

SOUTH DAKOTA BIRD NOTES

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Whole No. 83

Twentieth Anniversary Issue



J. W. Johnson

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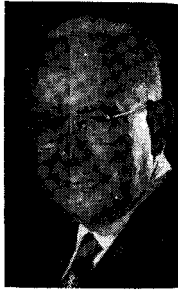
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President's Page

"IS THAT all I get for my four dollars?" The reaction of a prospective member of SDOU was related at the Huron meeting.

Such a question is its own answer, even if evoked by a not too good picture of SDOU. And, while SDOU needs the four dollars, many times over, our greatest need is for members with a different slant. Perhaps some of those counting the cost in dollars might be persuaded of the pleasures of adding to the sum of human knowledge by work in our particular fields of interest.

There is a common tendency to assume that, somewhere, someone knows the answer to any question that occurs to us. Often enough to help our own ego, if we realized it, our question is one that nobody knows an answer for. Actually, the little bits of information we have about natural history subjects and birds in particular, are but flyspecks on a wall of otherwise blank ignorance: We magnify their size without ever seeing the vast distances between. Put another way, the second question, "why," to any answer will put you on the frontier of knowledge. The third one will almost certainly move into the unknown. Of course, the informed will get impatient with questions that make them worry about their answers. But, if you are so recalcitrant as not to be stopped by a spate of details, you are a promising candidate to do a little independent research yourself. And tell the story and results for "Bird



Notes." Thus, an additional item a four dollar membership in SDOU will get you is work. On your own.

Our new editor, Winona Sparks, has suggested in her "Notes from Sparks' Mini-Ranch" in the September, 1969 issue, a question and answer column. Here is a chance for those who have wondered in silence or have been silenced but not convinced by answers that didn't. Such a column can become a highlight of Bird Notes if only a few will take the trouble to drop either of the editors a note of their questions.

Questions that come within that delightful zone—all too broad when the subject is birds and their ways—where there are opinions but no generally accepted certainty, could involve many of us in finding a bit more solid ground. And straight answers to simple questions must be in demand as well. I hope many of you will take the trouble to ask them. This too could help the new member get his \$4.00 worth.

Among the multitudinous proposals outlined for us by Paul Springer at the Huron meeting November 15, the key item is working members—in greater numbers. With the help of enough of them all the other dreams become reality. With few, our projects must remain at a relatively low level.

At the opposite extreme from the cynical dues payer was a new member who sought us out at the Huron meeting, having travelled a long way to do so, to see what we were like—and then ventured the expenditure for registration, membership, and a banquet ticket with little apparent reluctance. We hope his experience will turn out to be as happy for him as it was for us in meeting him.—Huron

J. W. Johnson, South Dakota Bird Notes

Editor, 1959-1969

A Tribute by D. G. Adolphson and Winona Sparks

J. W. (JIM) JOHNSON is best described as a "Man for All Seasons" because his interest in birds and bird study is only one facet of his interest in all forms of wildlife, natural history, astronomy and engineering. His work with birds has earned him the right to be called one of the "Deans of Bird Watchers" of South Dakota.

Jim was born in Orange County, Indiana, July 14, 1901, and was raised on the family farm. There he learned to appreciate nature and there he acquired his interest in engineering and astronomy. Before entering Purdue University he did shop work and while earning his degree in Civil Engineering worked for the Illinois Central Railroad.

In 1927 he received his degree and started working as a civil engineer for the Chicago and Northwestern Railroad. He was stationed at Chadron, Neb. and in Wisconsin until his transfer, in 1947, to Huron.

He married Lucille McCool, of Greenville, Mississippi, and their three children, Lucie, Benjamin and Nancy grew to adulthood in Huron, in the last of the homes that the Johnsons built with their own hands.

By 1940 Lucille had convinced him that her special interest in birds and bird watching was a fascinating pastime and since then his interest in birding has continued to grow. He was a charter member of the Huron Bird Club, organized in 1949 and now known as the James Valley Nature Club. He served as its vice-president and was a leader in the organization of the Audubon

Screen Tours now in their 20th year of presenting programs in Huron.

Since 1953 he has written a bird column for the Daily Plainsman, formerly the Huronite.

His wife, sharing his deep interest in nature, is his constant field companion. Her special interest is in warblers, all types of bird songs and both wildflowers and those grown in their own backyard garden.

Those of you regularly reading "Bird Notes" know the kind of people the Johnsons are, even without meeting them, from Jim's story of Goldie, the baby goldfinch they raised (Dec., 1968, v. 20, No. 4), and Oliver Twist, the blue jay, whose story was published in his newspaper column.

A new chapter in bird watching opened for Jim in 1960 when he received his banding permit after instruction and coaching by George Jonkel. During the next five years he banded over 18,000 robins, probably more than any other bander, with Blanch Battin and George and Jean Jonkel assisting him, at a communal roost on the James River.

Just to know Jim and Lucille Johnson is a privilege and to be invited to spend some time with them in their backyard is an experience. Although they live near the center of Huron their backyard is arranged with a large variety of trees, flowers and shrubs that block out the city around them. The large picture window in their living room overlooks a backyard filled with flowers and birds. In the center of the yard they have a four by two foot con-

(Continued on Page 96)

The Ecology of the Great Horned Owl and the Red-tailed Hawk

by Herb Tyler and Phil Saetveit

INTRODUCTION

THIS is a study of the Red-tailed Hawk, (*Buteo jamaicensis borealis*) and the Great Horned Owl, (*Bubo virginianus* spp.).

Since the success of wildlife conservation depends upon the understanding of ecology and population dynamics of any species, we have observed these birds of prey and obtained as much information as we could concerning their way of life.

In the last 100 years, numbers of hawks and owls have decreased greatly in the United States, (Braun, 1966). This decline has been caused by many factors, such as pesticide poisoning, decrease in habitat, and indiscriminate hunting. Not long ago the wholesale slaughter of raptors was taking place because it was believed they were economically harmful to poultry farmers. Actually both owls and hawks are beneficial to man since they eat rodents such as rats and mice, and only rarely take domestic animals, (Brown and Amadon, 1968). Thus, the economic importance of these birds can be determined more accurately by the study of their food habits.

We observed four Red-tailed Hawk nests and three Great Horned Owl nests between Feb. 14 and May 25, 1969. The nests were located in the Sioux River Valley of Lincoln County,

South Dakota and Lyon County, Iowa. Individual nests were numbered from north to south along the river.

The weather during February and March was cloudy and very cold. About three feet of snow remained on the ground for these two months. During the first part of April, the Sioux River flooded as a result of the sudden warm weather melting an abnormally heavy snowfall. The temperature remained mild during April and May.

The area of study contained the following plant life: American elm, cottonwood, basswood, boxelder, bur oak, silver maple, peach-leaf willow, ash, ironwood, gooseberry, coralberry, prickly ash, chokecherry, wild rose, poison ivy, raspberry, sumac, dutchman's breeches, *Hydrophyllum*, catnip, stinging nettle, Solomon's seal, dandelion, violet, wild strawberry, sage, bedstraw, bluegrass and blue-eyed grass.

