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Whole No. 72



Young Red-tailed Hawk

-Willis Hall

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Vol. XIX, No. I

March, 1967

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In This Number . . .

in inis Number	
President's Page, Herman Chilson	3
Birds of Prey, 1960, Lowry Elliott	4
The Life of Our Martins, J. W. Johnson	7
Birds' Nests of South Dakota, L. J. Moriarty	13
Book Reviews, The Life of the Desert; the Life of the Cave, J. W. Johnson	14
Bird Haven Notes, Lowry Elliott	15
General Notes of Special Interest, Short-eared Owl Sighings, Gray-Crowned Rosy Finches in the Black Hills, Curved-Billed Thrasher Winters at Fairburn, Continental Breeding Bird Survey, G. H. Owl Study, Snowy Owl Sightings Near Yankton, Yellow-Bellied Flycatcher Banding at Milbank, Correction? in Regard to Yellow-Bellied and Acalian Flycatcher Obervations, Mountain Chickadee at Rapid City, Rare Species Come to Feeding Stations in Rapid City, History Museum at Armour, Yellow-Crowned	
Heron Photographed, Trumpeters Produce 20 Young at Lacreek	16
Spring S.D.O.U. Meeting May 19-20-21, 1967, at Belvidere	23

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President's Page

L AST December while driving a new car home from the factory I got lost in southern Wisconsin. I was taking a short cut across the state and my travels took me through Columbia County, Wisconsin. I was particularly impressed with their experimental program of roadside arboretums along their highways. In many areas the na-

tural beauty of the roadside had been restored.

There are 30 counties in southern Wisconsin engaged in this beautification program. Columbia county has studied this problem since 1956 and in the past



four years has programmed over 12 miles of roads for different types of treatment.

The former method of killing all brush and replacing it with a grass cover has been replaced by this new selective brush management system. All noxious weeds, undesirable shrubs, and tall trees, are removed from the right of way and the following are encouraged to take their place: sumac, dogwood, nannyberry, wild grape, wild rose and bitterswect.

The natural cry, "How much will it cost?," wilt be raised by taxpayers. According to one Wisconsin highway official, "We are saving \$250,000.00 a year by reducing the number of areas that must be mowed." Another official remarked, "This will eliminate the necessity for snow fences in some areas." Joseph Tuss, Columbia County

agent is enthusiastic about this program.

Columbia County has had a wildlife study dating back to 1929. This study proved to them that the loss of quail was in direct proportion to the loss of 61 per cent of their hedgerows. In 1933 they had a quail population in one area of 433 quail. In 1958 their pepulation was extinct as a result of loss of hedgerows along roadsides. Their study also shows, "That detrimental insects and mammals occupying right of ways are more serious crop threats than those living in a brush cover."

Game conservationists should be especially interested in this Wisconsin study. Any thicket areas will provide small natural refuges for more wildlife. Nesting sites, food, and cover will be provided for our song and game birds.

The list of co-operating agencies is quite impressive: Agriculture Extension Service, A.S.C. Office, Railroads, Soil Conservation Service, Soil Conservation Districts, University of Wisconsin, all power and light companies, R.E.A. Co-operatives, State Department of Agriculture, and State Highway Commission.

The conservation editor of the Milwaukee Sentinel must have had in mind the reluctance of many Sunday drivers to move more than a few steps from their cars, as he wrote, "The plan's the berries and it's for the birds, both rural and urban. Red-necked lane hoppers, whooping tail-gaters, and lead footed bumper-buggers now will be

(Concluded on Page 20)

Birds of Prey, 1960

Lowry Elliott

INTRODUCTION

THE following observations of 503 hawks, 2 eagles, and 38 owls were made in northeastern South Dakota in 1960. Where only the date is given, only one individual was seen that day. If more than one was seen, the number is given in parenthesis after the date. The asterisk after the date denotes the days when observations were made in company with Alfred Peterson. The second table shows monthly observations and totals.

TABLE SHOWING DAILY OBSERVATIONS

Marsh Hawk, or Harrier

March 31; April 4, 7 (2), 8, 10 (2), 13 (2), 19, 22, 24, 25 (2), 26 (2), 29* (20); May 4, 6, 8, 12, 19* (8), 23 (3), 27*; June 5, 9, 15, 19, 21, 24 (2); July 9 (4), 13, 21, 23, 24 (2), 28; August 10, 11, 17 (2), 18, 21, 22, 26; September 3 (3), 4 (2), 6 (2), 10 (2), 13 (3), 14, 16, 19, 22 (5), 24, 25 (2), 27, 28 (2); October 2 (4), 3 (2), 4 (3), 6, 9 (2), 10 (2), 12 (2), 14, 16, 18 (2), 19, 30; November 3, 4, 5, 7, 8, 15, 21; December 29, 31.

Sharp-shinned Hawk

April 26; May 29*; September 6, 11, 23 (2); October 1, 2, 10.

Cooper's Hawk

April 5, 25, 26 (2); May 29*; August 20; September 24; October 27.

Goshawk

August 23; October 1.

Red-tailed Hawk

April 3, 16, 24, 26, 29*; May 15, 25, 27*, 29*; June 10; August 3, 4, 8, 9, 14, 17, 21, 23, 24 (2), 26 (2), 29; Septem-

ber 1, 6 (2), 10 (2), 11 (2), 12 (3), 13, 15, 16, 19 (2), 21, 22 (3), 24, 25, 26; October 2 (2), 3, 4, 5, 6, 11 (2), 12, 13 (2), 14 (2), 25, 29.

Krizer's Red-tailed Hawk

May 4*; September 12, 22.

Swainson's Hawk

May 27*; September 3.

Rough-legged Hawk

May 1 (2), 13 (4), 15; September 22 (2), 25 (2); October 1 (3), 4 (3), 6, 11, 12, 18 (3), 25, 28; November 2, 20, 21, 24; December 19, 28.

Golden Eagle

April 19; November 23.

Prairie Falcon

April 27.

Peregrine Falcon, or Duck Hawk September 28, 29, 30 (same bird).

Pigeon Hawk, or Merlin

April 20; May 2.

