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Great Horned Owl

F. W. Kent

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South Dakota Ornithologists' Union

OFFICERS 1963-64

DIRECTORS

President's Page

THE Winter Meeting at Huron, January 18 and 19, was attended by about 60 people who enjoyed a fine program of pictures and papers.

A highlight was the series of color slides, beautiful in their lighting and composition, needle sharp and clear, of three young Red-tailed Hawks, shown by Mr. and Mrs. Willis Hall of Yankton. These pictures cover the development of the birds from a few days old until they had left the vicinity of the nest.

Knowing that hawks seldom are able to provide enough food to raise more than one of their young, Willis brought food to the nest every morning. His assistance enabled the three young to grow up strong and well fed, while he photographed them at his usual close range.

This probably is the finest series of ornithological pictures made anywhere in the state, any time, and, alone, were well worth the trip to the meeting.

Excellent papers by Paul F. Springer and Warren Jackson and the banding research done by the Johnson's, Jonkel's and Blanche Battin, reported by J. W. Johnson rounded out the scientific program. A feature much to be remembered was the Black Hills bird skins displayed by Dr. Whitney.

At a short business meeting a liaison committee was appointed to work with the Wilson Ornithological Society on the joint meeting to be held in the Black Hills in June of 1965: Dr. N. R. Whitney, Chairman, Herb Krause, Les Baylor, and Harriet Yarger.

Nelda Holden consented to undertake the task of preparing the index of the Third Five-Year period, a long and dreary task her experience on the Second cannot lighten much. Her work will be vastly appreciated by all of us. This index, be it remembered, will be an essential tool for the Annotated Check-List Committee.

This Committee is composed of Dr. N. R. Whitney, Chairman, Herb Krause, H. F. Chapman, and Alfred Peterson.

It will be collecting all the published material to be found on South Dakota birds. While a formidable task, this is already well in hand by Mr. Krause. Our **Bird Notes** Editor is getting impatient to publish, at least, a skeleton bibliography in an early issue.

No less essential will be the unpublished material that so many people hold on to and never get around to preparing for publication—or even use. Any information on unpublished studies, as well as your own field notes, put in usable shape by you, should be forwarded to Dr. Whitney, 633 Berry Pines Road, Rapid City. Full credit will be given for all material used.

And this kind of material will make the Check-List—which can be only as good as the quantity of usable material allows.—**L. J. Moriarty**.

Hudsonian Godwit

Alfred Peterson

Along with my records of the Hudsonian Godwit in this area over the past ten years, the words of past observers on the species may be of more than passing interest.

The Water-fowl Family, 1903, L. C. Sanford, page 401: "The Hudsonian Godwit is rather an uncommon bird, probably at no time abundant on the Atlantic Coast of the United States. Farther north on the Atlantic Coast the Hudsonian Godwit is a regular summer migrant. I have seen these birds on some of the islands in the Gulf of St. Lawrence in large flocks."

North American Shore Birds, 1895 D. G. Elliot, page 110: . . . "but is not common at any time. It is a regular visitant during migration to the states bordering on the Great Lakes, and is often procured in full breeding plumage in Minnesota, Dakota and some other of the adjacent states."

Game Birds, Wild Fowl and Shore Birds, 1912, Edward H. Forbush, page 297: "In migration occurs most commonly on Atlantic coast in autumn and in Mississippi Valley in spring."

Life Histories of North American Shore Birds, 1927, A. C. Bent, page 205: "Many ornithologists have never seen it in life. I can find no evidence that it was ever common. All the earlier writers reported it as uncommon or rare. Audobon (1840) referred to it as of rare occurrence. He never saw it in life. Prof. William Brown in his notes refers to it as a scarce but regular spring migrant in Alberta."

Birds of the Northwest, 1874 Elliott Coues, page 494: "I have never seen it alive."

Distribution and Migration of North American Shore Birds, 1910, Wells W. Cook, page 52: "It passes in spring migration up the Mississippi Valley."

Birds of Canada, 1934, P. A. Taverner, page 209: "The Hudsonian Godwit is a fine bird on the verge of extinction." (Hardly so. A. P.)

Report of the Committee on Bird Protection, Auk, July 1963, LXXX:361. This attractive species is not in immediate danger of extinction. It has, however, long been rated as one of our very rare shorebirds. If a local picture is of interest, we note that each spring this species visits the 7,500 acre Welder Foundation Refuge, 30 miles north of Corpus Christi, Texas, in two's and three's. This past spring from 10 to 45 birds were there nearly a month, and a few remained for more than six weeks."

My records of numbers of Hudsonian Godwits observed on dates and at localities indicated are as follows:

1953: April 18, 4 near Lake Kampeska and 10 at Rush Lake; 4|20, 7 four miles east of Brandt; 4|20, 5 at Clear Lake and flock of 8 flying by.

1954: April 19, 1 on Milwaukee Lake; 4|20, 4 Fox Lake; 4|25, 10 Lake Preston; 5|11, 2 near Thomas; 5|17, 2 Fox Lake; 5|19, 2 Fox Lake and 7 six miles east of Brandt.

1955: April 18, 7 five miles east of Lake Poinsett; 4|25, 3 near Thomas; 4|30, 4 north of Florence and 2 southeast of Bristol; 5|8, 23 ten miles north of Tinkertown; 5|12, 1 at Altamont;

5|13, 2 near Goodwin; 5|15, 5 four miles north of Tinkertown, 2 at school and 3 at Bitter Lake; 5|17, at least 80 on Salt Lake; 5|21, the same; 5|24, about 20 Salt Lake, and 2; 5|25, 2 Lake Norden; 5|29, 4 Salt Lake, and 1.