The following mammal life was also observed: white-tailed deer, cotton-tail rabbit, deer mouse, short-tailed Shrew, opossum, raccoon, fox squirrel, muskrat, red fox, badger, striped skunk, spotted skunk, mink, weasel, 13-lined ground squirrel, plains garter snake, waterfowl, numerous passerines and gallinaceous birds.

To study the nesting habits of these birds, it was necessary to hike to the nest location. When snow was present

(Herb Tyler and Phil Saetveit are 1969 graduates of Augustana College. Herb is now teaching school in Sheboygan, Wis. Phil is in the Marines and currently in Vietnam. This study was done as a research project for an ecology course under the direction of Dr. Dilwyn Rogers, Biology Department, Augustana College, Sioux Falls, South Dakota.)

we wore waders and skied. During the flood period we utilized a two-man rubber life raft. Our equipment included two 33 mm single lens reflex cameras, a 15x60x zoom spotting scope, a tripod, two pairs of binoculars, pencil and a recording notebook. As the adult birds became more aggressive we wore motorcycle helmets for protection while climbing the trees. We usually climbed to the nest on each visit to check its contents. We took pictures through a 50 mm. and 135 mm. lens, and through the spotting scope by use of a special adaptor. Visits to the nests were made as often as possible, week ends and occasionally on week days. When observing the birds we watched from a distance through the spotting scope so we would not disturb their normal activities.

THE GREAT HORNED OWL (*Bubo virginianus* spp.)

In order to study the Great Horned Owl, it was first necessary to locate the nests. This was done by listening for the song, or hooting of owls during the evening hours. The song is usually a mellow "who, who-who, who, who." We first heard the owl of nest No. 1 on February 14th and spotted the nest the following day. On February 15 we found another nest, No. 3, while walking along the frozen Sioux River. Nest No. 2 was not found until May 3. This nest was found after hearing the song of the owls and searching the area with field glasses.

The three nests appeared to be old Red-tailed Hawk nests. Great Horned Owls never build their own nests but use the nests of other birds or squirrels, (Bent, 1937). They will, however, alter the nest. Their favorite nest, according to Bent, is the nest of the Red-tailed Hawk.

The three nests were an average of one mile apart. In order to determine the distance between nests we plotted their locations on a topographical map

and measured the distance between nests. This distance probably determines the hunting territory of each pair of owls. Due to the highly aggressive nature of the birds and their distance from one another their hunting territories probably overlap little if any.

When the young owls hatched the weather was still very cool with freezing temperatures common. The female owl brooded the young owls constantly. To make this possible, the male hunted and supplied the female with food. The young owls were covered with natal down and dependent upon the adults for both food and warmth. An egg tooth could be seen when the owls first hatched. The young owls remained somewhat altricial up to 10 weeks of age. They still depended upon the adults for food but were then able to maintain a constant body temperature. The eyes of the young did not open until they were between one and two weeks of age.

At three weeks the owls were completely aware of our presence at the nest and began showing some signs of aggression, such as hissing at us and clicking their beaks. The primary feathers on their wings began to appear from the sheath at this time also. As the owls became older they replaced the white natal down with brown juvenile feathers. Their increase in size was paralleled quite closely with their increase in aggressiveness.

At four weeks of age their primaries were completely out of the sheaths. At this age the birds were banded. It was also at this age that the owls were first observed to spread their wings in a defensive position.

At five weeks of age one owl from nest No. 1 left the nest earlier than owls normally do, (Craighead and Craighead, 1956). Upon our return three days later, only scattered feathers of the young owl could be seen so it

had apparently been eaten by a predator. The band was not found.

Between the ages of six and seven weeks all of the remaining owls left the nest but were unable to fly. Between nine and 10 weeks of age four of the five remaining owls were able to sustain flight for very short distances. The one owl that could not yet fly was much smaller than the other four and seemed to be underdeveloped. This pattern of development follows quite closely that reported by Austing, (1966). The owls, by May 24, had reached nearly adult size but their plumage was still somewhat underdeveloped.

Up to about four weeks of age the young owls dropped pellets and defecated in the nests. From that point on they usually made an effort to drop all wastes over the edge of the nests thus maintaining some nest sanitation.

The aggressive nature of the adult owls progressed steadily from the time

the eggs were laid until the young owls left the nest. The eggs were slightly larger than a hens egg, more rounded, and light brown in color. In the middle of February, when we first approached the nest, the owls would fly when we were within about 200 yards. After the young were hatched we were able to approach to within about 100 yards before the female flew from the nest. The older the young owls became the more aggressive the adults became.

April 3 was the first time we saw both the male and female owls. After we had flushed the female from the nest both returned to within about 50 yards and hooted.

The owls showed several types of aggressiveness. First of all they hooted, secondly, as they hooted they would bob their heads toward us in an apparent effort to intimidate us. They would do this from trees as close as 30 feet



At one week (note mouse)



At four weeks (note coot and grebe)

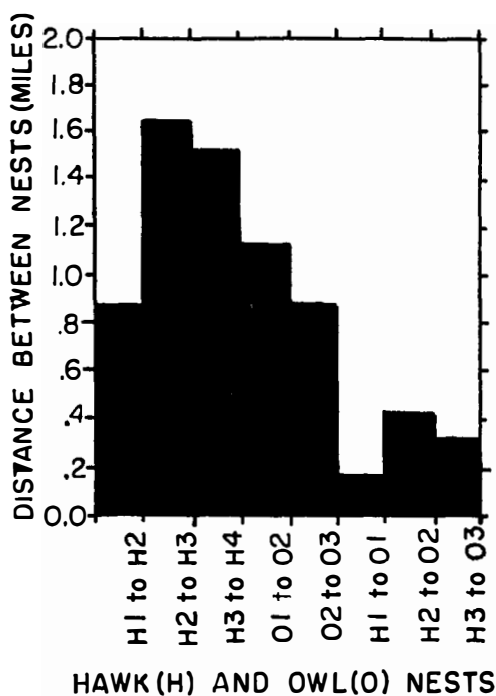


At five weeks assuming defensive position (note crow)



At five and one-half assuming defensive position

Great Horned Owls from Nests No. One and Two



Graph 1. Interspecific and Intraspecific Territorial Tolerance

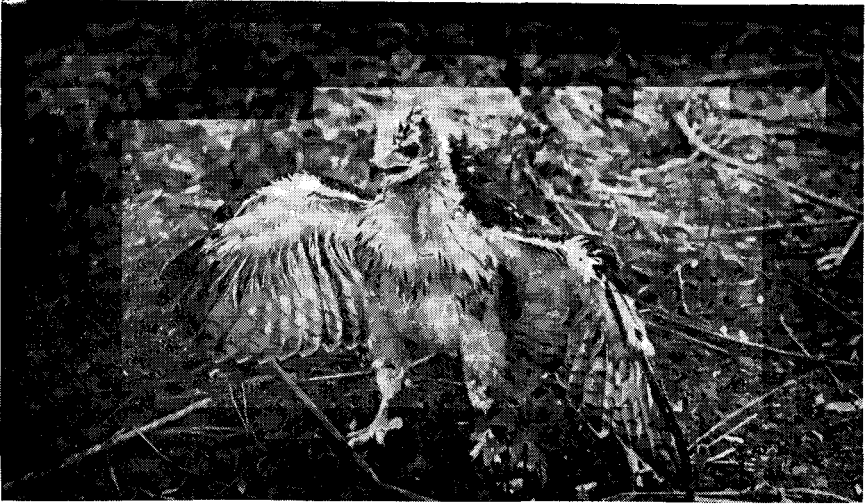
away. Thirdly, the owls hissed at us. The fourth type of aggressiveness was the clicking of their beaks. This resulted in a loud resonant sound.

