks of these "cloud-cleaving" birds steering their long V-shaped lines high over the open prairies heading toward the far northern breeding grounds and filling the air with the wild harmony of their honkings.

Though these geese in the spring are to be found in such great numbers in western Minnesota, it is only rarely that we have any reports of them in the eastern part of the state. It was exceptionally good news, therefore, to learn on April 19, 1941, that a mixed flock of blue and snow geese had, in their northern flight, stopped off at the flooded bottom lands of the Minnesota River, only a short ways south of the Minneapolis city limits. Here, after their long flight from wintering in marshes and tidal flats of Louisiana, they were to be seen resting on the muddy sand bars from which they made short flights to feed in the nearby fields. There were some 60 birds in the flock, about one quarter being blues and the balance snows. Among them were some immature blues not yet in complete adult plumage. These showed dark necks and mottled heads. The opportunity to see these geese brought much joy to many bird lovers and students of birds, and it is to be hoped that other springs will bring other flocks of these interesting and attractive geese this way. *William Kilgore, Minnesota Museum of Natural History, Minneapolis.*

RUFFED GROUSE CENSUS.—On the week end of February 21-22, 1941, Arnold Erickson, Don Quimby, and I, with five students in the class in Game Management, took the usual mid-winter ruffed grouse census on the Cloquet Forest Experiment Station. We left the University Farm Campus on February 21 in the early afternoon and arrived at the Experiment Station shortly after 5 p.m. Part of that evening was spent in going over the details of King's method of censusing ruffed grouse and planning the routes to be followed by each individual.

The next day census work was begun at 8 a.m. on the 32 miles of line in the four square mile sample. A total of 34 ruffed grouse were flushed by the party, and the population was computed to be 220 birds for the entire station, or 13.3 acres per bird. The population was found to be much lower than expected and showed little change from last year. *L. W. Kresting, Division Economic Zoology, University of Minnesota.*



AUTUMN FOOD HABITS OF THE SANDHILL CRANE.—Approximately 70 fecal droppings of the sandhill crane were examined in the present study. The droppings were collected from a field of flax and growing sweet clover near Felton, Clay County, Minnesota during the crane migration in late October, 1940. Mr. Donald Smith collected the droppings and the writer made the analysis in the food habits laboratory of the Division of Economic Zoology, University of Minnesota.

Because many of the droppings were broken or coherent, they were divided into ten groups, each containing about seven droppings, and examined by groups rather than individually. Corn hulls and fragments of corn kernels made up the bulk of the material in all ten groups. Fragments of seed pods and flower stalks of flax were present in nine groups although only three flax seeds were found, all of which occurred in one group of droppings. Sweet clover (*Melilotus* sp.) leaves were present in nine groups, oat hulls in seven, grasshopper (*Melanoplus* sp.) legs or body fragments in six, unidentified twigs in three, a single foxtail (*Setaria* sp.) seed in one, the abdomen of a small unidentified insect in one, a minute unidentified object—probably an insect pupa case—in one, and a very small shell in one. Only three of the food items occurred in measurable quantity. The 230 cubic centimeters of air-dried material examined consisted of 217 cubic centimeters or 94.4% corn, ten cubic centimeters or 4.4% sweet clover leaves, and three cubic centimeters or 1.3% flax. All of the corn was comminuted to a high degree, but many of the sweet clover leaves were entire and several were green. It is probable that the small snail shell listed among the food items merely adhered to the surface of one of the droppings with some soil.

Little has been published on the food habits of the sandhill crane. The available information, however, indicates that they feed to a large extent on cultivated grains. F. N. Hamerstrom, Jr. (1938), who has studied the sandhill crane in Wisconsin, states that “. . . observations on feeding birds indicate that grains—particularly buckwheat, although corn and oats were also taken—are a large part of the diet in spring, early summer and autumn.” Dr. Thomas S. Roberts (1932) also mentions the fact that sandhill cranes often feed in corn fields. Hamerstrom, recounting the results of his analysis of 30 sandhill crane droppings collected from a buckwheat field in September, 1936, says, “With a hand lens the hard seeds of huckleberry (*Gaylussacia baccata*) and blueberry (*Vaccinium* sp.), fragments of the legs and wings of grasshoppers (*Melanoplus femur-rubrum*) and the legs and elytra of a few unidentified beetles (*Coleoptera*), with a few bits of unidentified twigs, were separated from the buckwheat hulls and seed coats which made up 81.9 grams of the 82.8 grams of air dried material.” *Dean Tanner, St. Paul, Minnesota.*

HORNED OWL PREYS ON BROWN RAT.—On April 12, 1941 as I was driving along Minnehaha Parkway in Minneapolis, I saw a great horned owl sitting in a tree about 12 feet from the ground. I stopped the car and walked to within 15 feet of the bird. Thinking that I might try to capture it, I ran a short distance to the home of a friend for help. When we returned, the owl still sat on the same limb; but it flew as we approached. Only then did we discover that it had a brown or Norway rat in its talons. The rat had been hidden by the abundant feathers that hung from the bird's breast as it sat on the limb. The owl flew a short distance into an alley and landed on the ground near a wall. Again we approached to within four or five feet of the bird before it flew. This time it left the remains of the rat behind; it had eaten the head and entrails. We placed the remains under the tree where the owl had taken refuge, and departed. *Dana R. Struthers, Minneapolis, Minnesota.*

GOLDEN-CROWNED KINGLETS WINTERING AT CLOQUET.—The golden-crowned kinglet, a hardy little bird, regularly winters in the Root River valley of southeastern Minnesota. Each year since 1934 I have seen or heard several of these kinglets in the sheltered valley near Lanesboro or Stewartville. The golden-crowned kinglet has occasionally been seen in the Minneapolis area in each of the winter months; but winter records for central and northern Minnesota are few. Dr. T. S. Roberts (1932) stated that the records for Isanti and Ottertail counties are the northernmost for the state. According to Dr. T. S. Roberts' files, Alden F. Risser saw a golden-crowned kinglet at Greig's place in central Pine county on December 21-23, 1931. Charles Metzroth in *The Flicker* for May 1940, recorded the observation of a flock of 50 kinglets of this species at St. Cloud on December 14, 1939.

On February 22, 1941 at the Cloquet Forest Experiment Station I saw two golden-crowned kinglets in a sheltered black spruce swamp. The birds when first observed were feeding in the top of a 30-foot spruce. One of them, a male prompted by curiosity, flew down to within six feet of my face and displayed his pretty crown, reddish-orange in the center and pale yellow and black on both sides. The birds seemed to be in good condition even though extreme cold ( $-25^{\circ}\text{F.}$  to  $-30^{\circ}\text{F.}$ ) with high northwest winds had prevailed in this region only two days before. *Arnold B. Erickson, Division Economics Zoology, University of Minnesota, St. Paul.*



# MINNESOTA ORNITHOLOGISTS' UNION

## AFFILIATED SOCIETIES

### DULUTH BIRD CLUB

Officers: President, Miss Evelyn Jones; Vice-President, Mrs. G. J. Kitts; Secretary, Miss Catherine Vavra; Treasurer, Miss Alma H. Chesely.

Meetings are held the second Wednesday of each month at 7:45 p.m. at the Duluth State Teachers College.

### LAKEVIEW BRANCH OF THE DULUTH BIRD CLUB

Officers: President, Mrs. W. C. Olin; Vice-President, Miss Betty Watterson; Secretary-Treasurer, Mrs. Wm. Wernowsky.

Meetings are held the fourth Wednesday of each month at 8:00 p.m. at the Lester Park Library.

### MINNEAPOLIS AUDUBON SOCIETY

Officers: President, Mrs. David B. Green; Vice-President, Miss Lulu M. Aler; Secretary, Mrs. J. A. Lupient; Treasurer, Mrs. W. H. Sowden; Corresponding Secretary, Mrs. C. R. Nelson; Auditor, Mrs. L. W. Chamberlain; Field Secretary, Mrs. J. A. Thompson.