1956: April 19, about 30 at Hayti; 4|22, 1 Lake Mary, 3 Hayti and 5 or 6 near Thomas; 4|24, 1; 5|10, 1 on Sioux River at Estelline; 5|12, the same; 5|14, 6 or 8 Salt Lake; 5|19, 2 near Thomas and 8 north of the lake near Thomas; 5|23, 4 near Thomas and 10 north of the lake at Thomas; 5|27, 1 at Bitter Lake; 5|29, 4 at Salt Lake.

1957: May 9, 8 near Lake Norden; 5|10, 3 Fox Lake; 16 three miles north of Clear Lake; 5|11, about 20 on Fox Lake; 5|12, 25 Fox Lake; 5|19, 40 at Humboldt; 5|22, 4 at Albee and 1; 5|22, 7 at Tunerville; 5|22, 2 at Tunerville.

1958: May 1, 11 at Salt Lake and 4 Fox Lake; 5|3, 1 at Oakwood Lakes; 5|13, 45 at Fox Lake; 5|14, the same; 5|15, the same or rather more; 5|16, 2 near Colman; 5|19, 91 on Fox Lake; 5|20, the same; 5|16, about 60 Fox Lake; 5|21 and 5|22, about 65 on Fox Lake; 5|24, 24 Fox Lake; 5|25, 14 Fox Lake; 5|27, 3 Fox Lake; 5|28, 3 Fox Lake; 6|1, 1.

1959: April 17, 9 near Lake Cochrane; 4|21, 5 Oakwood Lake; 4|22, 5 east of Clear Lake; 4|23, 1 seen; 4|29, 2 near Thomas; 5|5, 3 Rush Lake; 5|8, 3 Rush Lake and about 6 on Lake Minnewasta; 5|11, 2 east of Altamont; 5|13, few on Rush Lake and 2 near Clear Lake; 5|17, 8 at pond east of Stone Bridge; 5|19, 1 north of Goodwin and 1 west of Watertown and about 12 on Rush Lake.

1960: May 15, About 40 just east of Lake Enemy Swim.

1961: April 26, 11 Rush Lake; 5|8, about 20 Rush Lake and 3 Castlewood; 5|14, 2 north of Clear Lake; 5|15, 4 at Brandt, 13 at Clear Lake and 17 near Clear Lake dump ground; 5|16, 2 four miles east of Brandt and 3 others; 5|19, 3 south of Altamont and 2, also 1 on Rush Lake; 5|21, at Bitter Lake some 40 in restless flight, back and forth several times.

Swainson's Thrush

—Drawing and Etching Courtesy E. W. Steffen

1962: May 12, 16 at Brandt 11:30 a. m. and 3 returned at 4:30 p. m. 5|15, 2 at same spot; 5|18, 2.

1963: April 30, 11 north of Florence and 1 north of Waubay; 5|10, 3 north of Florence; also about 15 same place and 2 west of Florence; 5|14, 1 north of Lake Alice; 5|15, about 8 at the barn two miles north of Florence; 5|25, 4; 5|26, about a dozen two miles north of Florence; 5|29, 3 southeast of Elliott's Bird Haven.—**Brandt.**

Gray-crowned Rosy Finch in the Black Hills

L. M. Baylor

Available records tend to leave unclear whether the gray-crowned Rosy Finch, **Leaucosticte tephrocotis,** is a regular or sporadic winter visitor in the Black Hills. This may be the natural result of having few observers who have been able to do systematic field work in the Hills. If there are others who have observed the Gray-crowned Rosy Finch in this area, undoubtedly, our Editor would welcome the opportunity to publish the records. With the accumulation of other observations, we may be able to move toward a more reliable interpretation of the status of this species in the Black Hills.

Miss Mary S. Heumphreus (**South Dakota Bird Notes,** VI:51) reported a single Gray-crowned Rosy Finch feeding with a flock of Purple Finches on May 24, 1963, at her ranch near Custer, S. Dak. Miss Heumphreus noted the conflicting opinions concerning this species. Over and Thoms (**Birds of South Dakota,** rev. ed., January, 1946) listed **L. t. tephrocotis** as "often seen in flocks in the Black Hills," and the Hepburn's form, **L. t. littoralis,** was listed as "a frequent winter visitor in the Black Hills" and a possible breeding resident "on the western slope of the Black Hills." At the same time, Miss Heumphreus observed that Peterson's **Field Guide** (presumably an early edition) did not give the Black Hills in the range of the Gray-crowned Rosy Finch. The latter commentary is sustained by Peterson's 1961 edition of **A Field Guide to Western Birds.** However, **The A. O. U. Check List** (1957) included "south-western South Dakota (Rapid City)" in the winter range of **L. t. tephrocotis.**

Dr. N. R. Whitney (**South Dakota Bird Notes,** VIII:64) observed four Gray-crowned Rosy Finches on October 20, 1956, feeding with a flock of Oregon and White-winged Juncos four miles south of Gillette Prairie between Hill City and Deerfield (central Black Hills). Whitney also reported the remarks of Harry Behren, Rapid City, to the effect that he had seen the species in the Hills on occasion and that his grandfather, Henry Behrens, collected several specimens in the Hills.

Recently, Mr. Behrens graciously checked the records of the Henry Behrens Collection and found it contained five specimens of **L. t. tephrocotis,** all collected eighteen miles southeast of Rapid City near Spring Creek. Three individuals were collected in November, 1900; one was obtained February 12, 1905, and the last one was collected January 21, 1911. Mr. Behrens also shared the information that Fred Dille, while at the Wind Cave National Park, had sight records of a large flock of Gray-crowned Rosy Finches in the winter of 1912-1913. In addition, the Wind Cave Collection contains two specimens of this species (Nos. 28 and 29) collected in the Wind Cave area on January 21, 1935.