These aggressive acts reached a climax on April 23 when both the male and the female owl attacked us while we were putting an owl back in the nest after banding it. From the nine attacks that were made, contact was made only once. The female owl struck Phil Sæetveit in the neck but did no serious harm. It is hoped that by banding these birds some conclusions concerning movements and mortality will eventually be learned. This type of study lends itself well to future investigation.

Chart three shows the types of food remains found in the nest of the Great

Horned Owls. While we did study many pellets in an attempt to determine the owl's food habits, we had difficulty in identifying the contents. For this reason pellet analyses contributed very little to our understanding of the owl's food habits. The statistics in the chart compare closely to studies made by John and Frank Craighead in southern Michigan from 1948-1956.

We found that in all cases, except for the shrews and mice, the head of the animal was eaten first. The remainder of the body was left in the nest and eaten within a couple of days. The mice and shrews were swallowed whole. This would indicate that owls prefer the heads and breast meat over other parts of their prey. It is possible, that these parts were the easiest to feed the young, thus were used first.



Red-tailed Hawk at six and one-half weeks, assuming defensive position, from nest No. 1

THE RED-TAILED HAWK (*Buteo Jamaicensis borealis*)

To begin our study of the Red-tailed Hawk we first had to locate the nests. Two, No. 1 and No. 2 were found in Feb. 14. Nest No. 3 was found April 7 and nest No. 4 on May 10. The first two nests were found while hiking down the river and checking any sightings of large nests. The lack of snow and ice, presence of fresh nesting material or the presence of uneaten food indicated the possibility of an inhabited nest. Areas in which hawks were sighted were searched thoroughly for a nest. Nest No. 3 was found while floating down the river in a rubber life raft during the flood in April. The fourth nest was found while hiking along the outskirts of a wooded area along the river.

Each nest was constructed with sticks about one-fourth to one inch in diameter. The cup of the nest was lined with corn husks, fur, feathers, grass but predominantly strips of inner tree bark.

The average distance between nests was 1.3 miles. The territory of each

pair of hawks was about one square mile, including river bottom, forest and hilly fields.

Mating behavior in these birds began in February. The courtship flight began when both birds ascended to an elevation of 1,000 feet or more. The male continued to gain altitude while the female soared at that level. Then the male folded his wings and swooped directly at the female. Just before the moment of impact, the male checked his speed and threw his talons out in front of him. The female rolled over and met his talons with hers. They copulated in a free fall, parting seconds before hitting the ground.

The hawks laid their eggs before April. The eggs were brown with white specks, slightly larger than a hen's egg.

In nest No. 1 two hawklets hatched but one hatched four days later than the other. By this time the older hawklet was much larger than the younger. When we returned to the nest a week later only the older hawk was present. The younger hawklet probably starved or was killed by his nest mate though

no evidence substantiates either of these hypotheses. Only one hawk in nest No. 2 survived. We found no trace of the other hawklet. We do not know how many eggs were laid in nest No. 4 because we did not discover the nest until May. One hawklet was present at this time.

When first hatched the hawklets were completely dependent upon the adult birds. An egg tooth was present at hatching time but disappeared very quickly. The young hawks used their egg tooth to chip their way out of the shell. When the young hawks were two and one-half weeks old, they first show-



Red-tailed Hawk one-day old from nest No. 2

ed signs of fear at our presence. At the age of three and a half weeks the primary feathers were emerging from their sheaths. At this same age the young hawks started snapping at us when we approached. At nearly four weeks of age we banded the birds. These bands may yield further information on the movements of these birds.

The nests were relatively clean each time we inspected them. There was very little fecal material found, and only minute remains of prey were detected in the nests.

The aggressive behavior of the adult hawks reached a climax shortly after the eggs hatched. At this time when we approached the nests, both adults

scolded us and swooped to within 10 feet of our heads. The hawks would soar over us in small circles, screaming periodically. They never actually attacked but merely made threatening dives.

Food of the Red-tailed Hawk was obtained by hunting in the day time. We observed three different methods of hunting. One method was to soar slowly over the woods and fields looking for prey to swoop upon. Another method was to sit silently and motionless in a tree and wait for prey to come within striking distance. The third method of hunting was to soar in pairs, cooperating with each other in capturing the prey.

We did not find as much uneaten food in the nests of the Red-tailed Hawks as we did in the nests of the Great Horned Owls. The remains in the hawk nests were usually hair, feet, tails and partially eaten bodies. Although hawks do regurgitate pellets, (Bent, 1937), we found none. Chart six shows the food items found in the hawk nests.

CONCLUSIONS

This has been a study of the Great Horned Owl and the Red-tailed Hawk. From the results of the study we have concluded that both of these birds are economically beneficial to agriculture through the control of rodent populations. There was a total lack of domestic animals in their diet.

We also found that these birds seem to complement each other in their hunting territories. There was a great overlap in territory between the two species but practically no overlap within each species. This is illustrated in the following graph. The distances between the two species is much shorter compared to the distances between nests of the same species. This is probably due to the fact that hawks hunt by day and

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SOUTH DAKOTA BIRD NOTES

Charts one through three relate to the owl nests. Charts four through six relate to the hawk nests.

—OWL CHART ONE—

Nest Number	Number of Eggs Laid	Dates of Hatching	Number of Eggs Hatched	Number of Owls at 10 Weeks
No. 1	2	March 26	2	1
No. 2	2	March 26-31	2	2
No. 3	2	March 29-31	2	2

—OWL CHART TWO—

Nest Number	Species of Tree	Height Above Ground	Diameter of Nest	Depth of Nest
No. 1	Ash	43 Feet	30 Inches	2 Inches
No. 2	American Elm	51 Feet	29 Inches	2 Inches
No. 3	Slippery Elm	46 Feet	28 Inches	3 Inches

—HAWK CHART FOUR—

Nest Number	Number of Eggs Laid	Dates of Hatching	Number of Eggs Hatched	Number of Hawks Survived
No. 1	2	April 29-May 3	2	1
No. 2	2	April 28	1	1
No. 3	2	April 30	2	2
No. 4	Unknown	Unknown	Unknown	1

—HAWK CHART FIVE—

Nest Number	Species of Tree	Height Above Ground	Diameter of Nest	Depth of Nest
No. 1	Peach Leaf Willow	52 Feet	31 Inches	4 Inches
No. 2	Slippery Elm	68 Feet	32 Inches	5 Inches
No. 3	Box Elder	37 Feet	25 Inches	6 Inches
No. 4	Dead Elm	59 Feet	35 Inches	4 Inches