Sparrow Hawk, or Kestrel

April 6, 7, 9 (3), 10 (3), 12 (2), 13 (6), 15 (12), 18 (4), 22 (3), 23, 24 (13), 26 (6), 27 (10), 29* (25); May 16; June 1, 7, 12 (2), 15 (2), 17 (2), 18 (3), 20 (2), 26; July 3 (4), 9 (2), 10 (2), 12, 14 (4), 16 (2), 17 (2), 18 (2), 20 (2), 23, 24 (4); August 8, 12 (3), 15, 16 (2), 20 (8), 21 (2), 26 (2); September 3 (9), 4 (16), 6 (11), 7 (2), 11 (3), 13 (6), 15 (3), 19 (3), 20 (3), 22 (2), 24 (5), 25 (2), 27 (3); October 1 (7), 2 (12), 6, 12 (2), 22; November 5, 14, 22, 30; December 29.

Screech Owl

August 14; September 4; October 2 26, 28; November 16, 21, 22.

SOUTH DAKOTA BIRD NOTES

Great Horned Owl

January 16 (2), February 14, 23; March 12, 20, 21; May 22; June 6, 14 (2); July 16; August 14, 16; September 1, 17; October 11; November 25; December 3, 12, 13, 18, 29 (2), 31.

Snowy Ow!

December 23.

Burrowing Owl

May 27*.

Long-eared Owl

November 12; December 3, 9, 11, 25.

Short-eared Owl

March 31, December 10, 11 (2), 12 (3), 18.

TABLE SHOWING MONTHLY OBSERVATIONS AND TOTALS

	January	February	March	April	May	June	July	August	September	October	November	December	Total
Marsh Hawk			1	36	16	7	10	8	26	22	7	2	135
Sharp-shinned Hawk				1	1				4	3			9
Cooper's Hawk				4	1			1	1	1			8
Goshawk								1		1			2
Red-tailed Hawk				5	4	1		13	22	16			61
Krider's Red-tailed Hawk					1				2				3
Swainson's Hawk					1				1				2
Rough-legged Hawk					7				4	14	4	2	31
Golden Eagle				1							1		2
Prairie Falcon				1									1
Peregrine Falcon										1			1
Pigeon Hawk				1	1								2
Sparrow Hawk				90	1	14	26	19	68	23	4	1	246
Total			1	139	33	22	36	42	128	81	16	5	503
Screech Owl								1	1	3	3		8
Great Horned Owl	2	2	3		1	3	1	2	2	1	1	7	25
Snowy Owl												1	1
Burrowing Owl					1								1
Long-Eared Owl											1	4	5
Short-Eared Owl			1									7	8
Totals	2	2	4		2	3	1	3	3	4	5	19	48

MARCH, 1967



Pine Siskin

-Courtesy Wilson Bulletin

SUMMARY

Sparrow hawks (246) were the most common species recorded during the spring and fall migration periods and during the breeding season, followed by Marsh (125) and Red-tailed hawks (61).

Hawks were plentiful in the fall. They migrated leisurely and stayed later than usual. Rough-legged were especially plentiful and there was quite a variance in coloring. The one seen on October 3 was a beautiful bird with dark chocolate spots on a white background and white socks. The hawk seen

December 19 was all black with only a small amount of white showing on its primaries in flight.

The red-tailed hawks seen October 2, 4 and 29 were large, almost black and had dark red tails.

The Krider's Rcd-tailed hawk seen September 12 was a light faded individual. The one seen September 22 was a beautiful bird, very much like the one seen May 4 northwest of Nassau by Alfred Peterson and I.

The pigeon hawk seen April 30 had killed a killdeer at the side of the road.

(Continued on Page 10)

SOUTH DAKOTA BIRD NOTES

The Life of Our Martins

J. W. Johnson

CHAPTER IV

ARRIVAL—NEST BUILDING

A YEAR of increasing drought, a not particularly mild or early spring led up to the season of 1959. But our martins were earlier than usual. The first appeared April 4, a week earlier than I expected.

Edward Mann, who has a martin colony at his cabin on Lake Byron, had an arrival on April 2, his earliest in the eight years the house has been used.

Since our colony record started with 1956, the early date means little here. Data given me by the late Mr. Wm. Youngworth of Sioux City, Iowa, in a letter dated April 7, 1958 is worth noting. Probably we can assume at least

a day's difference in arrival time due to the difference in latitude of the two points.

Youngworth's records go back to 1926 and his earliest arrival, April 3, 1948, would be a comparable date with mine of the current year on that basis. A record on another colony was March 29 and April 1, 1950—not too much difference when we remember the latitude difference.

Details of arrivals and early activity is tabulated. As in past years, apartments of the martin house are numbered from one to nine from left to right and top to bottom—three rows of three—as in reading and east or west side is designated by E or W.

		Color		Remarks
Date	Hour	Purple	Gray	
Apr. 4	6:15 a	1		
Apr. 6	5:45 a	1		In 1 E. Returned again at 6:25 p.
Apr. 7	6:15 a	1		In 1 E. Awake when first seen.
Apr. 8	6:15 a	1		In 1 E. Left at 7:20 a.
	8:25 a	2		Assumed 1 new arrival
	1:00 p	2	1	Possibly 4 birds here now.
Apr. 9		2	1	1 Purple and the gray much together.
Apr. 10	7:30 a	2	1	Same as above.
Apr. 11		2	1	Inch of snow last night, Temp. 31.
Apr. 12		2	1	
Apr. 12		2	1	
MARCH.	1967			

Apr. 14	Late p. m.	1		Only one bird seen today.	
Apr. 15	6:55 a	1	1	Paired behavior,	
Apr. 16	8:00 a	2	2	One of the grays very dark.	
(No	further obs	ervation	s unt	il April 30—after an absence of 13 days)	
Apr. 30	11:00 a	5	4	Present on our return this date.	
May 1	p.m.	4	4	Acting as paired, sitting close on wires, visiting apts. together.	
	5:30 p			Three or four new arrivals appeared late in p. m. with much chatter as of greeting.	
May 6	Various	4	7		
May 15				Purple male found sick or starved on ground —assumed lack of food due to cold. Later disappeared—to be found dead May 20.	