Meetings are held the first Friday of each month at 2:00 p.m. at the Walker Branch Library. Field trips during April and May on Tuesdays, Wednesdays, and Fridays.

### MINNEAPOLIS BIRD CLUB

Officers: President, Mr. J. S. Clark; Vice-President, Mr. C. C. Wilson; Secretary-Treasurer, Miss Helen Towle.

Meetings are held the first and third Tuesdays of each month at 7:30 p.m. at the Minneapolis Public Library.

### MINNESOTA BIRD CLUB

Officers: President, Mr. Arnold B. Erickson; Vice-President, Mr. Kenneth Carlander; Secretary-Treasurer, Mr. Horace Paul.

Meetings are held the second Thursday of each month, except in June, July, August, and September, at 8:00 p.m. at the Minnesota Museum of Natural History.

### T. S. ROBERTS ORNITHOLOGICAL CLUB

Officers: President, Mr. Charles Metzroth; Vice-President, Mr. Ralph Sauer; Secretary-Treasurer, Miss Alatheia Norwood.

Meetings are held bi-monthly during February, March, April, and May, at the St. Cloud State Teachers College.

# THE FLICKER

VOLUME 13

DECEMBER, 1941

NUMBERS 3, 4



*Published Quarterly by*

THE

MINNESOTA ORNITHOLOGISTS' UNION

MUSEUM OF NATURAL HISTORY

UNIVERSITY OF MINNESOTA

MINNEAPOLIS, MINNESOTA

# CONTENTS

AN ISOLATED RUDDY DUCK COLONY .....	Earl T. Mitchell	Page 23
BIRD NOTES FROM STANCHFIELD LAKE .....	Richard Voth	Page 25
MINNESOTA NESTING RECORD, 1941 .....	Charles B. Reif	Page 27
NOTES OF INTEREST .....		Page 31

---

---

## THE FLICKER

*Organ of the MINNESOTA ORNITHOLOGISTS' UNION*

Published Quarterly in March, May, October and December

Edited by Arnold B. Erickson and G. N. Rysgaard

Minneapolis, Minnesota

---

Twin City Regional Editor.....	Horace Paul, Minneapolis
St. Cloud Regional Editor.....	Ralph Sauer, St. Cloud
Duluth Regional Editors.....	Olga Lakela, Mrs. W. C. Olin, Duluth

---

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

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

---

### OFFICERS OF THE MINNESOTA ORNITHOLOGISTS' UNION

*Honorary President*—T. S. Roberts M.D., Minnesota Museum of Natural History, University of Minnesota.

*President*—Milton D. Thompson, Public Library, Minneapolis, Minn.

*Vice-President*—Richard Voth, Dassel, Minn.

*Secretary-Treasurer*—Mary Elwell, Duluth Teachers College, Duluth, Minn.

*Editors*—A. B. Erickson and G. N. Rysgaard, University of Minnesota, Minneapolis, Minn.

# THE FLICKER

VOLUME 13      DECEMBER, 1941      NUMBERS 3, 4

## An Isolated Ruddy Duck Colony

By Earl T. Mitchell

Late in the afternoon of July 1, 1941, I noticed, by chance, a small pothole of approximately fifteen acres lying between state highways 65 and 36 about a mile north of the city limits of Minneapolis. Being on the lookout for breeding waterfowl, I decided to investigate the possibilities of this pond. By means of rather primitive roads I reached a sandy hill covered with prairie vegetation overlooking the pond from the south. Sweeping the expanse of water with my glasses, I was greatly surprised and pleased to discover four male ruddy ducks in full breeding plumage proudly displaying themselves to hidden females which were evidently in a sparse growth of bulrushes (*Scirpus*). Even though the light was not particularly good, the brilliant sky-blue of the drakes' bills gleamed like huge sapphires, making the bill seem entirely out of proportion to the rest of the body. It appeared as though a bluish light actually emanated from their mandibles. The rich reddish-brown of the back and flanks and the jauntily cocked tail completed an eye-inspiring picture. The presence of these displaying male ruddies indicated that females were, in all probability, present also and that nesting was a definite possibility. Such a discovery would certainly be of great interest, since the ruddy duck is a comparatively rare breeder in the eastern part of Minnesota.

Accordingly, on July 6, my wife and I visited the pothole in hopes of finding nests. Although five male ruddy ducks were much in evidence in the scanty clumps of bulrushes, again no females were seen; and not a single nest could be found. The females were evidently sitting on the nests or brooding newly hatched young, neither of which came under our observation in spite of diligent search. Broods of coots and pied-billed grebes were numerous and easily seen from the shore, but no ruddy broods were among them.

Remembering that the ruddy duck usually nests in emergent aquatic vegetation such as bulrushes, it was decided a boat was necessary if we were to find any nests. Thus on July 12, equipped with a canoe and accompanied by my wife and a friend, Rhoda Green, I again visited the pond. We quickly launched the canoe, and the exploration of the pothole was on. A search among the scattered clumps of bulrushes yielded several coot and pied-billed grebe nests but still no ruddy nests. Finally a shallow extension of the main body of water was explored, and here a most unusual ruddy duck's nest was found. It was constructed of cattail stems and leaves and was situated in a small opening between two clumps of cattails

about five yards from dry land. The openness of the nesting site seemed quite unusual, for the ruddy duck commonly conceals its nest in dense stands of bulrushes or cattails. The nest contained only one egg; and although no disagreeable odor could be detected from the egg, it is likely that it was infertile; for the nest looked as though it had been recently deserted by the female and her newly hatched young.

After photographing the nest, we paddled along the southern margin of the pothole toward where we had left our car, thinking that our exploration was over. The best part of the expedition, however, was yet to come. The broods of coots were numerous. We broke up one group, and the young scattered helter-skelter in their rush to escape. Some of them dived under the water, and one downy young inadvertently reappeared in a tangle of aquatic plants next to our canoe. It became so enmeshed that we were able to capture it easily. Not more than a week old, it still retained the juvenile reddish bill and reddish down feathers on the head. A small leech was removed from the eyeball of the young coot, and we then freed it. Continuing along the southern margin, we noticed a very dense stand of spike rush (*Eleocharis*) which formed a solid band of dark green along the shore. Suddenly a brood of five two-weeks-old ruddy ducklings escorted by a female moved out from the stand of spike rush and headed for open water. Our expedition was now a success, for here was definite evidence of successful reproduction!

Our view of the brood was of short duration, however; for they quickly saw us, dived expertly, and scattered in every direction. We caught fleeting glimpses of the female and her young when they came up for air, but they all soon dis-

appeared in the dense spike rushes. Upon exploring the stand of spike rushes at close range, we found several nesting platforms that looked as though they had been occupied earlier in the season. These nests were more typical of the ruddy duck, being similar to those which I had seen in the huge waterfowl marshes at Delta, Manitoba.

Although our expedition was now over and observations on the pothole terminated, my thoughts about this little body of water have continued. Why should this particular pothole have breeding ruddy ducks while hundreds of other seemingly attractive ponds in this part of the state have none? The following suggestions are not intended to answer the above question with finality but are merely an attempt to suggest the influence of certain factors in attracting ruddy ducks to the pothole.