—OWL CHART THREE—

Nest Number	Number of Ascents	Species of Food Seen in Nest	Number of Each Species
No. 1	23	Deer Mouse	27
		American Coot	5
		Gadwall	1
		Meadowlark	4
		Rat	3
		Grackle	2
		Cottontail	2
		Pheasant	1
		Crow	7
		Shrew	2
No. 2	2	Mourning Dove	1
		Deer Mouse	2
		Rat	1
		American Coot	1
No. 3	14	Deer Mouse	10
		Pied-billed Grebe	1
		Rock Dove	1
		Rat	2
		Crow	3
		American Coot	3
Totals 39			79

—HAWK CHART SIX—

Nest Number	Number of Ascents	Species of Food Found in Nest	Number of Each Species
No. 1	14	Fox Squirrel	2
		Cottontail Rabbit	1
		Deer Mouse	8
		Shrew	2
		Rat	1
		Striped Gopher	3
No. 2	5	Deer Mouse	2
		Striped Gopher	1
		Plains Garter Snake	1
No. 3	9	Rat	1
		Deer Mouse	5
		Plains Garter Snake	1
		Leopard Frog	1
No. 4	2	Fox Squirrel	2
		Striped Gopher	1
		Deer Mouse	2
		Fox Squirrel	1
Totals 30			35

Fall Migration of Sandhill Cranes

Ester Serr

THE 1969 fall migration in western South Dakota has been the best since 1965. First cranes reported in the area came from Mable Ross of Dupree. At 7:30 p.m. on August 28, she saw 45 to 50 cranes flying over Highway 212 in Ziebach County moving to the south-east. Cranes were not reported in the extreme western part until October 5 when Keith Evans and Roger Kerbs observed two flocks of 100 and 350 birds in a cut hay field between 6:30 and 7:00 a.m. about seven miles south of the Slim Buttes, Harding County. Some of the birds were in the air. Since this was about sunrise, the cranes probably rested there during the night. First observations over Rapid City occurred at 8:30 a.m. on October 5. Elizabeth Southmayn watched them migrating that day with the heaviest concentration occurring between 10:30 a.m. and 2:00 p.m.; a total of 1,950 individuals being counted. On October 8, B. J. Rose observed 200 cranes along the South Moreau River near Castle Rock, Butte County, however, no cranes were seen in the Rapid City area. Strong winds prevailed in the area until October 15 when they were again observed in the area. The following list is of cranes sighted from October 15 to November 1.

October 15—120 over Rapid Valley, one mile east of Rapid City (Betty and Keith Evans).

October 16—150 circling a field near Wasta, Pennington County (D. G. Adolphson).

October 16—25 circling a field near Elm Springs, Meade County (Adolphson).

October 17—300 in two flocks over Rapid City (Elizabeth Southmayd).

October 17—24 over Wasta (Adolphson).

October 18—200 over Rapid Valley (Evans).

October 19—Eight over Rapid City (Southmayd).

October 19—60 over Rapid Valley (Evans).

October 20—75 over Rapid Valley (Evans).

October 22—100 over Rapid Valley (Evans).

October 26—200 over Rapid City (Clara and Len Yargar).

October 26—300 over Rapid City (Adolphson).

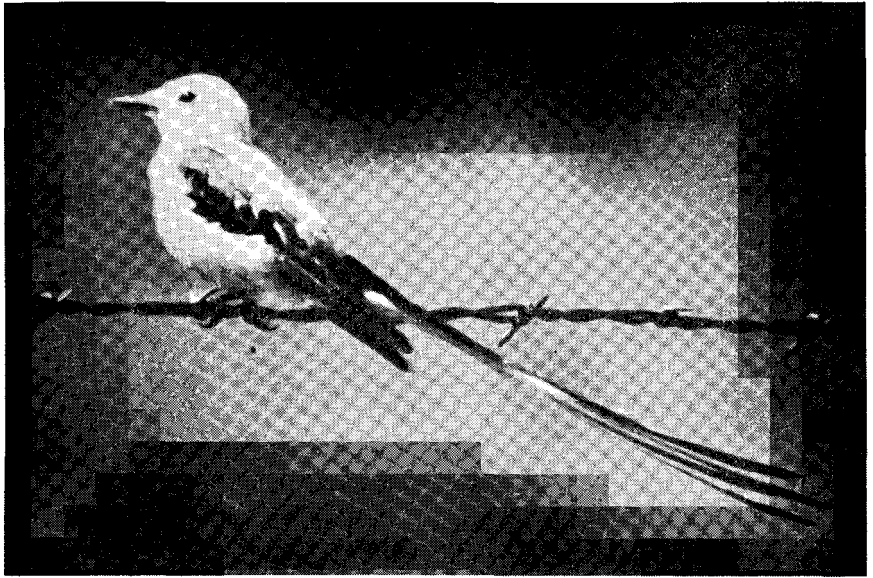
October 26—350 over Rapid City (Adolphson).

October 27—12 circling a field near Enning, Meade County (Adolphson).

October 30—275 over Rapid City (Southmayd).

November 1—300 over Rapid City (Elliott Southmayd).

A total of 5,149 cranes was observed during this period in flocks ranging from eight to 350. Counts in the Platte Valley in central Nebraska during migration, indicate that an estimated 150,000 pass across South Dakota. All who thrill to the sights and sounds of the wild, enjoy Sandhill cranes since they are one of the great natural attractions seen during the fall migration in western South Dakota.—Rapid City



Scissor-tailed Flycatcher

—From Color Transparency by B. J. Rose

Stranger Seen at Fairburn

B. J. Rose

ON Sunday morning, July 27, 1969, I received a call from Barney Nordstrom, of the Fairburn area in Custer County, reporting the presence of a Scissor-tailed Flycatcher on his ranch. My wife, Lois, and sons Alan and Douglas and I hurriedly traveled to the Nordstrom Ranch, three miles east of Fairburn. Mr. Nordstrom met us and pointed out the bird perched on the barbed wire fence adjacent to the road.

We observed the bird, "hawking" insects from the fence line area, and catching others from the ground.

I did manage to obtain several color slides of the bird.

After returning to Rapid City, several of the Black Hills Audubon Society members were contacted and informed

of the appearance of this unusual species in South Dakota. Paul and Cynthia Culley made the trek to the area that afternoon and also observed the bird. Less fortunate were SDOU President Les Baylor and Jim Johnson who traveled to the Nordstrom area the following day. They were unable to find the flycatcher after a thorough search.

This is the third record of Scissor-tailed Flycatchers in South Dakota. Dr. Stephen S. Visher reported sighting the first Scissor-tail in Sanborn County in August, 1915 (BN June, 1956).

Wendell Bever, then Chief of the Game Division of the South Dakota Department of Game, Fish and Parks, observed a Scissor-tailed Flycatcher, one-half mile west of Vivian, Lyman County, on June 18, 1962, (BN Sept., 1962.—Rapid City

SDOU 1969 Winter Meeting

Blanche Battin

HIGHLIGHTS of the SDOU winter meeting at Huron: a 20th birthday celebration, a list of speakers worthy of a name dropper's show, a new president, two new members, and two friendly hosts.

Those of you who failed to attend the meeting missed one of the best. If you stayed away because you have never attended an SDOU meeting and felt you would be lost in the crowd you made a mistake. We are a friendly group and welcome members and prospective members alike. Have you never noted that the nicest people in South Dakota are those interested in wildlife?