All during the period, May 1 to May 19, eight martins were present regularly—four of them in full purple. They acted as pairs, each pair pre-empting an apartment and going and coming as though it were home. The light colored ones often sat in these apartments looking out for long periods with an air of ownership. Sometimes their places would be taken by a male for shorter intervals.

Only one apartment on the east side was used regularly. This was the side facing our windows. Observation of the west side was much less complete.

In the east apartment both birds of the pair were to be seen early in the mornings, sometimes lying flat on the floor so that no detail could be made out, even with a 7 x 50 binocular, except that a dark object, like a bird, was there. More than once I was convinced that one of them had died of cold and hunger during the night and that I was seeing a dead bird.

A little later one of them would wake, move to the door and stand for a few minutes before emerging. The second of the pair would follow soon after.

For a few days after the apparent arrival of the new flock late in the afternoon of May 1, up to 11 birds could be seen at times.

Later only four pairs (?) were seen until the morning of May 20.

The three pairs that took over on the west side of the house, so far as I was able to observe, behaved in all ways like the pair on the east.

The cool weather and regular light frost during the period must have made living hard for them.

On May 15 a purple male was found on the ground, unable to fly and suffering from diarrhea. He was not seen again but his death was assumed. Periodic counts after that date never showed more than seven birds until the morning of May 20.

NEST BUILDING

On May 19, martins of both sexes were carrying nesting material to 1 E and 9 W. A total of seven birds was seen.

At 6:00 a. m., May 20, a light rain started. At 6:15 confusion about the

house led me to notice birds present in numbers and they were almost all about the east side of the house, only occasionally lighting on the west.

Counts run up to II maximum and a check of colors—the only time I could be sure of all nine present at the moment showed only one purple among them. In fact I was never sure of more than one purple bird at any time during the hour I was able to watch.

By the excitement, the occasional struggles for apartments, the small number of purple males, the fact that they had concentrated on the east side, all led me to the conclusion that most of the flock of 11 were new arrivals.

Either the original seven or eight were away or keeping inside the west apartments. A drizzle of rain, getting stronger as time went on, was falling during the whole period.

The bird found sick May 15 was assumed to be the one found dead in the flicker house May 20. If so, it must have found strength to climb the hackberry tree the 12 feet or so the box was above ground and crawl into the hole where it had died.

On May 22, five purple and 12 gray birds were seen, of which 10 seemed paired. This is the greatest number of birds seen in the vicinity of the house. For obvious reasons this method of counting can give only the minimum number in residence and has little necessary relation to the total. In this case there were at least six pairs here. Six nests were built, six clutches of eggs laid, hatched, the birds from six nests were observed in the apartments, banded, and left the nests in due course.

GENERAL

Among the problems in the study of Purple Martins, these stand out: Identification of individuals and sparrow competition, with the possible effect on behavior of measures taken to solve them.

IDENTIFICATION AND BEHAVIOR

In past seasons I have felt that I had fallen between all possible pairs of stools—made it a behavior pattern. While I took account of martin protests at my intrusion in removing sparrow nests, the sparrows increased their aggression to drive the martins from apartments in which they already seemed to be laying—which my lack of inspection left me unable to prove.

Identification of individual martins by color pattern may be possible but it seems impractical.

SPARROW COMPETITION

In the spring of 1958, a friend, Carl Metzger, came to tell me of his success in trapping sparrows from his martin house with rat traps—the spring type with wood base.

In the few days that remained before our martins returned I was able to catch a number of sparrows with these traps on the platforms—enough to show it could be done.

When the first martin appeared early, his arrival put a quick end to the trapping. But, sharp on the departure of the last martins in August, the traps went back on the platforms of the martin house. Trapping success was considerable for a couple months. About 50 sparrows were taken—killed instantly by the heavy spring of the trap. Three starlings were also trapped, of which two were dispatched and the third escaped. Since other birds in this area take no interest in a martin house, they are not likely to be caught.

During the winter the traps were kept set and caught an occasional sparrow, to total about twenty for the winter. When spring came the upsurge of interest in nesting brought additional sparrows to the traps. The martins' unusually early arrival, on April 4, stopped the trapping before sparrow numbers had been reduced as much as I had hoped.

Sparrow competition was still strong while the martins were building. While tearing out sparrow nests I found the martins soon ceased to protest my close approach. Accordingly I ventured to make some close inspection of their nests while I was about the house.

During the summer I learned that, after a sparrow has definitely taken over an apartment and is building in it, the martins seldom interfere. When they do act, it is against the sparrow and not the nest. And they avoid entering the area before the sparrow-infested apartment.

This gave me the idea of trapping a nest-building sparrow right out of the midst of a busy martin colony—without harm to the martins. And it worked perfectly. Often the sparrow was caught within less than five minutes after the trap was set. For this work special care was taken to set the trap on a hair trigger, with the sliding parts oiled so it would throw at the slightest touch.

While the remaining sparrow of either sex quickly acquired a new mate and the nest went on, so did my trapping and nest destruction.

The result of the season's work was something like a couple of dozen sparrows trapped and not one sparrow fledged in the house.

As soon as the martins were gone traps were again set on every platform. But the harvest was getting low. Sparrows were few and had given up the habit of roosting in the house. Yet there were occasional days when things changed. For example, one sun-

Birds of Prey, 1960

(Continued from Page 6)

It flew with difficulty about a hundred feet with its prey and I had good chance to watch it.

On October 2, I saw a migrating flock of about a dozen barn swallows flying at a sharp-shinned hawk over Salt Lake. The hawk paid little heed and soon the swallows flew different ways.

A Golden Eagle was observed on November 23 two miles south of our farm in Grant County. There was a strong southwest wind and the eagle was riding the wind traveling west with very little wing motion. Usually one or two Ospreys are here during spring migration when the suckers are running up the North Fork of the Yellow Bank

(Concluded on l'age 13)

ny morning I caught five sparrows in four traps in just a few minutes—two killed together in one trap.

NESTING AND BANDING

The first real inspection of martin nests was made June 12. I found one martin habit made for uncertain results: Pieces of green leaves, scattered over nest and eggs, often left some doubt as to actual numbers because I did not disturb the arrangement by removing the leaf fragments. For that reason the recorded numbers of eggs or even the number of young birds are open to question.