The early months of 1963 afforded Black Hills residents new opportunities to record the presence of the Gray-crowned Rosy Finch in the Hills. Dr. Whitney received reports from Carl Sward and Ralph Hubbard of mid-January observations of the species in the

Custer, S. Dak. area. For Rapid City observers, the most promising report came from Mr. and Mrs. Guy Caple. In January and February, Rosy Finches were rather frequent visitors at the Caple residence about two and a half miles northeast of Hill City, S. Dak. on Spring Creek, the birds being attracted by the excellent feeders maintained by the Caples. However, various members of the Black Hills Audubon Society, on a number of trips to the Caple residence, were unable to encounter the species.

Finally, on February 17, 1963, Duane Baylor and I chanced to find a flock of Gray-crowned Rosy Finches on the North Beach shoreline of Sheridan Lake in the Black Hills. The temperature was about 35° F; the sky was mildly overcast, and the lake was frozen to a depth of about two feet. Most of the ground was covered with snow, but the gravel shoreline was open. Close-observations with 7x35 binoculars and a 20x scope continued from 3:15 p. m. to 3:35 p. m.

While on the ground, the closely-knit flock was constantly on the move, pecking at the gravel surface. Since a later walk over the area gave us no indication of available food, it is assumed the birds were simply gathering small bits of gravel. Because of the flock's constant movement, a precise count was never achieved, but a number of counting efforts yielded an estimate of seventy-five to eighty individuals. Two races were present—the typical Gray-crowned Rosy Finch and the Hepburn's form, the latter having the gray head patch extending down across the cheeks to the throat. The flock's ratio was estimated at one Hepburn's Rosy Finch to five of the typical Gray-crowned form.

Our nearness to the flock yielded distinct observations of the pink wash on the wings and rump, causing us to appreciate the appropriate common name of this species. While our proximity did not disturb the birds, they were quite skittish about the movement of cars on a nearby road, which caused closely-grouped flights out over the lake, the finches returning to the beach after the cars had passed. These flights gave us an impression of lighter-colored feathers in the wing-linings, which flashed to the observers as a misty gray when the birds were in flight.—**L. M. Baylor, South Dakota School of Mines and Technology, Rapid City.**

Long-eared Owl

—Drawing and Etching Courtesy E. W. Steffen

Trumpeter Swans at Lacreek Natl. Refuge

Jerry J. Schotzko, Acting Manager

The Trumpeter swan transplant program, which brought the rare cygnets from Red Rocks Refuge in Montana to Lacreek National Wildlife Refuge in 1960, 61 and 62 can be termed a success. Twenty-six of the swans have been released and 10 are being held for release in 1964. The birds, none of which was over three years old in the spring of 1963, adapted themselves well to their new habitat. At least three definite pairs were established and two of the pairs nested on the refuge. This is the earliest known nesting for trumpeter swans. Usually breeding age is four or five years.

The first nest, located on a muskrat house in a remote part of the refuge's pool 7, contained eight eggs. On or about May 24 five cygnets hatched. Four of the young swans were observed with their parents on May 28. One cygnet was later found dead in the nest along with three infertile eggs. Three of the cygnets were not seen again and their fate unknown. Throughout the summer one cygnet was frequently observed on pool 7 with its parents. By September 1 this cygnet was nearly as large as the adults, although it retained the gray-brown coloration characteristic of immature swans.

The other swan nest, on a muskrat house in pool 9, was about one-half mile from the nearest dike or road. The best observation point during incubation was the tower at refuge headquarters. Six eggs were observed in the nest on June 8 when a check was made by boat. Four of the eggs hatched June 15. A check later revealed that at least one young had died in the nest. One of the remaining eggs contained a well developed embryo and the other was infertile. On June 18 the two adults were observed with a single cygnet on pool 9. Frequent observations were made of this group throughout the summer, although it was impossible to get photos without telephoto equipment.

By October 1 both cygnets were flying. When cold weather set in in early December they frequented the display pool at refuge headquarters and fed with the ten captive swans.

Both of the nests were in similar habitat, a muskrat house surrounded by about ten feet of open water in a dense stand of bulrush, bur reed and cattail. This type of habitat is plentiful in nearly all of the refuge pools. However, the size of the territory defended by the mated pair and the amount of human disturbance they can tolerate will determine the number of nests which the refuge can support. In late July three swans were observed flying over pool 9. One of the pair took to the air and pursued the three for about one-quarter mile before it circled back to its mate and their cygnet. Both of the nests were observed by boat before hatching but the swans returned to the nests within two hours.

The third mated pair of trumpeter swans made courtship displays in the headquarters area and then moved to pool 6 where they remained the rest of

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Birding in the Black Hills

Blanche Battin

AT THE foot of the north slope of Harney and Elkhorn Mountains, in the Black Hills of South Dakota, lies a lovely valley. A creek runs east down the valley and rocky out-croppings appear like sentinels above the woods. Ponderosa pine and aspen trees predominate here and when I arrived at Palmer Gulch Lodge June 29, 1963, wild flowers were thick on the mountain slopes and a lush growth of red and white clover was knee high on the meadow.

The Black Hills have always been a favorite vacation spot of mine because it is so different from our Eastern South Dakota plains. The bird life differs too although many familiar species are to be found here.

My rented cabin was located on a rocky ledge overlooking the meadow, Mt. Harney and Mt. Elkhorn. Relaxed on the porch I heard a Maryland Yellowthroat sing "witchety-witchety-witchey" down by the creek where they nest. A call of "peeer" came from the pine in front of the cabin and there was the Western Wood Pewee which has a duskier breast (a bit like an open vest) than the Eastern Pewee and a short husky call which drops a trifle at the end.

The Violet-green Swallows cutting figure eights over the cabin and down the valley stopped occasionally to rest on a wire and show their white breasts with the white extending above the eye and the two white marks on each side of the rump. They were nesting in a bluebird house fastened about seven feet up on a tall pole a few feet from my cabin.