J. W. Johnson, having just moved out of his job as editor of "Bird Notes" found himself elected president and will be working with Dr. Byron Harrell, Vermillion, vice-president; June Harter, Highmore, secretary, and Nelda Holden, Brookings, treasurer. New directors elected were: Herbert Krause, Sioux Falls (welcome back to South Dakota, Herb) and B. J. Rose, Rapid City. June Russell, Pierre, will be the new membership chairman.

The Spring Field Trip will be in the northwestern part of the state with headquarters at the REA building in Bison. Mr. Alferd Hinds of Perkins County will be the local host. Dates: June 5, 6 and 7. The North Dakota Natural Science Society is invited to join us at the Spring Meeting. Watch for details regarding the meeting in the spring issue of "Bird Notes." Plan now to be there.

Paul Springer, Don Adolphson and George Jonkel were appointed as a constitutional revision committee to report at the next meeting on the possibility of making the immediate past

president an exofficio and voting member of the Board of Directors.

It was recommended that the topics covered in the winter meeting program be printed in the "Bird Notes" so watch for these at a later date: "Ecological Observations in the Big Horn Mountains, North Central Wyoming"—Nat Whitney, Rapid City; "Birds of the Bible"—Mrs. Charles Crutchett, Armour; "Breeding Bird Survey, 1969 Progress Report"—Nat Whitney, Rapid City; "A Barn Owl's Food Habits"—Don Adolphson, Rapid City; "Red Crossbill Observations in Northeastern South Dakota—Herman Chilson, Webster; "Birds of Custer State Park and a Call for Assistance"—Les Baylor, Rapid City; "Highlight of Harding County Birds: June, 1969"—Will Rosine and Les Baylor; "Birds of Sieche Hollow"—Paul Springer, Jamestown, N. Dak.; "Nesting Observations in West River Prairies"—Nat Whitney, Rapid City; "Pesticide Research"—Ray Linder, Brookings;

"How I Became a Member of S.D.O.U."—Ruth Habeger, Madison, a Charter Member; "Next Steps for S.D.O.U."—Paul Springer, Jamestown, and a showing of slides, "Some South Dakota Birds"—J. W. Johnson, Huron.



Chestnut-collared Longspur

Christmas Count, 1968

	Aberdeen	Belle Fourche	Big Stone City	Brookings	Highmore	Huron	Milbank	Rapid City	Sand Lake	Sioux Falls	Waubay	Webster	Wilmot	Yankton
Mallard	30							480	250	1				10700
Black Duck									1					
Gadwall								103						
Green-winged Teal								7						
European Widgeon								1						
American Widgeon								3						
Common Goldeneye								166	2					4
Bufflehead								2						
Hooded Merganser								2						108
Common Merganser								15						
Red-breasted Merganser	1													
Sharp-shinned Hawk	1							2						
Red-tailed Hawk								2		1				
Harlan's Hawk								1						
Rough-legged Hawk								8						
Golden Eagle								1	1					
Bald Eagle														5
Marsh Hawk								1	1		1			
Prairie Falcon									1					
Pigeon Hawk								1						
Sparrow Hawk		1						1						
Greater Prairie Chicken					7									
Sharp-tailed Grouse								31						
Ring-necked Pheasant	558	5	309	76	210	11		5	90	43	9	8	59	13
Gray Partridge					3					1			89	
American Coot	1							3						
Killdeer								2						
Common Snipe								4						
Mourning Dove										2				
Great Horned Owl				14	3	4		3	4	5			2	
Snowy Owl	1								3					
Long-eared Owl										2				
Short-eared Owl				4		1								
Belted Kingfisher								6		2				
Flicker, Y-s.	10	1	13	5	6				1	7			1	

Long-eared Owl					4		1											
Short-eared Owl																		
Belted Kingfisher																		
Flicker, Y-s.	10	1			13	5	6											1
Flicker, R-s.		2			1	1	5											
Red-bellied Woodpecker																		
Hairy Woodpecker	2	1		9	8		2	8	21		3	15	4		2		6	
Downy Woodpecker	7	3		10	35		2	4	9	25		6	43	6	5		5	2
Horned Lark	487	10			381	51	770	3	246						75	133	291	
Blue Jay	3	1		6	35		3	9	42		4	12	8	2	2		3	
Black-billed Magpie									62									
Common Crow	34				76		26	1	14		1	41						5
Pinon Jay									525									
Black-capped Chickadee	10	9		49	179	7	9	15	156		62	120			7	4		2
White-breasted Nuthatch	3			7	10	2	3	3	5		1	22	6	2	10			
Red-breasted Nuthatch	4	1		1					24			2						
Brown Creeper	1	1		1	4	1		1	1			12						
Dipper												1						
Brown Thrasher		1																
Robin	25	3			7		1		19		6							1
Townsend's Solitaire									8									
Golden-crowned Kinglet					1				1									
Bohemian Waxwing		30							970			9						
Cedar Waxwing	11				1		3		1									
Northern Shrike	1				5				3		1							
Loggerhead Shrike									1									
Starling	32			6	38	21	32	10	827		30	103		2	2	44		84
House Sparrow	1055	23	125	1358	275	561	112	545		75	491		2	8	88		115	
Red-winged Blackbird				42												4		
Rusty Blackbird				1							1							
Common Grackle				3				1			6							1
Brown-headed Cowbird				2														
Cardinal	2		5	3			1					17						4
Evening Grosbeak	1		1				1	196										
Purple Finch	25		9	37			9	16										
Cassin's Finch								13										
Gray-crowned Rosy Finch								160										
Hoary Redpoll	1																	
Common Redpoll	76			87			76	111	150								95	
Pine Siskin	1			16				40										
American Goldfinch				44			62	103	5	25								
Red Crossbill								50										
Rufous-sided Towhee								1										
White-winged Junco								570										
Slate colored Junco	10	11	13	102			3	9	312		1	48		4				12
Oregon Junco				2				80				9						
Tree Sparrow				116		12	365	1	156		3	4						
Harris' Sparrow		18		1			3		4			3						
Song Sparrow									3			2						
Lapland Longspur	50						403		130				110	10	13		284	
Snow Bunting	17							100	2	25					9		321	

South Dakota Ornithologists' Union

Check-List Committee Meeting

November 15 and 16, 1969

N. R. Whitney

THE main meeting of the committee was held from 9 a.m. to noon on Sunday, November 16, 1969, at the home of Mr. and Mrs. J. W. Johnson, in Huron. Those present besides J. W. Johnson, were Paul Springer, Bruce Harris and N. R. Whitney. L. M. Baylor and Will Rosine were present for part of the meeting. Committee members Don Adolphson and Nelda Holden had reported their progress to the chairman the previous day and Mrs. Holden had circulated species accounts of birds from the House Sparrow through the Rose-breasted Grosbeak to committee members. B. J. Rose and June Harter were unable to attend the meeting.

Harris distributed some notes on recent observations. Springer reported a record of Say's Phoebe in Southeastern North Dakota, just north of Marshall County in South Dakota.