EGGS AND YOUNG

Eggs and young found in apartments during the nesting period as tabulated below. To distinguish from eggs, numbers of young birds are indicated by enclosing them in parentheses ().

July 1	(4) Est. 3 d	7 3 3 Hatching Da ays old *T **C	5 3 (5)* 1 Siny—Newly had Blearly bigger	9 3 3 atching (4) (2)** (4)
July 2 July 4 July 5	(4) 3 (5) 2	(2)2	pipped) (3) 1	(2) (4) 4 Banded 1 too small
July 7	(5) (2) 5 Banded	(4)		1 too sman
July 11 July 12		1 (4) 1 1 (4) 1	(4) (2 (4)Banded () 2)Banded Small one found dead
July 18	1	Banded Banded		
July 23		2 Band	led All out 6:3	
	All out 4:30 p.m.	A11 ou	it All out	All out 6:30 p.m.
July 30		5:30 p.		
August 3	Lone bird out 6:30-7:1	5 a.m.		
	_	SUMMARY—		
	East Side Apa	artments	West Side	Apartments
Date Hatched	1 4 6-24 7-6	7 7-2*	1 7 7-1 6	-28
*Only hatch act	ually observed.	Others estim	ated.	20 020
Age (days) at Banding Number banded	14 12	16	11 14	12
Number banded	5 1	2	4 2	4
Age at Leaving nes —Days Date left Nest	t 30 28	28	29 25	31
*Left nest 6:30-				
Pert Heat 0.30.		DING RECOR		during the day.
Ban	—ва n ded by George			ota
Date		Leg	Apt. No.	Band Number
Date July 5, 1959		Left	9 W	552-07110 552- 0 7111 552-07112 552-07114
July 7, 1959			1 E	552-07113 552-07116 552-07117 552-07118 552-07125
July 12, 1959		Left	7 W	552-07119 552-07120*
July 12, 1959		Left	1 W	552-07121 552-07122 552-07123
				552-07124

4 E 7 E 552-07126 552-07127 552-07128

Total Birds Banded: 18.

*This bird found dead "a few days before" July 5, 1960 near Ellendale, N. Dak.—W. L. Buker, Box 734, Ellendale, N. Dak.

*Further on Band 552-07120:

This would not have been one of the three "grays" seen at the house June 5, 1960. Two of them were banded on the right leg; the other, banded on left leg, lived with the colony for the season of 1960—a male of a pair rearing five young, of which four left the house alive.

Thus we had sight or report of four of the 18 banded birds of 1959 during the season of 1960.

AFTERWARD

On the morning of August 1, 1959, a martin was found dead under the wires, as though fallen from them. It was stiff and the ants had found it, though it could not have been dead longer than from the evening before. It was gray but wore no band. It may have been an adult female from the colony.

On August 8, 15 martins were present (five purple) and no bands visible after study with the glasses. More than the 10-12 remaining of the adults of the colony but less than the maximum seen on other occasions before the young were out.

Also on August 8 came my first sight of a banded martin. It was with seven others—all adults without bands (two purple) around the house at 8 a.m. The band was on the left leg and I saw it several times clearly, catching the glint of sunlight on it at other times.

This bird was gray with gray collar and sat on top of the house with less activity than the others who were much on the move. The band on the left leg indicated the west side of the house. The last birds banded there were from 1 W and from 7 W •a July

12. Why no other banded birds and few adults were seen about the house compared to other seasons is a question I have no answer for.

Of particular interest was the fact that no young but the one described above were seen about the house after leaving the nest, and none was seen returning to roost there under the close supervision of old birds as has happened other years.

This year the rule was: When they were once out they were gone and not seen again.

COMMUNITY FLOCK—DEPARTURE

The community roost was checked for martins during July and August with results as detailed below:

July 11, 8:15 p. m.—Seven martins flying. None on the wires at any time.
July 14—Same as above.

July 24, 8:15 p. m.—15 martins flying; seen several times between 8:00 and 8:25—probably different flocks going to roost in the trees.

July 25, 8:00 p. m.—The early season perch: the wires by the grain bins—in use for the first time this season. About 36 birds present but some coming and going.

August 2, 8:20 p. m.—for the first time this season about four martins are using the wires over the road. At the same time 36 on the wires by the grain bins.

August 14, 8:00 p. m.—About 75 martins estimated in the air.

August 15, 8:00 p. m.—Few martins on wires but many in the air, about 75,

(Continued on Page 22)

Birds' Nests of South Dakota

L. J. Meriarty

A. O. U. # 355 PRAIRIE FALCON (Falco mexicanus)

ON JUNE 26, 1966, I visited three nests of the Prairie Falcon in the western part of the State. In one nest were five eggs while the others had one and three young.

The parent birds all made attempts at defending their nests which were located in crevices in the cliffs. Some of the crevices ran back many feet.

Nothing like a true nest was evident. A slight hollow in the rock or in soil or rubbish was the nest bowl. All the nests were in a few feet from the face of the cliff where the sun could not reach.

This bird is apparently on a decline. The fact that one nest had five eggs at this late date, one had one young, the other three, one of which had been pushed out of or fallen, leads me to believe the number that reach maturity is small. All of the young were covered with an external parasite around the eyes and nostrils, which must have been hard on them.

The eggs are smaller than those of the Duck Hawk, about 52 x 40 millimeters, rather roundish oval, of white ground color, the smaller end being so finely and thickly dotted that the white is nearly obscured. The larger end is spotted with larger spots of amber, brown, cinnamon, and other shades.

The three young (actually two in the nest and one below on the ground) were about four weeks old, fairly well feathered, and with their feet turning yellow. The single young in the other nest had slate-colored legs and bill with

only the base of the mandible yellowish, the iris brown. The young would all turn on their backs with talons up in defense. However they threatened and screeched, they did not use their beaks except as a threat. We were careful not to allow them a chance to use their talons.

In one nest was a skin of a ground squirrel, still quite fresh and neatly turned fur side in like a sock. A few meadowlark, magpie, and flicker feathers and small bones I couldn't identify were present.

From what I have seen, the eggs must be laid normally in mid-May in this area. Although Bent gives nesting areas extending into southeastern South Dakota, I believe they are no longer found so far east.—Watertown.

Birds of Prey, 1960

(Concluded from Page 14)

River. However, this year the river was very low and I did not see any Ospreys.