The first striking difference between this pond and many others which I have seen in eastern Minnesota is the great amount of open water unobstructed by the dense clumps of cattails which are so common in most potholes. Ruddy ducks seem to prefer fairly large areas of open water for courtship display and feeding. A second difference is the fact that it is a rather deep body of water that does not dry up during late summer. Its depth makes it more attractive to diving ducks than a shallower pond. In spite of the fact that a nest was found associated with cattail cover, I believe that the dense stand of spike-rush along the southern margin offered attractive enough nesting cover to be a decisive factor in inducing the ruddies to breed at this pothole. The growth of *Eleocharis* was so thick and luxuriant that it offered good nesting cover and excellent nest material. *Division of Entomology and Economic Zoology, University Farm, St. Paul, Minnesota.*

# Bird Notes from Stanchfield Lake

By Richard Voth

On June 2, 1941 a group of older boy scouts and the writer made a trip to Stanchfield Lake. This body of water is located about 20 miles northwest of Little Falls, Minnesota, in a deep woods some two miles from a small country road. Many tall Norway pines, mixed with jack pines, oaks, birches, and aspens cover the whole area.

The history of the lake is very interesting. It seems that years ago a cloudburst washed a gully through the ridge surrounding the lake, and by the next morning nearly all of the water had disappeared. In the years that followed, birch trees invaded the "new" land that had once been lake bottom, and even the natives forgot that a lake had existed there. A few years ago some beavers moved into the area and built a twenty-foot dam across the gully which plugged the outlet and brought the lake back to its old level. The birches were drowned out, and now a ring of "ghost" trees surrounds the lake.

Our camp was pitched near the beaver dam not far from a deserted trapper's cabin. After our tents were put in order, we set out on an exploration trip. We found a pair of common loons on the lake, but the fact that they left in the evening led us to believe that they did not intend to nest there. Because of the high hills surrounding the lake, it was necessary for these birds to make at least three large circles over the water in order

to gain enough altitude to clear the hills. Then with a wild cry of farewell they disappeared into the setting sun.

We also saw hundreds of tree swallows which were nesting in holes in the dead birches. Flickers and downy woodpeckers nested in the trees, too, but in fewer numbers, and many eastern kingbirds had their nests on these same trees over the water.

After our first evening meal we were sitting around the campfires. The sun had gone down behind the hills, night was creeping in from the east, and insects were droning through the air, when suddenly out of the stillness came the cry, "whip-poor-will, whip-poor-will, whip-poor-will." This was repeated about 100 times from a tree 30 yards from the tents. It was so loud and arresting that it seemed as if all other creatures stopped their activity to listen. The call was repeated without a pause for two or three minutes. Then after a brief interval, we heard it directly above our tents in a Norway pine. When we tried to spot the bird with our flashlights it flew away. Faintly from across the lake came the "whip-poor-will." The call was repeated again and again throughout the night from various places around the lake. Many times an answering call could be heard, but never did both calls come from the same place at the same time.

After darkness closed in and our campfires were dying out, we heard a call come



through the woods—"whoooo whoooo who who who"—the plaintive hooting of a barred owl. Softer sounds came from the forest floor where small mammals were scurrying through the dry oak leaves, and out on the lake beavers were splashing in the night.

On one of the many trips of exploration around the lake, the nests of two interesting birds were discovered, the red-eyed towhee and the veery or willow-thrush. Neither of these birds is considered a rare find, but both are so clever at concealing their nests, that the discovery of the nest of either is a long-remembered event.

Attention was first directed to the towhee's nest, when I saw on the ground an egg with which I was unfamiliar. It was not in a nest, and as I examined it I heard a fluttering at my feet. The female towhee was doing her best to lure me away by the "broken wing" act. I dropped to my knees to separate the grass, and there at the base of a low shrub was the towhee's nest. It held two newly-hatched young and an egg similar to the one that I had just found. I marked the spot and later photographed the nest.

The veery's nest was found one evening just before dark as we lay hidden in some brush opposite one of the beaver houses on the lake. It was our intention to observe a beaver at work. Soon one

of them swam to the shore. Immediately we started to follow him along a deer trail, but we lost him in the underbrush. As we walked back toward the lake, a veery flushed from a tuft of grass along the trail. Its nest, which we photographed the next day, contained three eggs.

The following is a list of birds seen on our trip to Stanchfield Lake: Loon, pied-billed grebe, great blue heron, blue-winged teal, red-tailed hawk, broad-winged hawk, osprey, sparrow hawk, ruffed grouse, pheasant, sora, killdeer, Forster's tern, black tern, mourning dove, black-billed cuckoo, barred owl, whip-poor-will, nighthawk, chimney swift, belted kingfisher, flicker, pileated woodpecker, red-headed woodpecker, downy woodpecker, eastern kingbird, crested flycatcher, phoebe, tree swallow, barn swallow, purple martin, blue jay, crow, black-capped chickadee, white-breasted nuthatch, short-billed marsh wren, brown thrasher, robin, willow thrush, bluebird, cedar waxwing, migrant shrike, starling, red-eyed vireo, warbling vireo, yellow warbler, oven-bird, northern yellow-throat, western meadowlark, yellow-headed blackbird, red-winged blackbird, Baltimore oriole, Brewer's blackbird, bronzed grackle, cowbird, dickcissel, goldfinch, red-eyed towhee, chip-ping sparrow, white-throated sparrow, and song sparrow.—*Dassel, Minnesota.*

*Attention all those who may have the good fortune to see snowy owls this winter! Dr. Alfred O. Gross of Bowdoin College at Brunswick, Maine is conducting a nation wide study of the southward movements of the snowy owls during this winter season. Dr. O. S. Pettingill of the Department of Zoology, Carleton College at Northfield, Minnesota has offered to collect all possible midwestern records for Dr. Gross. Will anyone seeing one of these arctic visitors, or knowing positively of any being shot, please report the date, location and observer or collector to Dr. Pettingill?*

*Dr. Gross has been compiling records of these birds for a number of years in a study of the periodicity of their southward flights. The years of abundance of the owls occur every three to six years and a longtime study of the movements may bring out some exceedingly interesting correlations between the abundance of snowy owls and that of small rodents and furbearing animals.*

# Minnesota Nesting Record, 1941

By Charles B. Reif

Each year *The Flicker* presents an account of bird-nesting in the State of Minnesota as reported by the various members of the Minnesota Ornithologists' Union. The contributions made annually by this group of bird students is gradually building up the knowledge of the avian life about us. That there is still a great field for such endeavor was noted by Dr. Thomas Roberts in *The Birds of Minnesota*. He says ". . . there it still very much to be done in the future. Bird students in the years to come will add many things to this book and no doubt correct some errors, and the author hopes that they may have as much pleasure and joy in so doing as he has had during the last fifty years . . ." The nesting records here presented, represent a small part of the work to which Dr. Roberts referred and indicate that those persons involved are deriving a great deal of pleasure from such activity.

This year the nests of eighty-six species of birds were discovered. Exclusive of two hundred or so nests in several kinds of swallow colonies, over eight hundred separate nests were reported by thirty-nine observers. Those who contributed to the records are: Hulda Adams, Mabel Adams, Lulu May Aler, Katherine Briggs, Kenneth Carlander, Iva Cronk, Shirley Cummings, William Cummings, Ruth Eliason, Mary Elwell, Arthur B. Eustis, Phillip Featherstone, R. Freeman, L. Hackl, Byron E. Harrell, Casimer Hero,

Nestor Hiemenz, B. Johnson, Evelyn Jones, Vienna Koiviska, Wilko Korpinen, Dr. Olga Lakela, Alvira Larson, Gerda Leland, Brother Hubert Lewis, Catherine Lieske, William Longley, Mrs. R. Loranger, Mrs. Mary Lupient, Marian McLennan, Marius Morse, Mrs. W. C. Olin, Ed. Patcich, Dr. Charles B. Reif, Donald Sobar, Catherine Vavra, Richard Voth, Mrs. Wm. Wernowsky and Margaret Ann Wilson. The mythical award for the most extensive list goes to Harrell and Longley whose great number of observations makes one suspect that they are themselves feathered. Also worthy of mention is that dynamic Duluthian, Dr. Lakela, who again maintained her reputation for indefatigability in the field.