A rapping on a tree called me to the door to see who was there. Bark fell and then I located the noisy one—a White-breasted Nuthatch. A flip of wings and right in front of me not four feet away an Audubon warbler perched and looked the situation over. Much like the Myrtle Warbler at first glance, the Audubon has a yellow top-knot, rump, and side markings but its throat is yellow where the Myrtle's is white and it has a white wing patch while the Myrtle Warbler has wing-bars. Its song is made up of several down notes, sometimes with an upward "teeer" at the end. This I learned only after getting many kinks in my neck for the Audubon Warbler loves to feed in the very top of the tall pines.

The Mountain Bluebirds which used to nest in the pines in front of the cabin now nest in a bluebird house a little way up the valley. These beautiful sky-blue birds lack the red breast of the Eastern Bluebird. The male has a light blue breast, head, and back while the female is brown with a touch of blue on the rump, tail, and wing tips—as though the male had been painted first and the little paint remaining in the brush wiped off on the female.

Early next morning while walking near my cabin I heard the broken phrases of the Plumbeous Vireo's song. A pair was nesting in a pine tree. The nest, a small gray pouch hanging from a pine bough, barely showed from my distance of twenty feet. I would not

have seen it if these friendly birds had not shown it to me.

The Plumbeous Vireo is one of the larger vireos with a light gray head and back, with darker wings and tail. It has white wing stripes and white spectacles. Its beak is thick, black and down curved on the tip. I heard it frequently while hiking about the valley. The Warbling and Red-eyed Vireos were present too but were not heard as often.

The Ovenbird, that warbler with the orange head stripe and thick splotchy stripes on the breast, could be heard singing in every gulch I explored, each phrase of its song progressively increasing in volume. I had not realized it nested here. Walking into a clump of aspen trees for a look at the Ovenbird I flushed two White-winged Juncos. These are like the Slate-colored Junco with a thin white wing-stripe. Several years ago hiking up Sunday Gulch to Sylvan Lake I saw Juncos with a wider white wing stripe but have never seen them elsewhere.

The only robins around the cabin had no white marks on the tail and so, presumably were the Western Robins. Their overall appearance was dull, compared to our Eastern Robins.

Hiking across the meadow the first day, I had just reached the one-plank bridge across the creek when a whir and call of "peet weet" sounded and two sandpipers lighted on a muddy bank down the stream. Their size, darkish backs, light breasts and teetering action told me they must be Spotted Sandpipers, although they lacked the identifying spotted breasts of breeding Spotted Sandpipers. This was the first time I had ever seen sandpipers in this area.

Up the creek a Belted Kingfisher sat on a short dead branch and dived for fish. The Yellowthroats sang all along the way and the Red-winged Blackbird's rasping call came from their pool across the valley. Looking for two McGillivray's Warblers that three years ago had scolded me for walking near their nest, I searched far up the gulch but could not see or hear them anywhere. But from high up the hillside came the lovely song of the Swainson's Thrush.

Hairy Woodpecker turned up at the cabin the next day, his noisy agressiveness making the White-breasted Nuthatch seem a timid soul and, while hiking to an abandoned gold mine, I saw a Redtailed Hawk circle high overhead. A few days later I had a closer view of a Red-tailed Hawk and saw it had the light coloring of the Krider's Red-tail.

Twice the Yellow-bellied Sapsucker crossed my path. Both were males with a verticle white wing patch and black and red markings on the head. The blood red patches being both on the throat and on top of the head.

The Red-shafted Flicker flew about the lodge daily but it was several days before he sat where the red coloring of the under tail and wing feathers and the red mustache on his face could be seen clearly. Siskins chatted and flew busily from pine to pine. Occasionally the Chickadee and House Wren could be heard.

Once more I hiked up the creek to look for McGillivray's Warblers. An Eastern Phoebe, no wing bars or eye ring, sat on a tree over the trail and flipped its tail. The rusty capped Chipping Sparrows sang their cricket-like

BIRDING
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Huron Robin Banding

Summary by Years

George Jonkel & J. W. Johnson *

BANDING RECORD

Year	Imm.	Adult	Total	Percent Adult
1959	429	322	751	44
1960	983	514	1497	33
1961	916	431	1347	32
1962	1495	360	1855	19
1963	1064	442	1506	29
Total	4887	2069	6956	30

REPEATS, RETURNS, AND RETRAPS

	Year Banded: 1959				1960				Totals Prior Year†	Totals Current Year
	Imm.	Adult	Total	%Ad.	Imm.	Adult	Total	%Ad.		
1959	28	6	34	18					0	34
1960	9	4	13	31	95	16	111	14	13	124
1961	8	5	13	38	46	30	76	40		
1962	—	1	1	—	23	23	46	50		
1963	1	—	1	—	17	6	23	26		
	Year Banded: 1961						1962			
1961	85	16	101	16					89	190
1962	20	19	39	50	148	18	166	11	157	252
1963	18	16	34	47	55	20	75	27		
	Year Banded: 1963									
1963	162	17	179	9					133	312
							Total to Date		392†	912

COMPARISON OF PERCENT OF ADULTS IN REPEATS WITH TOTAL BANDED

Year	Repeats % Adult	Total Banded % Adult
1959	18	44
1960	14	33
1961	16	32
1962	11	19
1963	9	29

* The authors wish to say that, but for the willing and continual assistance of Jean Jonkel, Blanche Battin, and Lucille Johnson, as well as the Jonkel children, this work would not have been possible.

† The significance of this column is that these birds have all made at least one annual migration and returned to the point of banding.

The Ornithology

of

The Great Plains

with

Special Reference to South Dakota

By Herbert Krause

Sioux Falls, South Dakota

—1964—

The Ornithology of the Great Plains with Special Reference to South Dakota

ONE does not have to read far in trans-Mississippi literature to realize how important the Great Plains are, not only ornithologically but geographically and topographically.