Although the data were collected six years ago it is helpful for the north-eastern part of the State in showing migration dates and the months the different species are present. It also provides some basis for comparison in later years to the total number of species.—Milbank,

Book Reviews

J. W. Johnson

THE Life of the Desert, by Ann and Myron Sutton. Published by McGraw-Hill and produced jointly with The World Book Encyclopedia \$4.95.7½" x 10". Another in the series: Our Living World of Nature. 232 pages. Gorgeous color photographs, many full page, black and white photographs, drawings and highly readable text, with Contents, Bibliography, Glossary, Index, and detailed explanations with drawings. This book is a worthy companion of Life in the Forest, previously reviewed in these pages.

While all the pictures are good, some of the full-page color plates, such as that of the closeup of the Yucca lily blossom are overwhelming. Probably indicating the use of a long focus lens, the greatest effect of the close-ups comes when viewed at considerably more than normal viewing distances. Then they seem to stand out in stereoscopic relief.

Color photographs display the varied birds, and animals in characteristic action in their daily (or nocturnal) rounds of wrestling a living from the meager resources of the desert. Plants are no less lovingly pictured, showing how they looked at their best in bloom, how their regimented order makes use of every possible drop of moisture in this harsh land. Climate and weather, along with landscape also make lovely pictures. Thunder storms with lightning streaks, even rain, and finally just scenery make every page an adventure.

The arrangement is uniform with the first of the series, constantly varying, typically with a full page color photo facing a page of text along the left margin of which small photos and drawings illustrate the points covered.

The excellent text only comes to its own after the pictures have scored. Again, if there is a fault to be found. it is that the work is so well done the whole scheme seems almost disappointingly simple.

The book demands that one visit the desert to see if these things can actually be as beautiful as they are pictured. But it can also be a consolation for those unable to do so. No doubt the actual scenes, plants, and animals would seldom show their beauties to the visitor as they did to these knowing and expert photographers—who must have yet discarded many of their pictures for every one they used.—Huron.

The Life of the Cave, by Charles E. Mohr and Thomas L. Paulson, McGraw-Hill. 1967. \$4.95. This fourth volume of the series, of which Life of the Desert, above, is the third, is out just as this issue of Bird Notes is made up.

But this frustrated cave-crawler, biter in his declining years, must still do his bit by crowding in the few line-In all respects this book is the equal of and of similar format with the others of the series reviewed here.

To read, even study, this book means a new world of understanding when you get to visit a cave, in the Black Hills or elsewhere. And the mystery of cave dwelling creatures will have a new dimension for you. Or the price of the book will open all caves to you—while you stay at home in comfort.—Huron.

Bird Haven Notes, 1966

Lowry Elliott

MARCH 27, 1966—Arrived home after spending the winter in California. Many Grackles, Redwings, and Meadowlarks. Many ducks on sloughs. Potholes full of water.

March 29-Saw a Bluebird.

April 3—Nine Whistling Swans in a pothole about five miles southeast of Milbank.

April 4—Whistling Swans (40) in same pothole. Very close to road. Very tame.

April 7—A flock of (34) Sandhill Cranes over our farm. Unusual. Quite low and circled in an updraft until very high and small before going on north. Bugled only a few times.

April 14—Saw a Hermit Thrush, a flock (30) of Snow Geese and many ducks and coots.

April 22—About 70 greater and lessen Yellowlegs. More Mourning Doves and Flickers and first Vesper Sparrow.

April 27—First White-throated Spar rows (35). A pair of Golden-crowned Kinglets and a pair of Ruby-crowned Kinglets.

April 29—Miserable cold with wet snow. Three Purple Martins, first. First Barn Swallow, five Myrtle Warblers and a Brown Creeper in a snow storm.

May 10—A Cardinal in our trees and two Red-headed Woodpeckers.

May 11—Three inches of wet snow last night.

May 27—Green Herons in our trees.

May 28—A partial albino English sparrow.

June 2-First Dickcissel.

June 6—First Cuckoo heard. Saw 13 Lark Buntings 1½ miles north of our farm. All except one were males

July 4—Mulberries and service berries ripe and birds feeding on them.

July 14—Went to Clear Lake Hospital to see Alfred Peterson. On the way saw four Chestnut-collared Longspurs, an Upland Plover, a male Lark Bunting on a virgin prairie area about four miles south of La Bolt. Wild tiger lilies in bloom on low-lands.

July 22—First flocking of Mourning Doves (35). Some swallows moving.

August 2—A flock (35) of Cowbirds in our pasture around cattle, all young birds. Saw two Burrowing Owls while taking an evening ride about three miles from home, near the Minnesota line.

August 5—Three Burrowing Owls at same place as August 2. Three Swainson's Hawks near northeast corner of our farm, one adult, two young, beautiful, dark birds, tame. Would not fly from fence posts or poles when cars went by. There about a week. Fourth year a family of four or five have stopped at the same place in the fall. A few days later I found one of the young birds dead by the road, shot by some trigger-happy vandal. Just what I feared would happen.

August 7—Saw first young Red-headed Woodpeckers. Adults have been plentiful.

August 12—Meadowlarks and Mourning Doves flocking. Kingbirds and

(Concluded on Page 22)

General Notes of Special Interest

SHORT-EARED OWL SIGHTINGS— This winter I have seen two Short-eared Owls, one on January 1, 1967 near Highmore and another January 8, five miles east of Fairburn. Both owls were seen at dusk, flying across the prairie. —Leonard Yarger, Rapid City.

GRAY-CROWNED ROSY FINCHES IN THE BLACK HILLS-I saw a flock (25) of these finches on November 6, 1966 at the Victoria Lake Y on Sheridan Lake road and a flock (100) on the gravel parking area on the dam at Pactola Lake. L. M. Baylor also saw a flock of about 100 the same day near Sylvan Lake. On January 10, 1967 Gertrude Backman saw a flock (20) near Sheridan Lake, On January 30, 1967 L. B. Yarger and D. G. Adolphson saw a flock of about 250 feeding an stubble field between Keystone and Rockerville. The status of the species Black Hills is sporadic winter visitant by O. S. Pettingill and N. R. Whitney, Jr. (Birds of the Black Hills) and L. M. Baylor (South Dakota Bird Notes, XVI:60)-Esther Serr, Rapid City.