The numerous records of the separate nests have been compiled in tabular form. The species have been arranged systematically and the number of nests for each species are indicated in column A. In column B are the early and late extremes of the nests. Column C contains symbols which indicate the state of the nest: thus "b" means that the nest was under construction; a numeral followed by the letter "e" indicates the number of eggs; and a numeral followed by the letter "y" indicates the number of young birds in the nest or accompanying the parent. The name of the county in which the nest was found appears in column D and that of the observer in column E.

	A	B	C	D	E
Common Loon	3	5/30 8/11	2y 1y	Aitkin Stearns	Olin Hiemenz
Holboell's Grebe	2	6/29	3y	Stearns	Hiemenz
Horned Grebe	2	8/20	y	Roseau	Carlander
Eared Grebe	1	8/20	y	Roseau	Carlander
Pied-billed Grebe	4	6/19	9e	Kandiyohi	Hiemenz
		7/13	3e	Kandiyohi	Hiemenz
Great Blue Heron	8	5/3	b	Washington	Lewis & Cummings
		8/20	y	Roseau	Carlander
Green Heron	2	5/10		Hennepin	Harrell & Longley
Black-crowned Night Heron	42	5/3	b	Ramsey	Lewis & Cummings
		6/7	4e	Hennepin	Aler
American Bittern	1	7/12	2e	Ramsey	Lewis & Cummings
Common Mallard	24	5/7	16e	Hennepin	Harrell & Longley
		7/17	11y	Roseau	Lewis & Cummings
Redhead	2	6/13	7-9	Stearns	Carlander
Blue-winged Teal	3	5/17	1e	Hennepin	Hiemenz
		6/22	12e	Mille Lacs	Harrell & Longley
American Pintail	1	6/19	10y	Stearns	Eustis
Ruddy Duck	3	6/28	2y	Roseau	Hiemenz
		7/13	10e	Stearns	Carlander
American Merganser	1	8/27	28y	Roseau	Carlander
Red-breasted Merganser	5	7/8	7e9y	St. Louis	Lakela
		7/24	10y	St. Louis	Olin
Cooper's Hawk	1	7/5	y	Cass	Reif
Red-shouldered Hawk	1	5/30	3y	Stearns	Voth
Sparrow Hawk	2	4/26		Ramsey	Harrell & Longley
		7/10	3y	Stearns	Hiemenz
Ruffed Grouse	2	5/11	8e	Anoka	Harrell & Longley
		5/15	11e	St. Louis	Lakela
European Partridge	1	7/31	8y	Stearns	Hiemenz
Virginia Rail	3	5/24	1y	Hennepin	Aler
		6/24	8e	Hennepin	Harrell & Longley
Sora	1	6/6	12e	Stearns	Hiemenz
Florida Gallinule	1	6/7	10e	Hennepin	Harrell & Longley
American Coot	56	6/19	9e	Stearns	Hiemenz
		8/11	2y	Stearns	Hiemenz
Piping Plover	7	6/2	4e	St. Louis	Hero
		7/25	3y	Roseau	Carlander
Killdeer	8	5/20	4y	St. Louis	Leland
		6/22	3e	Mille Lacs	Eustis
Spotted Sandpiper	5	5/28	4e	Hennepin	Lupient
		6/25	y	St. Louis	Lakela
Herring Gull	33	7/10		Lake	Lakela
Franklin's Gull	1	7/13	2y	Stearns	Hiemenz
Forster's Tern	3	6/19	e	Stearns	Hiemenz

	A	B	C	D	E
Black Tern	23	5/30 8/11	1e y	Hennepin Stearns	Harrell & Longley Hiemenz
Mourning Dove	11	6/11	1e	Stearns	Hiemenz
Yellow-billed Cuckoo	3	6/4 7/9	1e 2e	Stearns Stearns	Hiemenz Hiemenz
Black-billed Cuckoo	2	7/4 7/25	4e 2e	St. Louis Beltrami	Larsen Morse
Nighthawk	1	7/16	2y	Stearns	Hiemenz
Screech Owl	1	6/5	2e	Hennepin	Aler
Ruby-throated Hummingbird	3	6/12 7/15	1e 2e	Stearns Cass	Hiemenz Reif
Belted Kingfisher	6	4/19 6/29		Hennepin Stearns	Harrell & Longley Hiemenz
Flicker	4	5/17 7/15	y y	Ramsey St. Louis	Lewis & Cummings Lakela
Pileated Woodpecker	5	5/11 6/4	b y	Anoka Stearns	Harrell & Longley Hiemenz
Red-headed Woodpecker	4	5/10 7/12	e y	Ramsey Hennepin	Harrell & Longley Harrell & Longley
Hairy Woodpecker	5	5/11 5/17	y y	Hennepin Hennepin	Aler Harrell & Longley
Downy Woodpecker	2	5/24 6/12	y y	Hennepin Stearns	Harrell & Longley Hiemenz
Eastern Kingbird	15	5/22 6/26	4e 4e	Hennepin Stearns	Harrell & Longley Hiemenz
Crested Flycatcher	4	5/24 7/11	b y	Ramsey Hennepin	Harrell & Longley Morse
Phoebe	18	4/27 7/22	4e 5y	Stearns Dakota	Hiemenz Lewis & Cummings
Least Flycatcher	9	6/3 7/29	e 4y	Stearns Cass	Hiemenz Reif
Wood Pewee	13	6/3 7/28	e	Stearns Ramsey	Hiemenz Harrell & Longley
Prairie Horned Lark	4	4/20 6/26	4y 1y	Ramsey Ramsey	Harrell & Longley Harrell & Longley
Tree Swallow	15	5/17 7/13	b 2y	Hennepin St. Louis	Harrell & Longley Freeman
Bank Swallow	100	4/26 7/30	b y	Hennepin St. Louis	Harrell & Longley Lakela
Rough-winged Swallow	3	5/3 6/11	b b	Hennepin Stearns	Harrell & Longley Hiemenz
Barn Swallow	7	7/22 7/30	1y 4e	St. Louis Cass	Lakela Reif
Cliff Swallow	6	7/22 7/22		St. Louis Stearns	Lakela & Adams Hiemenz
Purple Martin	4	5/3 7/20		Ramsey Roseau	Lewis & Cummings Carlander

	A	B	C	D	E
Blue Jay	5	5/3 7/23	b 4y	Ramsey Stearns	Lewis & Cummings Hiemenz
Black-capped Chickadee	5	6/19 6/22	y 4y	Hennepin St. Louis	Aler Lakela
White-breasted Nuthatch	6	4/28 8/10	b y	Ramsey Stearns	Harrell & Longley Hiemenz
Red-breasted Nuthatch	1	6/22	3y	St. Louis	Lakela
House Wren	10	7/3 8/12	4y 1y	St. Louis St. Louis	Cronk Cronk
Prairie Marsh Wren	5	5/30 7/19	b 2y	Aitkin Ramsey	Olin Harrell & Longley
Short-billed Marsh Wren	2	6/3 7/1	7e 3y	Stearns St. Louis	Hiemenz Lakela
Catbird	24	6/1 7/22	4e 3y	Stearns Hennepin	Hiemenz Harrell & Longley
Brown Thasher	12	5/10 7/29	2e 2y	Hennepin St. Louis	Harrell & Longley Adams
Robin	62	4/14 7/31	4e 3e	Ramsey Ramsey	Harrell & Longley Harrell & Longley
Wood Thrush	2	5/20 5/24	5e 3e	Ramsey Hennepin	Harrell & Longley Carlander
Hermit Thrush	1	7/4	3y	St. Louis	Lakela
Olive-backed Thrush	1	7/21	2y	Lake	Lakela
Willow Thrush	3	6/2 7/8	3e 3y	Morrison Cass	Voth Reif
Bluebird	10	4/27 6/26	1y 5e	Ramsey Stearns	Harrell & Longley Hiemenz
Blue-gray Gnatcatcher	1	8/10	5y	Stearns	Hiemenz
Cedar Waxwing	18	6/3 9/6	3e 3y	Stearns Ramsey	Hiemenz Harrell & Longley
Migrant Shrike	2	4/27 6/5	b 4y	Hennepin Stearns	Harrell & Longley Hiemenz
Starling	4	4/19 6/1	b y	Ramsey Stearns	Cummings Hiemenz
Red-eyed Vireo	4	7/13 8/23	2y 3y	St. Louis Itasca	Eliason Wilson
Warbling Vireo	4	5/24 7/10	1e 1y	Hennepin Ramsey	Harrell & Longley Harrell & Longley
Black and White Warbler	3	6/22 7/20	2y 2y	St. Louis St. Louis	Lakela & Larson Lakela & Jones
Yellow Warbler	10	5/24 7/23	b 3y	Hennepin St. Louis	Harrell & Longley Lakela
Myrtle Warbler	1	7/11	2y	St. Louis	Lakela
Cerulean Warbler	1	7/27		Stearns	Hiemenz
Blackburnian Warbler	1	7/3	3y	St. Louis	Lakela
Pine Warbler	1	7/6	1y	St. Louis	Larson
Connecticut Warbler	1	7/11	3y	St. Louis	Lakela
Mourning Warbler	1	7/10	2y	St. Louis	Lakela