Geographically, the Great Plains lie in a mighty belt extending from Texas to the Canadian border in the United States and beyond the Saskatchewan River in Canada. On their eastern side they include western sections of Oklahoma, Kansas, most of Nebraska, about half of South Dakota and a corner of North Dakota. On their western border they include eastern portions of New Mexico, Colorado, Wyoming and Montana. This is the area properly called the Great Plains.

East of the Plains lie the Great Prairies which encompass eastern areas of Kansas, Nebraska and South Dakota, and nearly all of North Dakota. This vast land region slants toward the Mississippi River generally and spills over into Illinois, Indiana and the western part of Ohio to form the Great Plains environment or complex.

The term Great Plains, as used in this paper, follows the monumental studies of Walter Prescott Webb of the University of Texas, and considers both the Great Plains proper with their northward extensions and the Great Prairies as one great environmental unit. However, for practical purposes, only that portion lying west of the Mississippi will be considered in detail. The two land regions form a terrace sloping from the Rocky Mountains to the Mississippi.

In South Dakota, this long lean to the eastward is dramatically illustrated. Thus, Moran, Wyoming, on the edge of the Tetons, lies 6742 feet above sea level; Cody declines to 5016 feet, Buffalo 4645 and Gillett 4544. In South Dakota, Rapid City's 3231 feet above the ocean slants to Pierre's 1490 feet and Sioux Falls' 1440 feet.

Since the terrace of the Great Plains slopes gently eastward, the rivers drain their watersheds by taking a generally easterly direction to merge at last in the southward flowing Mississippi River. This is important in any study of the ornithology of the Great Plains. In South Dakota the rivers to the west of the Missouri flow eastward, following the slope of the Great Plains themselves. East of the Missouri, however, they flow southward—the James, the Vermillion, the Big Sioux; an ancient geographical upthrust in the northeast, providing the state with its morainic complex of potholes and sloughs, also provides a share of the height of land with its southerly inclination.

Ornithologically, the vegetation of the Great Plains is important, for in a large measure it determines the kind of bird life found there. Instead of tall trees, abundant understory and extensive brushy edges, as is characteristic of the Forested area, the Plains are, for the most part, treeless. Only in the valleys of the rivers and their tributaries does one find timber of any conse-

quence. Woody plants, shrubby and small in size, are found in valleys or in low-lying areas. Over all the region spreads the endlessness of grass, the dominant growth of the Plains. It too, however, reflects the variegated character of this land region. From east to west there are first the grasses of the Prairie Plains—the blue-stem sod, the blue-stem bunch grass, the needle and the thin-stemmed wheat grasses. The very names—sod, bunch grass, needle grass—dramatize the soil and climatic conditions in which they flourish. Blue-stem bunch grass is characteristic of central Kansas and Oklahoma while blue-stem sod, needle and wheat grasses cover vast stretches in the northern states. All three appear in eastern South Dakota; their range extends apparently no farther west, however, than the James River.

West of the Prairie grasses rise the short or Plains grasses—gramma, galleta, buffalo and mesquite. Thanks to the movie and the novel, "mesquite" is almost a symbol of the desert or desert-like environment. It is found in western Texas, in southern New Mexico and in Arizona. But the gramma and buffalo grasses extend in a wide belt from Texas and Oklahoma northward, touching eastern Colorado and Wyoming, western Nebraska and fanning out widely into South Dakota where generally it merges with the Prairie grasses in a line drawn roughly north and south through Mitchell.

Thus, South Dakota participates in a great measure in the types and changes of vegetation from east to west which one finds in the Great Plains generally. The state is largely treeless except in valleys and ravines where flourish cottonwood, scrub oak, box elder and willow. In moist draws and hollows grow such plants as wolfberry, silverberry, buffaloberry, sumacs and wildrose. Prairie grasses—blue-stem sod, needle and wheat—merge with the Plains grasses—gramma and buffalo grasses—beyond the James River.

The effect of such a vegetative environment upon bird-life can be seen immediately although its total effect is probably less readily recognizable. Birds dependent upon forests or the edges of woods, such as the greater number of Passerine forms—warblers, vireos, tanagers, kinglets, thrushes, and the like—are at once ruled out for lack of suitable habitat except that minority group as to species and number which inhabits valleys and low-lying sheltered places. Deep water birds will be absent; so will certain of the duck family. And those birds which find large trees indispensable will naturally be excluded. Thus the habitat—the kind of vegetation flourishing here—will have important determinations upon both species and numbers of birds.

Species which have adapted themselves to a habitat of grass, long, short or intermittent; to a habitat of bushy growths in draws and valleys; to trees along the streams; to cat-tail and wide-grass islands on the prairie landscape—such species will be found as resident populations. One example of this habitat would be the so-called pothole country, extending from eastern Kansas northward through eastern Nebraska into South Dakota where sloughs and small bodies of water increase in number until they seem to reach a kind of maximum number in northeastern South Dakota and well into North Dakota. This is one of the Prairie segments of the Great Plains, a prime and almost unparalleled example of habitat for waterfowl and wading birds. South Dakota is famous nation-wide for just such habitat. In such Prairie environment are found large waders such as Sandhill Crane, Whooping Crane, American Bittern; waterfowl such as Trumpeter

Swan, Canada Geese and a great variety of ducks—Mallard, Pintail, Blue-winged Teal, Shoveler, Gadwall and the like; smaller waders such as Willet, Marbled Godwit, Avocet and Wilson's Phalarope. The dryer areas support abundantly such upland birds as Greater and Lesser Prairie Chicken, Sharp-tailed Grouse, Bob-white Quail, Long-billed Curlew, Upland Plover. In various transitional niches are found Savannah Sparrow, Grasshopper Sparrow and their relatives; Chestnut-collared Longspur and Lark Bunting.