CURVED-BILLED THRASHER WINTERS AT FAIRBURN—This southwestern desert bird first showed up at my feeding station mid-November 1966, and has been coming many times a day ever since (January 23). The bird feeds for a short time then flies back across the road to the heavy brush cover in the French Creek Valley.

The bird has a dull gray-brown back, faintly spotted breast and deeply curved bill. The eyes are more bright

orange then the pale orange description given by Peterson's Field Guide to Western Birds.

About fifteen members of the Black Hills Audubon Society have seen the bird and have confirmed this not previously recorded desert species.—Mrs. Harold Smith, Fairburn.

CONTINENTAL BREEDING BIRD SURVEY

During the summer of 1966 the Bureau of Sport Fisheries and Wildlife conducted a Breeding Bird Survey in which over 600 routes were run throughout the states east of the Mississippi River. The data from the survey will form a basis for determining changes in songbird populations during future years. The 1967 Survey will be expanded to cover 11 additional states west of the Mississippi River, including South Dakota.

Each survey route is selected at random and follows a 25-mile course, to be driven by automobile. One trip is made during the month of June. Birders throughout the State who can identify the breeding birds of South Dakota by song and sight, and are interested in assisting with this survey, are invited to contact: Dr. N. R. Whitney, 633 S. Berry Pines Road, Rapid City, South Dakota 57701, or Chandler S. Robbins, Migratory Bird Populations Station, Laurel, Maryland 20810, for additional information.

DOVE BAND RECOVERY—A dove banded by Don Adolphson in the Huron area 8-65 was shot 9-66 near Houston, Texas.

"G. H. OWL STUDY"

D. G. Adolphson

The great horned owl (Bubo Virginianus) is widely distributed throughout the timbered regions of South Dakota. It is a generous provider for its young and preys upon almost any living creature that walks, crawls, swims, or flies except the larger mammals. The owl is the first species in the State to nest each spring with full sets of eggs laid usually by the middle of March and the young are ready to leave the nest generally by the end of May.

Nest Success

During the nesting season of 1966 a banding program was initiated with the aid of J. W. Johnson and G. M. Jonkel to determine the nest success and to obtain other pertinent data about this species. Fourteen nests were found in 10 counties and 12 nests were successful (at least one young was fleeged). The 12 nests fledged 21 young for a success ratio of 1.75 birds per nest. Two of the nests fledged three young, five nests fledged two young, and five nests one young.

The band of one of the above young, banded 5-18-66 near White Owl in Meade County, was received 8-66, about 12 miles away, from point of banding.

Only three nests were found in March during the incubation period and they were not checked for the number of eggs because the weather was too severe to drive the adults off the nests. One of these nests fledged two young, one nest was unsuccessful possibly because of a blizzard, and the other was unsuccessful because of shooters. The other 11 nests were found during April, May, and June

when the young were in various stages of development.

Nesting Habits

Six of the nests were in shelterbelts and eight in groves of trees along drainageways or lakes. The nests ranged in height from about 20 feet to 50 feet and averaged about 38 feet. Two of the nests used were old squirrel nests and the others were stick type nests. The size ranged from about 12 inches to 36 inches in diameter.

Prey found in nests include remains of mammals and birds. Cottontail rabbit remains were found in two nests and jackrabbit remains in four nests. Remains of birds were found in three nests; the other nests contained no prey at the time of the visits.

Information Wanted on Owl Nests

Anyone finding a Great Horned Owl nest with young in April or May anywhere in the State is asked to please contact me at the address below. We have banded 25 young to date and from further banding, it is hoped to learn more about the habits and wanderings of this species.—2611 Lawndale Prive, Rapid City, South Dakota 57701.

SNOWY OWL SIGHTINGS NEAR YANKTON—On December 24, a male Snowy Owl sat atop a haystack south of the Gavin's Point Fish Hatcheries Building.

* * * *

On December 25, a female was in the same location.

On the morning of December 26, a male was sitting on a telephone pole two miles east of Yankton and was there long enough for a photograph (marred by telephone wires) to be taken.

On that afternoon a male was photographed on a haystack at Gavin's Point Dam—but at a great distance and with poor light.

At dusk that day a male was sitting on a telephone pole two miles north of Yankton—probably the same owl as was observed in the morning.

So probably two male Snowy Owls and one female were in the Yankton area around Christmas, 1966—Willis Hall, Yankton.

YELLOW-BELLIED FLYCATCHER BANDING AT MILBANK—Since starting banding in 1954, I have banded Yellow-bellied Flycatchers on the following dates: 6-1-56, 8-25-58 (2 birds), 5-23-59, 9-14-59, and 8-26-66—Lowry Elliott, Milbank.

CORRECTION

The note on the Yellow-bellied Flycatcher reported at Huron (B. N. XVIII:90) brought a prompt and dubious reaction from Ron Huber, St. Paul.

"Read with much interest your note on the Yellow-bellied Flycatcher at Huron. Have you read the excellent article on plumages of the Yellow-bellied and Acadian Flycathers by Robert M. Mengel? It appeared in the Auk 69 (3): 273-283, July, 1952. If you read this article, you will note that the fall plumage of the first year Acadian Flycatcher is sometimes very yellow, right down to the undertail coverts, and including the throat. I have seen many Yellow-bellies on their breeding grounds in extreme northern Minnesota. They frequent black spruce swamps during the summer and in migration they turn up repeatedly in the Minneapolis-St. Paul area; so they presumably follow the Mississippi southward. I have also seen the Western Flycatcher in the Black Hills, identified by the call note, and it is inseparable from the Yellow-bellied by appearance alone. My impression of both species was that the yellow seemed confined to the upper breast and belly but not the undertail coverts. If this is true, and the bird you saw was yellow all the way to the tail, you may well have seen a first-fall Acadian flycatcher. Without a call note, that would be a tough one to identify!! Considering the breeding and probably the migration route of our Yellow-bellied and considering that the Acadian breeds in Iowa, not far from South Dakota, it would really be a toss-up."