	A	B	C	D	E
Northern Yellow-throat	2	7/7	4e	Hennepin	Harrell & Longley
		7/20	3y	Stearns	Hiemenz
Redstart	5	6/12	3e	Stearns	Hiemenz
		7/9	2e	Stearns	Hiemenz
Yellow-headed Blackbird	8	6/18	4e	Stearns	Hiemenz
		6/19	4e	Stearns	Hiemenz
Red-wing Blackbird	45	5/10	4e	Dakota	Lewis & Cummings
		6/26	4e	St. Louis	Lakela
Orchard Oriole	7	6/14	2e	Ramsey	Harrell & Longley
		7/9	y	Ramsey	Harrell & Longley
Baltimore Oriole	13	5/16	b	Ramsey	Harrell & Longley
		7/13	y	Mille Lacs	Morse
Brewer's Blackbird	19	5/9	5e	Ramsey	Harrell & Longley
		7/16	3e	Ramsey	Harrell & Longley
Bronzed Grackle	2	6/3		Stearns	Hiemenz
		6/7	4y	Roseau	Carlander
Scarlet Tanager	2	6/10	1e	Stearns	Hiemenz
		6/12		Stearns	Hiemenz
Rose-breasted Grosbeak	5	5/20	y	Ramsey	Harrell & Longley
		7/13	y	Goodhue	Cummings & Featherstone
Indigo Bunting	1	7/30	2e	Stearns	Hiemenz
Dickcissel	1	8/16		Ramsey	Harrell & Longley
Purple Finch	1	5/31	1y	St. Louis	Lakela
Goldfinch	37	7/13	b	Goodhue	Cummings & Featherstone
		9/13	4y	Ramsey	Harrell & Longley
Red-eyed Towhee	2	6/2	3y	Morrison	Voth
		7/26	1y	St. Louis	Lakela
Vesper Sparrow	1	5/10	5y	Dakota	Lewis & Cummings
Field Sparrow	1	5/10	b	Dakota	Lewis & Cummings
Clay-coloured Sparrow	2	7/1	1e	Ramsey	Harrell & Longley
		7/20	3y	Stearns	Hiemenz
Chipping Sparrow	12	5/17	b	Hennepin	Harrell & Longley
		7/22	2y	St. Louis	Lakela
Swamp Sparrow	1	6/7	4y	Hennepin	Harrell & Longley
Song Sparrow	5	6/7	3e	Hennepin	Harrell & Longley
		8/16	3e	Hennepin	Harrell & Longley

*Museum of Natural History, University of Minnesota, Minneapolis, Minnesota.*

## NOTES OF INTEREST

JUVENAL WHITE-WINGED CROSSBILL IN ST. LOUIS COUNTY, MINNESOTA.—Although the white-winged crossbill unquestionably breeds in northern Minnesota, no nest has yet been found; and it therefore seems well to place on record all observations of young birds of this species in the state.

On August 3, 1941 a single young white-winged crossbill was observed on the walk of the concrete retaining wall along the channel to the Duluth harbor. Despite the large number of visitors on the walk, the bird moved about without apparent fear gathering small insects. On several occasions the bird ventured within a foot or two of us in search of food. *G. N. Rysgaard, A. B. Erickson, W. Nord, Minneapolis, Minnesota.*

**ADVENTURES WITH A SPARROW HAWK.**—One Saturday morning late in April, as I walked around a small bluff-like island in Otter Lake, a hovering male sparrow hawk directly above me attracted my attention. Watching him, I noticed a female also circling about the island. Immediately I began to look for possible nesting sites. An examination of several old tree holes in the neighborhood proved fruitless. However, the next Saturday I discovered a tree I had not examined. About 20 feet above the ground was a large hole, probably that of a pileated woodpecker. A dead stick on the ground broke as I stepped on it, and immediately a scratching above me caused me to look up. My eyes came to rest on a female sparrow hawk perched on the edge of the hole half way out of the tree. After four weeks of weekend visits, I built a blind about 150 feet from the nest. But from this distance, even with a 15 power telescope, identification of their prey was too difficult, so I moved the blind to within 75 feet of the nest. This arrangement proved very satisfactory for observation, but even with a 4-inch lens, taking pictures, both movies and stills, was out of the question. Once again I moved the blind, erecting it 30 feet from the hole. Here with only a 2-inch lens photography was possible. The first time I climbed to the nest, after a period of 13 rainy days, I reached into the hole and grabbed a bunch of very animated feathers. "Gosh!" I thought, "They're almost ready to leave the nest!" But to my surprise, and hers too, it was "ma" hawk, and she did not like it one bit, so I let her go. Reaching into the cavity, I pulled out 4 chirping, downy hawks probably about three days old. The female dove angrily at me. I put them back and returned to my boat just as it commenced to rain. The rainy weather continued for another four days, and I made no trips to the nest. After this wet spell, I returned to the nest and blind to watch the activity at the nest. Nearby was a kingbird's nest, and whenever the hawks appeared, they set up a great commotion.

Their diet, as far as I could determine, consisted almost wholly of meadow mice. The average number taken per day over their 25 day nesting period was six, and I judge that they took about 160 or 170 mice. They also took a few short-tailed shrews, half-grown ground squirrels, two young ring-necked pheasants, several small birds, perhaps song sparrows or warblers, and a host of large dragonflies.

Their method of feeding was extremely interesting. The male did most of the hunting, transferring his contributions to his mate. The male would arrive with food and almost invariably perch in a certain dead tree. Giving a sharp chitter he would call the female. They would chitter between themselves before the female would fly past the male, take the food from his beak with her talons, and fly to a dead tree near the nest where she usually ate the heads of the mammals and skinned them partially, then fly to the nesting cavity. She generally took from one to two minutes to feed the four young. One day I played parent to them, bringing them a small ground squirrel. I left the remains on the limb near the nest. It disappeared and probably was fed to the young. As the young grew older, the old birds became more aggressive, the male diving extremely near my head. On one of my last visits to the nest the male struck me on the head three times but, of course, did no harm. On my final visit, accompanied by Mr. R. M. Berthel of White Bear, I climbed the tree and looked into the cavity. The one remaining sparrow hawk fluttered into a shallow pond. His feathers were dampened; but his spirits were still very high; and he clawed, clutched, bit and screamed when I retrieved him. About two weeks later I saw three of the hawks in the vicinity of the nest; but they have not been seen since. Will they return again next year? Well, we certainly hope so. *Daniel Lucas, White Bear, Minnesota.*

**MORE BIRD OBSERVATIONS AT LAKE OF THE WOODS.**—This article is presented to bring up to date an earlier article on Lake of the Woods birds (Gustav Swanson and Kenneth Carlander, *The Flicker*, Vol. 12, No. 1). Since that article appeared, I have spent seven months in the Lake of the Woods area (June 17 to September 23, 1940, February 25 to 27, 1941, and May 30 to September 24, 1941). During this time I saw a number of interesting birds, although I was principally concerned with a lake survey and a study of the commercial fisheries of Lake of the Woods for the Minnesota Department of Conservation.