Note-keeping was discussed informally, and President Johnson suggested that Whitney publish his own method of keeping notes in the journal, "South Dakota Bird Notes." It was felt that Whitney's system of using a loose-leaf notebook with a page for each species was preferable to the method of listing each species seen under the day's heading.

Whitney distributed copies of his prefatory remarks to Harris and Springer. These pages had already been reviewed by Herman Chilson and Herbert Krause, both of whom made valuable corrections.

Progress to date: Johnson is begin-

ning to rewrite his species accounts and has distributed the flycatchers to Whitney for further review. Whitney received this week end the second drafts of his species as retyped by June Harter. Harris is rewriting his accounts. Nelda Holden distributed some accounts as mentioned above.

Paul Springer suggested that any ecological notes in the preface should emphasize the changes brought about by impoundment of the Missouri River, both in extending water bird habitat and in reducing the extent of bottomland forest available to migratory land birds. Furthermore, West River stockponds permit redistribution of many species.

Introduced and exterminated species should also be included—especially Pileated Woodpecker, Passenger Pigeon, and Carolina Parakeet.

How much South Dakota history and the history of ornithology should be included was discussed. This will have to be reviewed with the scholars—especially Krause—who knows this field.

FINANCING—Whitney to write to Chan Robbins and to Dr. O. S. Pettin-gill, to see if they have any suggestions. Bruce Harris suggested talking to the Game, Fish and Parks Commission, but advised that a reasonably firm cost estimate be available first. Later Springer talked with Robert Hodgins,

(Continued on Page 95)

SOUTH DAKOTA BIRD NOTES

General Notes of Special Interest

RED CROSSBILLS AT HURON—July 24, 1969 on the way to work, I saw an odd colored sparrow fly up into a tree near the library (located in a downtown Huron park). It had a creamy rump.

Later in the day, I saw two similarly colored birds fly up as I went by and this time took a second look at the flock of birds feeding on the library lawn. There was more yellowish coloring on their breasts and their wing and tails were darkish in color. Their mandibles were crossed. Red Crossbills.

At first there were no males but later two showed up. Their coloring was not a solid red, but splashes of red on the head and back.

At one time there were 13 Red Crossbills on the ground. They seemed unafraid of the people who stopped to watch them and of the young girl who quietly tried to catch one. They continued to feed while keeping just beyond her outstretched hand.

They fed on the library lawn for two days then I left town so I could not check on them.—**Blanche Battin**

* * * *

FIRST KNOWN HOODED WARBLER RECORD FOR SOUTH DAKOTA—The first record for this species in South Dakota was reported by Bertin Anderson on May 15, 1968. On that date he collected a male 1½ miles southwest of Yankton. The specimen is deposited at the University of Minnesota. Mr. Anderson, a graduate student at the University of South Dakota, is now located in Oklahoma, where he is a biology instructor at Northwestern State College.

A.O.U. Check List of North American Birds, 1957, states that the hooded warbler breeds from extreme southeast-

ern Nebraska (rarely) south to the Gulf Coast, central Iowa and northeast to Rhode Island.—**Bruce Harris, Woonsocket**

* * * *

FIRST CASSIN'S KINGBIRD RECORD FOR SOUTH DAKOTA—While participating in the Black Hills Audubon Society's Annual Big Count Day on June 8, 1969, the first Cassin's Kingbird for the State was found.

The observation was made about five miles northeast of Rapid City (about one mile north of the Meade-Pennington County line in Meade County).

My wife, Lois, son Alan, and I were returning towards Rapid City when Lois spotted what was first thought to be a Western Kingbird, perched on a barbed wire fence. Since it was the first Kingbird seen that day we stopped to look it over. Immediately upon observing it through binoculars, the dark gray breast contrasting sharply with the white throat was apparent. When the bird flew from its resting site, the tail showed the narrow light terminal tail band and an absence of white outer tail feathers. After taking wing, it flew southeast to alight on another fence about 300 yards east of the road. A long-range telephoto shot was attempted, but due to the extreme range and poor light, the results were not acceptable for identification. We returned to the area, later in the day but could not find it again.

I am certain this was a Cassin's Kingbird since I have observed and photographed this species in Texas and New Mexico.

Cassin's Kingbirds can be expected in Western South Dakota since the AOU Checklist of North American

Birds—Fifth Edition lists this species as breeding in Colorado, eastern Wyoming and southeastern Montana (Powder River County). It behooves all of us to more carefully inspect Western Kingbirds along our western border. Perhaps more records can be made and with diligent search even a nesting pair can be found.—**B. J. Rose, Rapid City**

* * * *

ANOTHER BLACK-LEGGED KITTIWAKE IN SOUTH DAKOTA—When returning from the 1969 SDOU Annual winter meeting in Sioux Falls, on November 24, 1968, Keith Evans of Rapid City and I traveled across the southern portion of the state.

At Fort Randall dam on the Missouri River near Pickstown we searched the flocks of Ring-billed Gulls below the dam in hopes of finding a rarity.

After looking over flocks of Common Mergansers, gulls and several individual Bald Eagles we decided to continue our journey home. We were traveling southwest across the dam when we observed a flock of Ring-billed Gulls at rest along the lake shore near the campground above the dam.

We searched the flock with binoculars and spotting scope and finally detected a Black-legged Kittiwake resting with the gulls. The black spot behind the eye and black bar across the nape of the neck were prominent. I did photograph the bird at long-range simply for the record, but the photos are not suitable for publication.

For the record, I would like to submit the data that on November 17, 1967 I observed and photographed two Black-legged Kittiwakes below Big Bend Dam. The photos in Bird Notes were of the two individuals, however, I was not able to photograph both birds at the same time. I returned on November 19 and 23, 1967, but was able to find only one on these latter dates.—**B. J. Rose, Rapid City**

CHESTNUT-SIDED WARBLER AT RAPID CITY—On June 9, 1969, I received a call from Esther Serr that Mrs. Goldie Burton had sighted a Chestnut-sided Warbler in her yard in Rapid City. Miss Serr requested someone verify the sighting. During the noon hour, I visited with Mrs. Burton and we searched her yard thoroughly without sighting the bird. As I was preparing to leave we heard the Yellow Warbler-like song coming from the mid-branches of a large cottonwood tree. The bird then flew into a green ash tree near Mrs. Burton's house. A beautiful adult Chestnut-sided Warbler hopped into view as it was searching the foliage for insects. There was no doubt of identification.

The Chestnut-sided Warbler is found frequently during migration in eastern South Dakota, but no records for the Black Hills area are found in "Birds of the Black Hills" by Pettingill and Whitney (1965).—**B. J. Rose, Rapid City**

* * * *

SAGE THRASHER IN PENNINGTON COUNTY—On April 21, 1968, a Sage Thrasher was observed about four miles northeast of Rapid City in Pennington County. By some strange coincidence, this sighting was made only one and one-half miles south of the above observation site for the Cassin's Kingbird.