Such is an inadequate description of the Great Plains; such are the avifaunal forms which are found in this habitat. That it was a productive habitat, one conducive of great populations is indicated by the reports of the earliest explorers to this area—reports of abundance that filled the first beholders with amazement and brought charges of downright falsehood from listeners who heard or read the first reports.

I think one cannot emphasize too strongly the role of habitat in the abundance of the avifauna during the early history of the Plains; one cannot repeat too often, I believe, the fact that habitat played a most conspicuous part in the maintainance of the level of bird and mammal populations, described by the pioneers upon the Plains as teeming in myriads upon the wide spaces. Official reports, semi-official records, the narratives of adventurers, the accounts of journalists and magazine writers and the letters sent back home—all agree that the areas beyond the Mississippi were indeed a paradise of game, for in those days few animals indeed were non-game. Robins, bobolinks, bunting, curlews, killdeer, as well as song birds —all were considered delicacies for the well-developed gourmet tastes of the time.

The Great Plains are important not only for the bird-life of the immediate historical past but also for bird forms of the remote geologic ages. One such geological species is **Hesperoranis**, "western-bird," a name given to what is apparently the third oldest avian fossil known. This large bird, some five feet in length, resembling a loon or a cormorant, is from Upper Cretacious geological period and lived perhaps 100-million years ago. According to Wetmore's CHECK-LIST OF FOSSIL AND PREHISTORIC BIRDS OF NORTH AMERICA (1956), it was found in the shale beds of Logan County in western Kansas. Another fossil bird from the Upper Cretacious is **Ichthyornis**—"fish-bird" so-called,—which apparently was gull-like in size and habits. This too was found in the shale beds of western Kansas. Of modern forms the Great Plains has contributed such fossil species as an Eared Grebe from Sherman Country, Kansas, a vulturine and a kite-like form from Sioux Country, Nebraska, to mention several among many.

South Dakota too is well known for its paleontological findings. (See Bird Notes Vol. XIV:14). Eleven bird fossils from the western part of the state are listed in Wetmore's CHECK-LIST, including a tree duck and several teal-like forms, Old World vulture forms, buzzard and eagle forms, a grouse of the Genus **Tympanuchus** from which apparently also descended our present-day Prairie Chicken or Pinnated Grouse; and an owl form of the Genus **Stryx** in which we find at least one contemporary species, the Barred Owl, once common in the state but now seen with ever decreasing frequency.

It is a long step from the prehistoric imprints in the Pleistocene, less than a million years ago, to the historical record of yesterday; or, to be factual, to 1794, when the historical record begins for South Dakota, as I tried to point out

in an article, "Ornithology in South Dakota Before Audubon," in Proceedings, The South Dakota Academy of Sciences (1956). That year, 1794, may very well be one of the first dates in ornithological recording for the Plains area. From that year onward as hardy men pushed up the rivers—the Missouri, the Arkansas, the Platte—and extended their exploratory efforts more and more from the rivers out onto the plains the accounts from the western country abound in reports of the bird life on the Great Plains: Trudeau in 1794, Tabeau in 1803, Lewis and Clark in 1804-06, Pike in 1806 on the Osage River in Missouri, Long in 1820 up the Platte, Washington Irving, the famous writer, in 1832 on the Kansas and the Canadian Rivers. After 1832 there are dozens of journals including Parkman's travels in 1846 which enriched American literature when they were incorporated in his the Oregon Trail in 1849.

Tabeau, the narrator of the Loisel Expedition to the Arikaree Nation, was one of the first to describe the fauna of the Upper Missouri region. In 1803 he found "plovers in abundance in spring" and "the pheasants (grouse) in every season abundant. The hawk, the merlin (Pigeon Hawk), the crow, the owl and other similar birds are very common." In 1820 Capt. John Long wrote, "The country along the Platte is enlivened by great numbers of deer, badger, hares, eagles, buzzards, ravens and owls." On the headwaters of the Arkansas. Washington Irving in 1832 saw "flights of Carolina Parakeets," . . . "flocks of turkeys and ducks" . . . "herds of elk." Parkman in 1846 describes a "multitude of quail plaintively whistling" at Westport, Kansas, the jumping-off place for western regions at the time, a part of west Kansas City now. At St. Louis, he notes, "The country overflows with game." Near Brule, Nebraska on the South Fork of the Platte, June 6 he saw Burrowing Owls and wild geese. In western Kansas on the Arkansas River on September 4 he recorded "clouds of buzzards."

Keen-eyed men like John Bradbury, traveling up the Missouri in 1811; naturalists like Audubon, ascending the same river in 1843, all exclaimed in amazement at what they saw: "acres of wild geese rising from sandbars to form soldier-like lines in the sky;" "herons, cranes, geese, swans, ducks and all other kinds of water-fowl abounding in the greatest quantities." Prairies swarmed with Prairie Chicken and quail; in certain areas, particularly where there was considerable brush and timber, wild turkeys were so numerous that their gobble was continuous; great sections of the timber along small creeks served as gigantic turkey-roosts. "Migrations of Passenger Pigeons were so heavy that the continual flight darkened the sky and when they alighted on the ground they covered whole acres;" "Swallow-tailed Kites sailed like great Swallows." In the tall trees Carolina Parakeets were flashes of green and yellow, flocks of them. Such were the panegyrics about the abundance of game.

In the 1850's Col. Richard Dodge found the deer in Texas as abundant as jackrabbits in North Carolina. "Turkeys appeared in such flocks that I used occasionally to kill them with a stick from horseback," he writes. In the sixties he found the Plains well supplied with Sharp-tailed Grouse; they were plentiful as far east as the Missouri River, he advised his hunting friends in New York. He told of a soldier in his command who "bagged 26 turkeys from one tree without changing his position." Plovers, that is, Upland Plovers, he

notes, "collected in flocks almost innumerable."