In the summer of 1940, very few new birds were seen. On July 4, we banded young herring gulls on Gull Rock near Long Point. Most of the gulls were already too old and active to be captured, although we were able to band 23. One of these was reported from Panama Beach, Florida, in January, 1941. On July 2, 1940, many Bonaparte's gulls were noted flying in from the west. No Bonaparte's gulls were noted the year before, although they were seen in 1932 by Swanson. Several Franklin's gulls were seen on July 9. Both species of black-headed gulls were noted at various places on the lake the remainder of the summer and in 1941.

During the summer of 1941, we saw more shore birds than in the previous years. The sand beaches of Morris Point and of Pine and Curry Islands probably rank with the long points at Frontenac and Duluth as Minnesota's outstanding shore bird areas. We say 16 species of shore birds on these beaches this past summer. The semipalmated, least, and pectoral sandpipers were the most common, but numbers of white-rumped, Baird's and red-backed sandpipers were also seen. Sanderlings were especially abundant on September 9. The most thrilling find, however, was a knot, which we observed from a distance of about eight feet, on June 11, 1941. Discussion of Pine and Curry Islands would be incomplete without mention of the piping plovers nesting there. Two or three broods of young were seen each year, but several other broods were undoubtedly on the islands. On June 30, 1941, a few semipalmated plovers stopped on the island, and we had a chance to compare this darker colored species with the lighter colored piping plovers. In September there was an unusual wave of warbler migration. The Cape May and chestnut-sided warblers were particularly abundant. On September 10, a large flock of American pipits was seen along the beach near Morris Point.

In the earlier report, 158 birds were listed. Below are given additional records. This does not make a complete list of the birds to be seen in the area, but is merely a list of the birds seen by Dr. Swanson and myself.

Black duck, three pairs in the Bostic, July, 1941; ring-necked duck, mouth of the Warroad River, September 18, 1941; goshawk, near Baudette, September, 1941; Cooper's hawk, near Baudette, August, 1941; European partridge, introduced several times. (Two or three small flocks seem to have become established and overwintered, 1940-41. They were seen in February, 1941, and several times in the summer); Virginia rail, Warroad River, June, 1941; ruddy turnstone, Pine Island, June, 1941; knot, Pine Island, June 11, 1941; red-backed sandpiper, Pine Island, June 11, 1941; stilt sandpiper, Pine Island, July 28, 1941; sanderling, Pine Island, September 10, 1941; Franklin's gull, several places, summer of 1940 and 1941; Forster's tern, a few, August 20, 1940; short-billed marsh wren, Bostic Bay, July 17, 1941; American pipit, a large flock, Morris Point, September 10, 1941; Tennessee warbler, Warroad, September 22, 1941; Cape May warbler, Warroad, September 22, 1941; Blackburnian warbler, Baudette, July 11, 1941; chestnut-sided warbler, Baudette, July 23, 1941 and September, 1941; rose-breasted grosbeak, Baudette, June 10, 1941; swamp sparrow, Bostic Bay, July, 1941. Kenneth D. Carlander, Department of Zoology, University of Minnesota, Minneapolis.

DECEMBER, 1941



**PURPLE FINCH NESTING NEAR ST. CLOUD.**—Believing that it is not the usual thing for a purple finch to nest in this locality, I submit the following experience as a record of possible interest and value.

It is often surprising how much birding you can do from your car while riding along the highway, but I never expected to find a purple finch's nest in this manner, especially around St. Cloud. It is quite a treat to me just to see a finch during migration.

A purple finch was seen on May 9, 1941, in a young forest of spruce and pine on the grounds of St. John's College. On that occasion it appeared that some bird was building in a certain spruce, and the place was noted for further investigation.

Three of us visited the spruce on May 18, and found a nest with a sparrow-like bird on it about eight feet above the ground near the trunk. She was difficult to flush and did not leave until one of the party was boosted up. She then got off quickly and chirped faintly while watching sadly from the branches of nearby trees. There were four blue eggs and one cowbird's egg in the nest. The bird looked like a finch. There was no evidence of the male bird. As far as we knew, this was not the finch's nesting area; and it was decided to keep the nest under observation.

On different days at different times I would stop along the road to see that the female bird was still on the nest and hope that I would see the male bird evincing concern over the disturbance, or at least keeping his mate company and singing for her; but each time I was disappointed.

When a friend and I visited the nest on May 28, the bird was still on the nest; but she departed when a mirror attached to a long pole was thrust over her head. There were the eggs as before. The bird was anxious for us to leave so that she might return to the nest. It seemed very strange that we did not see the male finch.

The female bird was still sitting on June 2, but on June 4 there were young in the nest. I thought I would like to see the parents carrying food, but I could not catch them at it.

At last, on June 7, the male finch was seen in the top of one tree and then in the top of another. On June 9, I heard a song. It was noon, and there was a misty rain; but I wished to see where the song came from. I found the male finch sitting in a tree top singing and singing! You can imagine how glad I was to get a treat like that. It was like a story with a happy ending.

At this time, I observed the nest once more. I did not seem to be alarming any bird, and the nest appeared empty; but when I placed my hand near the nest, a young finch hopped out onto a branch. I was frightened away, thinking that after all I might be breaking up this home that I had been so happy about finding and watching.—*Mrs. A. J. Trainor, St. Cloud, Minnesota.*

**BANDED MARSH AND SPARROW HAWK RETURNS.**—On June 18, 1940 we banded a young marsh hawk, Biological Survey band number 38-539126, three miles south of Minneapolis, Minnesota. The hawk was shot on January 28, 1941 in Colorado County, Texas. Also, on June 18, we banded two sparrow hawks taken from a nest near Hastings, Minnesota. The one, bearing Biological Survey band number 38-318705 was caught in a trap at Harrison, Arkansas, on December 21, 1940; and the other, number 38-318706, was shot in Line County, Oklahoma, on November 15, 1940. *James A. Struthers and Dana R. Struthers, Minneapolis, Minnesota.*

**SHORT-BILLED MARSH WREN.**—On June 8, 1941, I was shown a short-billed marsh wren in a swampy area near the Forest Hill Cemetery of Duluth, and I learned to identify its song. On June 19, I found a pair that seemed to be busy in the section nearest the road. They showed alarm, but I could find no nest. However, I observed their characteristic manner of disappearing into the base of a clump of grass or bushes, and then working their way up to get a better view of the intruder. They held their tails at an angle nearly touching their backs revealing the soft buffy under tail feathers. Then with a rapid whirr of wings they disappeared into a neighboring clump, chipping away at the intrusion.

On June 23, they seemed to be busy in the center of the area, and one was observed with a dry grass in its bill. Then it was time to be elsewhere before I could observe where it went. Two days later Alvira Larson and I decided we must find a nest, so we set out at five a.m. I think there were present the heaviest dew and the most saw flies of the season. We started in the far corner of the marsh and worked to the front behind bushes, so that the wrens would not see us. Then we learned how wary they can be. They suddenly appeared behind us, darting about, calling, and making quite a fuss. They succeeded in making us stop and examine all the surrounding clumps. On noticing that they had disappeared we proceeded to the center, where they were quietly sneaking through grass clumps. Our search was soon rewarded, for there was the ball nest of coarse grass in a tall clump of grasses, two feet from the ground, with an entrance in the side. No birds or eggs could be heard or felt.