Don Adolphson made me a copy of the Mengel article from Dr. Whitney's copy of Auk and it is indeed an interesting account of an extensive study of available material. It surely brings into question the fall indentification of the two species anywhere there is a possibility of both being present.—J. W. Johnson, Huron.

BIRD BELIEVED EXTINCT DISCOVERED ON ISLAND

A BIRD previously thought to be extinct, the Auckland Island rail, was discovered on desolate Adams Island, a wind-swept islet of the Aucklands group 600 miles south of new Zealand.

The rail is a small ground-living bird about the size of the quail. It is a subspecies of the Australian Lewin water rail and had been regarded as extinct.

The discovery was made by a sevenman team of New Zealand scientists.

Only one specimen of the bird was collected by the party. Adams Island is less than a mile from the main Auckland Island, but the leader of the expedition, Dr. E. J. Godley, said that the main reason for the bird's survival there may be that there are no introduced animals on Adams Island as there are on the main Island.

Vegetation on Adams Island showed what the original vegetation on the Auckland group was once like.

In 1948, a scientific party made world headlines when it discovered in remote corner at New Zealand's South end province the rare bird Notornis, which for many years had been considered extinct.—Science News, 89:477 June 11, 1966.

HISTORICAL MUSEUM AT ARMOUR
—Besides drugs and birds, Chas. P.
Crutchett has found time to take a
prominent part in the founding, maintenance, and operation of a historical
museum at Armour, S. Dak.

At the organization of the Douglas County Historical Society in 1955 he was made president. A part of the Society's work was the gathering of material, historical papers and photographs. Soon antiques began to come in and the collections have continued to grow,

The entire collection is housed in a brick building on the Courthouse grounds at Armour. Though yet small it is a good museum. Educational tours for school groups over the county are given.

The Historical Society has been incorporated for the continuing care of the collections and as a protection against their dissipation in some future contingency.

Mr. Crutchett has been a Director for the past ten years.

* * * *

RARE SPECIES COME TO FEEDING STATIONS IN RAPID CITY—Some interesting observations were made this winter (1966-67) up to January 24 m the Black Hills area by members of the Black Hills Audubon Society.

Species more common during this period than in previous years: Red breasted Nuthatch, White-breasted Nuthatch, Cassin's Finch, Bohemian Waxwing, and Townsend's Solitaire. About 150 Evening Grosbeaks have been coming all winter to Kenny Thompson's feeders in Rapid City.

Rare or uncommon species showing up at feeders or in yards: Rufous-sided Towhee since December 15 and continuously and Golden-crowned Kinglet since January 9 and since at Mary Hyde's yard. A Mockingbird had been seen continuously since December 27 in Bonnie Bradford's yard and another has been feeding in Clara Yarger's yard since December 18. White-crowned Sparrow December 3 and continuously since, Harris Sparrow November 1 to December 29, and Red-bellied Woodpacker November 9 at Gertrude Backmann's feeding station. A Sawwhet Owl was seen roosting in a connifer on December 13 at Elizabeth Southmayd's yard.—Esther Serr, Rapid City.

MOUNTAIN CHICKADEE AT RAPID CITY—The first confirmed observation of a Mountain Chickadee in the state is reported by Esther Serr, Rapid City. The bird has been at Gertrude Backman's feeding station continuously from November 19, 1966 to the time of writing January 24, 1967.

Or. Whitney also saw the bird and identified it as the Mountain Chickadee, though the light was not good enough for a picture.

There is some evidence of a second individual of the species in Rapid City this winter. But data is not yet adequate for confirmation or to make sure it was not actually the same bird.

Since the Mountain Chickadee is like the Black-capped Chickadees, but with a prominent white line over the eye, its identification should be a fairly straight forward matter with a good view of the bird. We hope there will be further information coming in on this new species for the state.—Editor.

YELLOW-CROWNED NIGHT HERON PHOTOGRAPHED—On May 5, 1966 my wife, Doris, and I were experimenting with a 400 mm telephoto lens. We went to Gitche Manitou State Park, in Iowa.

which is about ten miles southeast of Sioux Falls.

Shortly after arriving, we flushed a large gray bird from a tree just above our heads. We followed it to another tree and, with the aid of binoculars and Peterson's Field Guide to the Birds, we identified it as a Yellow-crowned Night Heron.

I got as close to the bird as possible and took three color slides.

Although I do not have the exact dates, my wife and I saw this bird or one like it several times near the lake at the Hills of Rest Memorial Park at Sioux Falls during the summer of 1965, as did Kordellia Johnson. (B. N. XVIII:68)—Delbert A. Nelson, 4418 Apple Road, Sioux Falls.

(The slides are good and the species clearly evident.—Ed.)

HELP NEEDED FOR BREEDING BIRD SURVEY

I have agreed to act as the South Dakota coordinator for the June 1967 Cooperative Breeding Bird Survey of the Bureau of Sports Fisheries and Wildlife. Anyone who lives near any of the 29 starting points (see adjacent map) and can be available for one morning in June to drive one or more of the 25-mile routes is asked to please contact me at the address below by May 1 for the necessary forms and specific instructions.

The purpose of the survey is to obtain, by random sampling, an index of abundance of breeding birds. Such a technique is needed in order to provide information on distribution and relative abundance of North American birds.

and specifically to measure widespread applications of pesticides.

Each route is covered once each summer by the following standardized procedure: Begin one-half hour before sunrise; make 50 stops one-half mile apart and count all birds heard at each stop or seen within one-fourth mile during a three-minute watching and listening period. One observer should do all the observing on a given route, but he may have an assistant to help with recording or driving. Unless driving conditions are very poor, most routes can be completed in four to 4½ hours.

A summary of all lists will later be sent to each participant. In subsequent years an analysis of population changes for the entire area covered will be made available. Data on distribution and comparative abundance of individual species will be available to research workers on request—Dr. N. R. Whitney, Jr., 633 S. Berry Pines Road, Rapid City, South Dakota 57701.