The sighting was made along the road where it was observed perched on a barbed-wire fence. Several good color slides were taken of the bird. The day was cold and blustery with some rain falling.—**B. J. Rose, Rapid City**

* * * *

BLACK AND WHITE WARBLERS BANDING RECORDS — I recently caught two Black and White Warblers. In my 36 years of banding, I have only caught this species twice before: Minot, N. Dak. on May 15, 1952; Winner, S. Dak. on May 7, 1959; and finally at Cresbard, S. Dak. on Sept. 3, 1969.—**H. W. Wagar, Cresbard**

HUDSONIAN GODWITS IN BEADLE COUNTY—On April 25, 1969 there were 23 Hudsonian Godwits seen about 10 miles west southwest of Huron.—**Ralph F. Fries, Lake Andes National Wildlife Refuge, Lake Andes**

EDITOR'S NOTE: This comparatively scarce species is a regular spring migrant through eastern South Dakota. They usually are found in small flocks of less than 10 and often in the company of Marbles Godwits.

* * * *

LESSER GOLDFINCH OBSERVED IN THE HOT SPRINGS AREA—On the evening of July 8, 1969, a little dark-backed bird fluttered down and drank from our bird bath. In the poor light I hesitated to try to identify it positively, but it appeared again the next day, coming several times to drink or bathe. It had a coal-black back, bright yellow front, and white wing bars. When the bird perched with its wings folded the striking white wing bars formed a pattern down its back that resembled chevrons. When the bird twittered or sang it had the typical goldfinch voice. I identified it as the black-backed variety of the lesser goldfinch.

During the next six weeks the bird visited the bath often, sometimes several times a day. My husband and I frequently saw it around breakfast time in the morning, again between 12:00 noon and 2:00 o'clock, and again in the evening. At times it was accompanied by a female, and on other occasions the female came alone to bathe or drink.

The male was also seen at our bird bath by Mrs. Don Eibert of Hot Springs on August 14, and by Mrs. Elizabeth Mullin of Hot Springs on August 16.

I was never able to locate a nest in the immediate area or any signs that the pair had raised young birds near by. From the middle of August on, they appeared less often at the bird bath. Several times I concluded they

must have left the neighborhood, only to have the male reappear.

As this is written, (Sept. 12) he was last seen by me on Sept. 10.—**Mrs. C. J. Twomey, Hot Springs**

EDITOR'S NOTE: This is the first known observation of the lesser goldfinch in the Black Hills area. A flock of eight was seen, in northeastern South Dakota, by Herman Chilson (SDBN, Vol. XV, p. 66) at Pickerel Lake during January and February, 1963. The breeding range of this species is in the southern Rocky Mountains to Oregon and Utah. It winters to the southwest in southern California, Arizona, and into Mexico (A.O.U. Check-List of North American Birds, 1957).

* * * *

WINTER BIRD BATHS—The frequently recommended practice of adding glycerine to water may keep your bird bath unfrozen this winter—but not the birds that use it.

Cold water was thrown on the glycerine theory by Mrs. Walter R. Spofford, research associate at Cornell University's Laboratory of Ornithology, in reply to several queries received from bird lovers.

"Several bird lovers," she said, "have asked about adding glycerine to the water in bird baths in winter. My advice to them is don't. This practice results in the death of many small birds."

The glycerine in the water, she explained, is harmless if the birds drink it, but if they bathe, their natural insulation against the cold is destroyed.

"The feathers of birds are remarkably adapted for forming an insulating layer," Mrs. Spofford said. "The barbs of birds feathers interlock and in the winter the feathers are fluffed out, trapping warm air against the body. Anything added to the water—especially something oily like glycerine—makes it impossible for the feathers to function normally. As soon as the bird is

exposed to extreme cold or heavy snow or rain, he will freeze."

It's far better, Mrs. Spofford said, to add warm water several times a day or to use little electric water heaters commonly used to open water for chickens. —Cornell University News, Ithaca, New York

* * * *

NEW ROBIN CALL?—On the 28th of June, 1969, a peculiar bird call was heard, completely unlike any I had ever heard before. It appeared to come from high in the trees just across the street from my residence on 102 South Madison in Pierre, but I was unable to locate the supposedly new and unknown bird for whenever I moved out from the porch the call would cease.

The call could best be described as a clear, whistling cl-ee - cl-ee - cl-ee - cl-ee, varying in number from three to a high of 23 of the calls, repeated in succession but often with a slight break between every four or five of the cl-ee notes. When first heard, these calls came early in the morning and late in the evening. They were more rarely heard through the middle of the day. On July 4th and 5th they came more often during the day and finally the call was traced on July 5th to a female robin as she sat on her nest high in an American elm in the parking, her head and beak just showing above the rim of the nest.

A pair of robins had nested in an American elm in the yard in May, building an exceptionally large and rather messy nest. One young tumbled out before fully feathered and died, however the remaining three left the nest and apparently reached maturity as they were frequently observed.

A pair of robins began a nest in the afore-mentioned tree in the parking about June 20, presumed to be the same pair as the young were still near the female as she gathered nesting material. The nest was also very similar

to the first one observed, being exceptionally large and messy for robins.

I had originally neglected to pay any attention to the robin nest when endeavoring to identify the strange call for the call had not the slightest resemblance to any robin sound observed over the past 50 years. After identifying the sound as coming from the female, my observations then became concentrated and it appeared that she began this calling when she was ready to leave the nest, although once I observed the male bring food to her. Ordinarily after the male appeared there would be a quick change of positions and she did not again call while off the nest.

I had to leave town on July 6 and upon my return on July 9 I resumed observations. That evening the female was observed calling for the first time while off the nest. In this case she was perched upon the rim of the bird bath, calling cl-ee - cl-ee in a slightly plaintive whistling call, with little or no inflection. The young had hatched and I observed that the female did most of her calling from the nest, as before, and that when the male arrived with food she then left to also gather food. She did, however, now begin occasionally calling at almost any time of the day such as on July 12, with almost monotonous regularity throughout the afternoon, a 100-degree day.

The first young one left the nest on July 16 while the remaining three did not leave until the 18th. The calls of the female now came at less frequent intervals, a short time at sunrise and again in the evening and seemed to have a less piercing and quieter tone. On July 25 I heard what I presumed to be the last call, in the evening and from half a block away, however, on August 4 the bird was again in the yard briefly and called a few times.

In my past observations of song birds, and robins in particular, it has

seemed to be completely foreign to their nature to call from the nest or to otherwise attract attention in any way to the nest site. This particular robin, so far as I know, never uttered this call until well into the brooding stage but once having apparently learned the call was readily identifiable by it and as before mentioned, used it with almost monotonous regularity while the young were in the nest feeding stage.

Our tape recorder was under repair at the time and I realize now that a special attempt should have been made to obtain another one and to record the phenomenon. We got the recorder back after the young had left the nest and the female did not stay long enough in one spot to record. We will be listening next spring to see if the bird returns for there would be no mistaking her individual call. If anyone has ever had a similar experience with a female robin I would be most interested in hearing of it.—R. V. Summerside, Pierre

* * * *

BLUE GROSBEAK AT LOST CREEK, TRIPP COUNTY—A male blue grosbeak was seen singing on a highline wire at 9:00 a.m. on May 29, 1969 along Lost Creek. The creek is a tributary to the Keya Paha River and is located 25 miles southwest of Winner. A search of the area revealed no nest nor could another blue grosbeak be found in the vicinity. J. S. Findley (South Dakota Bird Notes, 1955, v. 7, page 56), states in a compilation study that blue grosbeaks "are not uncommon in southern South Dakota from the extreme east to the extreme west, and that they are found up to the center of the state along the Missouri River."—D. G. Adolphson, Rapid City

Check-list Committee Meet

(Continued from Page 90)

who thought that Harris or Rose should talk with the commission, rather than Whitney.