On Thursday and Friday, June 26 and 27, I saw no eggs or young, but the parent was seen with food in its mouth. On the evening of June 30, three of us searched for more nests but found none. At the nest located on June 23, however, we had the thrill of seeing three half-grown young pop out and perch in the tall grasses. The next morning at 6 a.m. they favored the Duluth State Teachers College ornithology class by again popping out of the same nest. Then ensued the fun of making them movie starlets. One of the wrens must have been a female, because she took readily to having her picture taken and perched on hand, nest, or grass most accommodatingly. The two "males" were more active and had to be brought back from disappearing acts in the grasses. On the following Thursday while browsing around, two more nests were found, 20 to 30 feet apart.

Now what puzzles the author is, which nest were the eggs incubated in and did the adults use all the nests they constructed? The problem of watching these marsh wrens for nesting data was suggested to me by Dr. Olga Lakela of the College. Hereafter, I shall have a keener appreciation of movies showing bird nests and young, for I now understand more of the time and patience it involves to observe birds carefully. *Evelyn Jones, Duluth, Minnesota.*

**COURTSHIP AND NESTING OF THE RED-EYED VIREO.**— The clear warm days of late June had at last come, after weeks of dismal rainy weather. The chipping sparrows, which had already raised one brood in the little spruce before the lodge, were building another nest in a nearby balsam. Up on the hill a pair of vireos was very busy satisfying the appetites of two young cowbirds that all but smothered the rightful heir. Then on June 28, 1941, I became aware of another pair of red-eyed vireos which was exploring the area about my cabin. At times during the next few days these vireos dashed about the woods, darted in among the filbert thickets, and squealed excitedly. When they stopped for a moment in the brush, one of them

could be heard making queer little noises. Early one morning it chanced that I saw the flash of their wings and heard their chattering as they flew toward me. The female bird abruptly came to a perch on a sloping kinnikinick stem near the ground. Immediately, the male alighted just above her on the same stem. I paused to watch.

The male was excited. His mouth was held widely open. From it came a monotone of very staccato notes which sounded not unlike a huge hinge's squeaking. This noise he made continuously while his head moved from side to side with a weaving sort of motion. In cadence with his feet which changed their place on the perch every few seconds, the male fanned out his wings. The stiff attitude he assumed when his wings were fanned included the holding erect of his tail and a backward arching of his neck. After each of these stiffenings, the weaving motion of his head was resumed.

During this song and dance, which the male so whole-heartedly performed, the female vireo watched with complete boredom. She uttered not a sound nor made any move other than to glance carelessly in some other direction. When her swain's routine had been in progress for about two minutes, she hopped down the stem a few inches and took wing. Again the male pursued her, chattering and squeaking as he dodged this way and that following her every turn.

The next day the male sang near my cabin during the morning and afternoon. I did not see the female until that evening when she passed by with some fibers in her bill. During that first day she had woven a platform in the fork of a small panicked dogwood about two feet from the ground. The pieces of grass and fiber were wound around the branches each of which was about a quarter of an inch in diameter.

The body of the nest was begun on the second day. Gradually it became deeper and deeper. Into its construction went only grasses and what appeared to be fibers of basswood bark. It was in the third day of construction that the pendant structure assumed its final shape. Then bits of birch bark were added to the outside though these contributed to nothing more than the appearance of the nest.

The final labor of the female (I am sure it was the male which spent most of his time singing in the nearby filbert grove) was to line the nest with finer grasses than she had used in the framework. The building had taken four days, and though the male may have helped, I thought it was always the female which was seen at the nest. It was she who snuggled down into the nest to make it fit her own proportions. She laid the first egg in the nest on the sixth day after construction had started.

Both birds were near the nest on the seventh day, but the female did not stay on it. On the eighth day she began her sitting, but only one of the three eggs was hers. A cowbird had deposited the other two. During her absence from the nest next day, I removed the cowbird eggs. The vireo laid no more but resigned herself to incubating her own one egg. She stayed on the nest very faithfully during the next four weeks. The nest happened to be near a much used path, and though people passed within a few feet of it, she did not often depart. Toward the end of the month she grew so tame that I was able to touch her head softly.

Sometime during the last days of the fourth week the nest was abandoned; the single egg as yet was unhatched. Other red-eyed vireo nests were found during the summer, and it may be that this pair tried again to have a family. During the last week of September vireos were still heard, and occasionally a pair was seen darting with abandon through the fall woods. *Charles B. Reif, Museum Natural History, University of Minnesota.*

## NOTES ON THE LESS COMMON BIRDS OF THE DULUTH AREA.—

For the third consecutive year the red-throated loon (*Gavia stellata*) migrated through Duluth, Minnesota, during the first half of June, surprisingly late in the season for this far northern species. The 1941 record was obtained on Minnesota Point in the exact locality where the species was sighted in 1940—in Lake Superior Bay about four miles from the Duluth entrance canal. Only one individual was seen and identified by the writer and Mrs. W. C. Olin early on the morning of June 5. Curiously enough, Mr. L. Hackl on the following day collected one red-throated loon in the same locality. The specimen, a male in transition plumage, with the throat patch only partly formed, was a welcome addition to the bird collection of the Duluth State Teachers College. On June 17, Mr. Hackl reported seeing several red-throated loons in the same general location. Even at a distance the species is unmistakable because of its slender graceful neck and its upward pointing bill. In favorable light the white breast meeting the water line and the colorful throat are reliable field marks in identification. In 1940 the writer heard the call of the red-throated loons as they rose from Lake Superior and headed northward. It was very different from that of the common loon.

Blue geese (*Chen caerulescens*) are relatively rare migrants in eastern Minnesota. Their occurrence in Duluth in the spring of 1941 is an interesting addition to the few previous records of this area. On June 1, several individuals flew over the campus of the Duluth State Teachers College. In the rolling fog they were flying low, just above the tops of the buildings, to the delight of a group of students just returning from an Ornithology field trip. Later, on the same day two immature birds, their necks just beginning to turn white, were discovered in a grassy plot on the Bayside Boulevard on Minnesota Point. For two weeks the pair was seen there daily feeding on the vegetation. For each mouthful the geese looped their necks to reach the very roots of the plants with quick and vigorous jerking, seemingly unconcerned of the curious spectators who watched from slowly moving cars at a distance of a few yards. However, their wary senses permitted no close approach of a human by foot. Alarmed by even the most cautious movements in attempts to leave the car, the geese flew to a farther shore, to return as soon as it was safe to resume their feeding. The pair was last observed by the writer on June 13.

The red-breasted merganser (*Mergus serrator*) appears to be nesting on the North Shore of Lake Superior in greater numbers than is commonly supposed. Five broods at least came to the attention of the writer during the summer of 1941, all within about two miles of the shore centering the St. Louis and Lake County line. The observations were made at close range with the aid of the colored plate in *The Birds of Minnesota* by T. S. Roberts. It is reasonable to assume that the species under discussion was correctly identified. Moreover, there are previous records of this species from farther north on Lake Superior. On the morning of July 8, the writer with 17 students first discovered one female with seven young in Lake Superior at the Stony Point lookout about 16 miles from Duluth. Less than a mile farther, on the shore was another female with nine young. In the same locality on July 13, the writer with Miss Alvira Larson saw one female with 16 young and another with nine. Later, on the same day at Knife river another female with eight young was seen to leave the shore rocks for the open lake. All of the young were in the downy plumage, able to swim and "run" on the water surface when suddenly alarmed. On this day, also, several adults without young were sunning themselves on the rocks of the Stony Point Lookout.

The piping plover (*Charadrius melodus*) arrived at Minnesota Point on April 28.