In 1868 Mrs. Elizabeth Custer, wife of the commandant of the ill-fated Little Big Horn expedition, who spent a winter on Big Creek, Kansas, writes that in the Antelope Hills "the trees were black with wild turkeys;" "trees were weighed down to the end of the branches" with the birds. One can scarcely find a narrative of the period between 1820 and 1870 without finding equally startling illustrations of the immense swarms of game populations teeming upon the Plains. Everyone is familiar with the reports of vast herds of buffalo, sometimes so huge as to halt railroad trains; herds of antelope and elk; bears leaving their tracks on the muddy edges of every stream, it seemed.

As South Dakota is a part of the environment of the Great Plains complex, so it is a participant in the profusion of its faunal life. The state was one of the great buffalo pastures of the west. Red River hunters came as far as Mobridge—the Mandan and Arikaree villages—in 1804 to stock their winter larders. In 1845, Lieut. Allen, exploring the country westward from the Des Moines River to the Big Sioux River, found that buffalo were in sight from the moment he struck the river. He found "more than 100 buffaloes" at his encampment near the Sioux Falls and shot three. But "we might have killed hundreds by delaying for that purpose," he continued. On the lower Big Sioux he found elk, some herds numbering a hundred or more. Col. Dodge found the Ruffed Grouse so plentiful in the Black Hills in 1874 that his command killed a large number without difficulty, although the cover was brushy and exceedingly thick, he writes in **The Black Hills** (1876). In September 1843 Audubon on the Missouri saw Passenger Pigeons on the Little Missouri River in North Dakota and flocks of them on the Moreau in South Dakota, as well as numbers all the way down stream to St. Louis. In 1856-57 Lieut. Warren's expedition found them at the mouth of the Big Sioux. In the fall of 1877 Dr. Charles McChesney, the post surgeon, saw Passenger Pigeons "taken in numbers" at Fort Sisseton in northeastern South Dakota. As late as 1885 G. S. Agersborg, writing in the **Auk**, reported them in the Missouri River bottom lands in Clay County.

Carolina Parakeets, as Audubon painted them, were green-bodied birds with yellow heads over which ran a broad red band well down below the eye. They ranged widely along the Mississippi, chattering wildly as they flew; like the Passenger Pigeon they found the wooded river valleys attractive. In 1832 Irving found them as far out on the Great Plains as the Cimaroon River in eastern Oklahoma. They were still seen in flocks in Decatur County, Iowa, in 1872, and in eastern Kansas in 1873. Travel accounts abound in reports of the "little parrots," as they were called, and the numbers seen on the Missouri. Like all members of the family, they had shrill, high-pitched, squeaky calls which once heard are not likely ever to be forgotten. I shall never forget the shrieky cries of the Meyers' Parrot which I heard on the Crocodile River in South Africa. In 1843 Audubon saw flocks of the parakeets at Council Bluffs; he noted them in South Dakota near the mouth of the White River. Swallow-tailed Kites ranged widely over the Great Plains, especially along rivers like the Arkansas; their white heads and underparts, their black wings and long black forked tails, their buoyant swallow-like flight were an unforgettable sight. They were common

along the Missouri. During the entire winter of 1875-76, Dr. McChesney saw them at Fort Sisseton. They were seen on the James River in 1885. Agersborg reported that "a few spend the summer here (in Clay County), have no doubt that they breed across the Missouri River in Nebraska." And Visher, writing in the **Auk,** reports that as recently as 1910 one was shot near Vermillion, a specimen now in the Over Museum at the University of South Dakota.

According to all available evidence, the Whooping Crane nested as far south as Iowa and Nebraska, including South Dakota. The moist and watery places of the pothole country were ideal for its breeding. In South Dakota Dr. McChesney reported it only in spring and fall migration for the Coteau area but Trippe recorded it as nesting in Minnesota in 1871 and in Iowa in 1872. Adrian Larson's article on the birds of Sioux Falls in **Wilson Bulletin** recounts the shooting of a Whooper a few miles northwest of the city "a few years before 1916."

The Sandhill Crane, a prolific breeder, nested well into Nebraska and Iowa. Its flocks in thousands in spring and fall migration, its dancing courtship were a common sight on the breeding grounds. In South Dakota it nested in the Coteau area near Fort Sisseton during 1875-76, writes Dr. McChesney; in 1885 Agersborg reported it breeding in Clay County; in 1910 Tullsen reported it visiting at LaCreek in Martin County in huge numbers; in 1915 Visher found nests in Sanborn County and called it "a tolerably common breeder."

Smaller birds, less dramatic, but just as important in the whole picture, nested over the prairie swales—Bobolink, Lark Bunting, Lark Sparrow, Swamp Sparrow, Chestnut-Collared Longspur, Sprague's Pipit, to mention only a few. A great many of the birds found on the Great Plains are found in South Dakota as residents in suitable habitat, as migrants, or as individuals in post-nuptial dispersion. Exceptions are the large number of southern species such as Verdin and its relatives, Scissor-tailed Flycatcher and its southern allies, Elf Owl and other strigid forms, Gambel's Quail and its phasianid relatives—a sizable list which is restricted to the southern reaches of the Great Plains.

Again one must stress habitat as one of the dominant features absolutely necessary for nesting as it is for migratory stop-overs or post-nesting expansion or winter ranging. Habitat is basic to all other considerations in any study of the birdlife of an area, large or small.

Such was the optimistic situation historically, such was the rosy picture in the immediate past of our Great Plains record. What it is today is only too tragically well-known. It probably serves little purpose to mourn over the errors of the past. What is tragic is that man seems to learn so beggarly little from the experiences of the past. Only in the slow accretion of trial and error does one see an attempt to correct the faults of antecedent generations. Then it is usually late if not too late to benefit man or the object of his mistakes; then it is only because man himself feels the constricting consequence of his own stupidity.