Specimen locations should be specified. Springer mentioned a Western Sandpiper collected in Minnesota, that had been seen first on the South Dakota side of Salt Lake, and thus is a definite South Dakota record. Springer also emphasized that specimens should be rechecked to be sure that they are correctly identified.

Spring recommended a map of the ecological divisions of the state. He is especially interested in the contrast between the Coteau des Prairies and the adjacent James River and Minnesota River valleys. The Yellow-billed Cuckoo, for example, nests in the river valleys but not on the Coteau.

Springer asked about the progress of the Annotated Bibliography of South Dakota Ornithology, on which Krause has been working. Baylor and Rosine had no recent report on this. Springer suggested that this should be cross-referenced by species.

Springer would like to see a more general bibliography of South Dakota natural history. Whitney suggests a more general bibliography of South Dakota birds. Nelda Holden is currently working on the five-year index to "South Dakota Bird Notes."

Springer suggests that before going to press, species accounts should be checked with adjacent states such as North Dakota to correlate reports. He also suggested that reports from the Breeding-Bird Survey should be available to the compilers of individual species accounts.—Rapid City

J. W. Johnson

(Continued from Page 76)

crete bird bath which is used by nesting birds from blocks around as well as by their own birds.

During the winter hundreds of birds come to feed and drink and during periods of migration the yard is filled with sparrows and warblers. Summer nesters, including catbirds, brown thrashers, cuckoos, robins and orioles make the Johnson yard their headquarters. There is also a 24-room purple martin house well filled each summer. Their bird diary is a record of all the birds observed in their yard for the past 22 years.

Although Jim had contributed many articles to "Bird Notes" and written technical articles on astronomy, some published as chapters in text books, he had never edited a magazine when he took over as editor of the "South Dakota Bird Notes" in 1957. In his years of editing he not only maintained the high standard already set of reporting significant articles on the ornithology of South Dakota but he continued to build interest and improve the "voice of" bird lovers of the state.

Jim has also written for the "Inland Bird Banding Association News" and has to his credit a timely article in the "Audubon Magazine," (1963, v. 65, No. 4, page 213-217), on the plight of the sandhill cranes displaced by the water above Oahe Dam on the Missouri River when the reservoir inundated the cranes' secure resting grounds.

On Dec. 31, 1968, Jim retired from the railroad after 41 years of service and in July, 1969, he stepped down as editor of "Bird Notes." His many hours of editing and making up each issue of "Bird Notes" is appreciated. You will note that it took two (new editors) to fill his place.

Retirement will not find Jim idle for he will continue to raise his voice vigor-

(Continued on page 104)

The Ecology of

(Continued from page 82)

the owl by night, resulting in practically no contact between the two species.

Studies of this type can be valuable tools for determining changes in the populations of these two species as their environment changes.

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Notes from Sparks' Mini-Ranch

THERE is snow in the high country and all the deer and small beasts have gone into hiding, waiting the end of the hunting season. Our hour-long drive in the morning has lost its savor with no wildlife to be seen.

Some mornings the pine trees on the top of Strawberry Hill are much too beautiful to be real—asparkle with diamonds in the early morning sun or flocked as no indoor trees could ever be. Often on these bright, clear mornings the road under the car wheels is a twisting, turning roller coaster of ice, to be crept up gradually and down gently. Cars glide by, hugging the sanded spots and easing around the sharp curves. By nightfall trees are again normal and added sand and traffic have chipped at the ice until wheels can turn at almost their regular speed.

The month of December is a wonderful month. The love expressed by shoppers as they go from store to store in the early dusk, humming their favorite carols, is the love that children know, spelled with small letters. It is felt in the smiles and friendly jostlings as crowds fill the streets and jam the stores.

While we are thinking of Christmas let us also think of the needs of our feathered friends. The December-January 1969 issue of "National Wildlife" contains an article by Marbelle Dickey Hodgins describing a Christmas tree for the birds. Her tree is made of one-half-inch dowel threaded through three graduated pieces of trellis wood and set upright in a flower pot filled with plaster of Paris. The branches of the tree are smeared with equal parts of melted suet and bird seed. Or peanut butter and seed.

In a clipping from the "American

News," Aberdeen, Evelyn Van Wagner gives her recipe for "Cake for the Birds," as follows: One cup uncooked cornmeal, one cup flour, three tablespoons dry milk or one cup skim milk, one-half cup fat, (bacon grease or ground suet), one-half teaspoon soda, one-half cup dry bread or stale cake crumbs or dry cereal with enough water or skim milk to make a thick batter. This should be baked at 350 degrees for an hour, cooled in the pan and then put in a mesh bag to hang from a tree.

Her second recipe is for "Bird Porridge" and calls for two parts ground suet, two parts cornmeal, two parts sugar, one part flour and not over one-half part water, cooked like mush, poured into a greased pan, cooled and when hardened cut in chunks. If this sounds like too much work you might just keep the feeders filled with commercial bird seed.

Now that our trees and bushes have been picked clean we are beginning to plan for next spring's planting—shrubs that will furnish food for year-round feeding. An article by Mary Anne Guitar, source unknown, tells of a new development in Panther Valley, near New York City, where 400 acres have been set aside out of the 2000 allotted for homesites, to be planted with fruiting trees and shrubs attractive to birds, with plenty of shelter left for nesting.

Land management expert, Philip Barske, was given the go-ahead in developing and planting the area and he gives the name of the Dutch Mountain Nursery, Augusta, Mich., 49012, as an authority on planting lists of bird-drawing shrubs and trees.

Quoting from an article by Joe Van Wormer in the "National Wildlife of

October-November 1969, volume seven, number six, page 23, "Counting waterfowl accurately is an impossible task. The best guesses of experts, based on all available data, are still only estimates. But one estimate made in recent years placed the fall flight population of ducks in excess of 80 million birds."

He goes on to discuss the heavy toll of waterfowl from air and water pollution and pesticides and is particularly concerned in the loss of breeding grounds as a primary cause for the decrease of waterfowl. His pictures, distinguishing the 38 living species of ducks found in North America, make this article of special interest.

I was sorry to miss the Huron meeting and sincerely hope I will be able to attend the June meeting in Bison.

That's "30" for now.

J. W. Johnson

(Continued from page 96)

ously in the cause of conservation of wildlife and the protection of their natural habitat. On Nov. 15, 1969, he was elected president of the South Dakota Ornithologists' Union at the Huron meeting.

Photographing birds and flowers in their backyard or on the trips that he and Lucille are planning will occupy much of their time. And perhaps he will now find time to read that south wall of books in his study that he has been accumulating over the years. No matter what he does or where he goes he will continue to be our choice for "Man for All Seasons for Many Reasons," Jim Johnson, Editor Emeritus.

South Dakota Ornithologists' Union
1970 Annual Spring Meeting
June 5, 6 and 7, 1970
Perkins and Harding Counties
Grand River REA Meeting Hall
Bison, South Dakota