About the middle of May six pairs were recorded; only three nests were located, two with four eggs on June 2, by Mr. Casimir Hero, and one on June 14, by the writer. The first eggs were destroyed, presumably by herring gulls and crows. At a later date two other destroyed nests were discovered. Some of the discouraged plovers migrated to other areas. The two pairs that remained seemed to have succeeded in incubation because two recently-hatched young were noticed by the writer on July 26. At a later date they were seen again, and another older young obviously from a different nest. This record of 1941 is encouraging and satisfying because during the summer of 1940, the piping plovers were unsuccessful in nesting on Minnesota Point.

Minnesota Point is a haven for shore birds. The last spring migrants leave in June; the first return in August. But throughout the summer certain species, not nesting in the state, may be seen there. At least two such records were obtained in 1941, ruddy turnstone and sanderling on July 26. Among the fall migrants on August 22, two notable species were observed by the writer and Miss Hulda Adams, namely, American knots, four in the gray plumage, and one buff-breasted sandpiper, the latter being a new record for the Point. There were also many sanderlings, Baird's and semipalmated sandpipers.

While the shore birds roam along the sandy beaches of the Point, the song birds drift through the sunlit pine forest along the sand ridge. On August 22, the tall pines tossed in the steady gale from Lake Superior, but in the leeward bay side, the underbrush stirred with swiftly moving wings of many birds. Sparrows, flycatchers, warblers, thrushes, catbirds, waxwings, thrashers, and robins, all were there. Chilled by the lake breeze but stimulated by the warmth of the sun, they sang and fed on their restless way. Familiar calls and chirps with flashing colors gratified the senses until, in one breathless moment, a strange bird posed on the topmost branch of the red-berried elder, to feed on the delectable fruits. Its yellow back and underparts shone in the bright sun, the bill was light, the wings dark. During the first moments of surprise and uncertainty, while the author studied the bird through glasses, Miss Hulda Adams turned to the correct plate in *Bird Portraits in Color*. The object of study was a scarlet tanager in the unusual xanthochroid plumage. Later the writer checked the observations against the single specimen deposited in the Minnesota Museum of Natural History. *Olga Lakela, State Teachers College, Duluth, Minnesota.*

**FURTHER NOTES ON DUCK HAWKS.**—In *The Flicker* for October, 1941, we gave a report of our 1940 study of the duck hawks of the Mississippi River bluffs. This spring, 1941, we made only two trips to the bluff country south of Red Wing, Minnesota. On May 25, we followed the river as far south as Lansing, Iowa; but we saw only four duck hawks, probably migrating birds. On June 14, however, at two eyries south of Winona, Minnesota, we found nesting peregrines. At the first nest the young were already awing and flew from the face of the bluff as we approached. At the second eyrie there were three young on the rock-ledge nest. When we threw a rope ladder over the cliff and climbed down to the ledge, two of the young flew; but the third one, a female, not yet certain of her wings, we managed to capture. This bird we intended to train for falconry. After further search we located two other eyries at which duck hawks appeared to be nesting, and thus we equalled our 1940 record of four nesting sites. Three of the eyries discovered in 1940 were in use in 1941, but the fourth had been abandoned. The discovery of a new eyrie in 1941, however, seemed to indicate that the nesting duck hawk population had remained about the same as in 1940. *James A. Struthers and Dana R. Struthers, Minneapolis, Minnesota.*

# MINNESOTA ORNITHOLOGISTS' UNION

## AFFILIATED SOCIETIES

### DULUTH BIRD CLUB

Officers: President, Mrs. G. J. Kitts; Vice-President, Miss Alma Chesely; Secretary, Miss Esther Larson; Treasurer, Miss Hulda Adams.

Meetings are held the second Wednesday of each month at 7:45 p.m. at the Duluth State Teachers College.

### LAKEVIEW BRANCH OF THE DULUTH BIRD CLUB

Officers: President, Mrs. W. C. Olin; Vice-President, Miss Betty Watterson; Secretary-Treasurer, Mrs. Wm. Wernowsky.

Meetings are held the fourth Wednesday of each month at 8:00 p.m. at the Lester Park Library.

### MINNEAPOLIS AUDUBON SOCIETY

Officers: President, Miss Lulu M. Aler; Vice-President, Mrs. I. A. Lupient; Recording Secretary, Mrs. I. S. Lindquist; Corresponding Secretary, Miss Florence Messer; Field Secretary, Mrs. R. H. Wells; Treasurer, Mrs. W. H. Sowden; Auditor, Mrs. J. A. Thompson.

Meetings are held the first Friday of each month at 2:00 p.m. at the Walker Branch Library. Field trips during April and May on Tuesdays, Wednesdays, and Fridays.

### MINNEAPOLIS BIRD CLUB

Officers: President, Mr. J. S. Clark; Vice-President, Mr. C. C. Wilson; Secretary-Treasurer, Miss Helen Towle.

Meetings are held the first and third Tuesdays of each month at 7:30 p.m. at the Minneapolis Public Library.

### MINNESOTA BIRD CLUB

Officers: President, Mr. Arnold B. Erickson; Vice-President, Mr. Kenneth Carlander; Secretary-Treasurer, Mr. Horace Paul.

Meetings are held the second Wednesday of each month, except in June, July, August, and September, at 8:00 p.m. at the Minnesota Museum of Natural History.

### T. S. ROBERTS ORNITHOLOGICAL CLUB

Officers: President, Mr. John Voth; Vice-President, Mr. James Schertler; Secretary-Treasurer, Miss Alatheia Norwood; Advisor, Mr. George W. Friedrich.

Meetings are held bi-monthly during February, March, April, and May, at the St. Cloud State Teachers College.

# MINNESOTA ORNITHOLOGISTS' UNION

## AFFILIATED SOCIETIES

### DULUTH BIRD CLUB

Officers: President, Miss Evelyn Jones; Vice-President, Mrs. G. J. Kitts; Secretary, Miss Catherine Vavra; Treasurer, Miss Alma H. Chesely.

Meetings are held the second Wednesday of each month at 7:45 p.m. at the Duluth State Teachers College.

### LAKEVIEW BRANCH OF THE DULUTH BIRD CLUB

Officers: President, Mrs. W. C. Olin; Vice-President, Miss Betty Watterson; Secretary-Treasurer, Mrs. Wm. Wernowsky.

Meetings are held the fourth Wednesday of each month at 8:00 p.m. at the Lester Park Library.

### MINNEAPOLIS AUDUBON SOCIETY

Officers: President, Mrs. David B. Green; Vice-President, Miss Lulu M. Aler; Secretary, Mrs. J. A. Lupient; Treasurer, Mrs. W. H. Sowden; Corresponding Secretary, Mrs. C. R. Nelson; Auditor, Mrs. L. W. Chamberlain; Field Secretary, Mrs. J. A. Thompson.

Meetings are held the first Friday of each month at 2:00 p.m. at the Walker Branch Library. Field trips during April and May on Tuesdays, Wednesdays, and Fridays.

### MINNEAPOLIS BIRD CLUB

Officers: President, Mr. L. B. Gilbert; Vice-President, Miss Florence Nelson; Secretary-Treasurer, Miss Helen Towle.

Meetings are held the first and third Tuesdays of each month at 7:30 p.m. at the Minneapolis Public Library.

### MINNESOTA BIRD CLUB

Officers: President, Mr. Arnold B. Erickson; Vice-President, Mr. Kenneth Carlander; Secretary-Treasurer, Mr. Horace Paul.

Meetings are held the second Thursday of each month, except in June, July, August, and September, at 8:00 p.m. at the Minnesota Museum of Natural History.

### T. S. ROBERTS ORNITHOLOGICAL CLUB

Officers: President, Mr. Charles Metzroth; Vice-President, Mr. Ralph Sauer; Secretary-Treasurer, Miss Alatheia Norwood.

Meetings are held bi-monthly during February, March, April, and May.