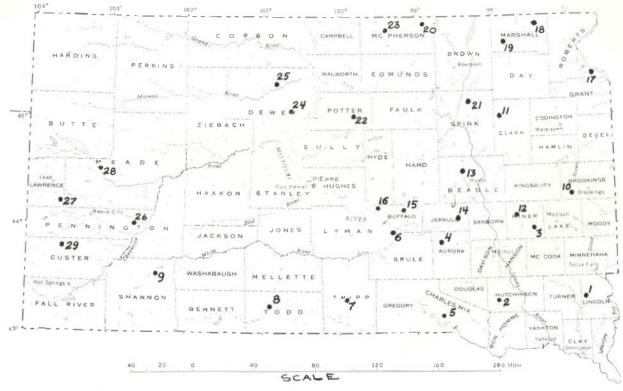
President's Page

(Continued from Page 3)

able to enjoy the wild grapes, bittersweet, and other shrubs."

This sounds like a worthy project for individual S.D.O.U. members to promote in their respective cities, towns and counties.

For further details write the Wisconsin Natural Resources Commission of State Agencies, Madison, Wisconsin. Ask for Selective Brush Management Controls on Wisconsin Roadsides, November, 1965.—Herman P. Chilson.



Breeding Bird Survey

Map showing starting points of routes with their numbers. Contact Dr. N. R. Whitney, Jr. for forms and instructions for any route you can make. (See page 20.)

BIDRIN FAILS TO PREVENT DUTCH ELM DISEASE

The chemical Bidrin injected into elm trees as recommended by the manufacturer is not effective in preventing elm disease infection, according to the U. S. Forest Service entomologists at the Forest Insect and Disease Laboratory at Delaware, Ohio. Arthur C. Lincoln, who is in charge of the project designed to determine the effectiveness of the chemical in preventing Dutch elm disease, says that while the evaluation is not yet completed, he is certain that injections made this spring were ineffective.

In each of four midwestern metropolitan areas that have a high disease incidence—Cleveland and Toledo, Ohio; Moline, Illinois; and Wayne County, Michigan—about 250 elm trees were injected with Bidrin in May by local crews, who had been trained by the manufacturer's representative. In each area, 250 other study trees were left un-treated for comparison. None of the study trees had been sprayed with any insecticide for at least two years.

Lincoln found no significant difference in the incidence of Dutch elm disease between treated and un-treated trees. Scientists at the Delaware laboratory considered the treatment ineffective and will conduct no further field evaluations of this chemical. However, extensive laboratory and nursery experiments will be continued with Bidrin and other promising systemic materials.

Responsibility for planning, executing, and reporting this study rest with the Delaware laboratory, which is part of the Central States Forest Experiment Station. The Forest Service scientists, however, received the full cooperation of the Shell Chemical Company, developer of Bidrin, the J. J. Mauget Company, manufacturer of the injection units and equipment; and the

local authorities in each study area.

Waltonians are quite disappointed in failure of numerous treatments tried in an effort to control this serious Elm disease.—Izaak Walton League Magazine, January, 1967.

Martins

(Concluded from Page 12)

which gradually disappeared into the trees.

August 16, \$:00 p. m.—About 75 martins in the air. No more than three seen at the house today, and they rarely.

August 19, 8:00 p. m.—Few martins about. No more than a dozen, at any one time.

August 20, 8:00 p. m.—Few martins about. A dozen or so on the wires, (where 300 had been in 1956) and a little later about 25 appeared over the trees, a total of well under fifty seen at one time.

August 20—No martins seen at the house during the past several days. Only a dozen seen flying at one time near the roost.

August 23—Only six martins sailing about over the trees. None on the wires.

August 24—No more than four martins seen at one time.

August 26—No martins at all seen at the roost.—Huron.

Bird Haven Notes

(Concluded from Page 15)

Red-headed Woodpeckers moving south leisurely.

I am quite pleased and proud of my new "Bird Haven" sign with swinging boards and small red martin house on top. It was designed, painted, and put up near our mail box at the beginning of our farm lane east of the house by my seven children for a Father's Day gift.—Milbank,

Spring S.D.O.U. Meeting May 19-20-21, 1967

Belvidere, South Dakota

HEADQUARTERS: Tom Berry Auditorium
HOSTS: Belvidere Community and the Black Hills Audubon Society



- 1. BELVIDERE DAM—Established in 1906 by Milwaukee Railroad. See Greater Canada Goose project under the direction of the State Game, Fish and Parks Department. Very accessible birding and banding areas. Restocked with fish in 1966.
- 2. FREEMAN DAM—Established as a WPA project seven miles east of Belvidere. KOA Brave Bull Campground with a 75 camper facility. Good dam fishing . . . also trout. Excellent birding and banding area. Boat dock.
- 3. WHITE RIVER—Area of large cottonwoods and meadows along this river three miles south of Belvidere.
- 4. BRAVE BULL CREEK—Drains prairie with many stock dams. Good fishing and prairie birding.
- BELVIDERE STATE BANK—See L. A. Pier's collection of big game animals, birds, and Indian relics.
- BAD LANDS—Field trip planned for this area and visits to Baxter Berry and Skee Rasmussen ranches. Black-footed ferret area here.
- 7. TOM BERRY AUDITORIUM—Meeting place. Seating for 250. Register 7:30 p. m., May 19, 1967.

—PRE-REGISTRATION BLANK—

TO: ESTHER SERR 615—8th Street, Rapid City, South Dakota

NAME		
NUMBER IN PARTY HOUSING NEEDS:	Adults	Children
Camping		
Motel		
Private Home		
	EEDED? E RETURN BY APRIL 15. I	

MARCH, 1967

TRUMPETERS PRODUCE 20 YOUNG SWANS

MARTIN—For the fourth consecutive year, the rare trumpeter swans at Lacreek National Wildlife Refuge have produced young.

Six pairs of trumpeters at the refuge and one pair nesting near the Badlands National Monument hatched 24 cygnets, of which 20 survived to flight.

Production in 1965 was 15 cygnets.

In 1963, two pairs of wild trumpeters at Lacreek produced four cygents, two of which survived, the first time in

more than 80 years the rare birds successfully nested east of the Rocky Mountains. Since then, 41 young swans have been reared at or near the refuge.

Adult swans with their young return to the refuge's open water and feed during winter. A recent count showed 44 swans had returned this year, leaving about 31 unaccounted for.

Anyone with information on the missing birds is asked to notify the manager at the Lacreek National Wildlife Refuge, Martin, S. Dak.—Rapid City Journal, Nov. 21, 1966.