If one is at all sensitive to what Christians call God's creatures, the wild animals, one can hardly feel comfortable at the thought that buffalo roam no more, that the elk on the prairies trumpet their silver bugles no longer, that the antelope on a thousand prairie rises will never flash their white rumps again.

Buffalo as wild animals can be count-

ed among the extirpated species on the North American continent. They were slaughtered out of a wantonness that makes one wonder whether savages or the descendants of civilized Europeans marched against them. Ruthlessly were they mowed down, shot even from coach windows of trains by pleasure-loving sportsmen. They were taken by professional hide hunters who ripped off the skins and left the carcass. Near Wood River, Nebraska, in 1860 "rotting buffalo dotted the prairie so that the whole area stank." And many sections along the South Platte River in 1873 were "rank with odor of decaying buffalo."

Nor can the blame be laid entirely upon the hunter whether professional or not. The plain truth is that it was allegedly government policy to destroy the buffalo in order to bring the Indian under control. The testimony of Representative Garfield of Illinois was inserted in the CONGRESSIONAL RECORD in 1874, when a bill was reported out by the Committee on Territories "to prevent the useless slaughter of buffaloes within the Territories of the U. S." Said Garfield, "The very best thing that could occur for the solution of the difficulties of that (the Indian) question . . . would be that the last remaining buffalo should perish . . . so long as the Indian can hope to subsist by hunting buffalo, so long will he resist all efforts to put him forward in the work of civilization . . . he will never take a step toward civilization until his savage means of support were cut off . . . The Secretary of the Interior would rejoice so far as the Indian question is concerned, when the last buffalo was gone."

What the Secretary of the Interior really said is included in his ANNUAL REPORT FOR 1873: "I would not seriously regret the total disappearance of the buffalo from our western prairies, in its effect upon the Indians, regarding it rather as a means of hastening their sense of dependence upon the products of the soil and their own labors."

However, misgiving must have filled several Congressional hearts. Representative Ford said, "I am not in favor of civilizing the Indian by starving him to death." Said Representative Eldridge: "The Argument, Mr. Speaker, is a disgrace to anybody who makes it." The bill to prevent the slaughter was passed. It was sent to President Grant for his signature. But the President pigeon-holed it—and the slaughter went on.

Apparently the army was not wholly uninterested in this question. In 1874, after the southern buffalo herd had been virtually exterminated, the Texas legislature met to pass a bill outlawing the hide hunter. At once the legislature met the opposition of General Philip Sheridan, General of the Army, then in command of the southwest division. "You ought to thank the hide hunters," he told the legislators. "Their men have done more in the last two years, and will do more in the next year, to settle the vexed Indian question than the entire regular army has done in the last thirty years . . . let them kill, skin and sell until the buffaloes are exterminated." The Texas legislature did not pass the bill.

Not only the hunter but official opinion must also face the consequences of unenlightened attitudes toward wildlife conservation. Official opinion, almost always selfish in its desire to achieve its own ends rather than to consider ultimate goals, certainly leaves the average citizen often in a state of complete bewilderment.

In 1949, when the South Dakota Ornithologists' Union held its formative meeting in Sioux Falls, a representative

of a government agency concerned with proposed empoundments on the Missouri River, addressed the meeting. At that time there was concern about the Missouri reservoirs and the destruction of habitat along that stream. The representative of official opinion, himself not the author of the speech but merely the speaker, read the official opinion to the members: "It will certainly be a new day for ducks in this region when the thousands of acres of new water are a reality . . . River improvement work in the State will increase the total square miles of water by about 71% (551 square miles). This increase will certainly have a beneficial effect upon waterfowl populations of the region . . . Large reservoirs with indented shore lines are ideally suited for duck mating . . . The South Dakota reservoirs will offer duck and goose environment with shelving flats and bars, sloping shores, shallow and deeper areas, and wind protected bays and coves . . . it will be a veritable haven for ducks and geese . . . large bars and shallow water cut-offs and ponds will be used by resting water fowl. Aquatic food in sufficient quantities will be available."

When individuals who had made some study of habitat pointed out that it might take a long time before the bars and resting places would provide those organism which make such places attractive, the question was brushed aside as unimportant. When it was pointed out that in other reservoirs, the shelving flats would remain mud bars for years, with scarcely a sign of aquatic life on them, and that it might take a hundred years or more to build up such places with that animal and vegetative life which the goose desires, the subject was allowed to die of inertia.

That was in 1949. Now, in 1963, anyone who wishes to know how accurate alleged official opinion was, need only consult the tabulations of goose and duck populations, compiled from official sources, which appear in the newspapers.

A study of the ornithology of the Great Plains shows clearly that while we can rejoice in the species and numbers which still remain with us, the optimism must be tempered with the cold fact that we have lost many species and that population numbers have been drastically reduced. Some species have declined so much that they are extirpated from areas where they were common forty years ago. What is true of the Plains in general is true of South Dakota also. To bring the matter closely home, Lark Bunting, Grasshopper Sparrow, Burrowing Owl, Bob-White, Chestnut-collared Longspur and Wood Thrush, to mention only a few, used to nest in the Sioux Falls area. There has been no report of actual nesting of any of these species since 1949, at least.

Today some species are already completely lost to us as residents. Once all nesters in South Dakota, the following must now be considered as extirpated as wild birds from the state: Whooping Crane, Sandhill Crane, Canada Goose (except captive and semi-captive birds on refuges), Trumpeter Swan, Swallow-tailed Kite, Passenger Pigeon, Wild Turkey (except those introduced in the Black Hills for sporting purposes), Raven, McCown's Sparrow, Osprey, Sprague's Pipit. All were reported nesters at or just before the turn of the century. All are gone as nesters today.

Migratory species lost to us must include the Hudsonian and Eskimo Curlews, once reported on the prairies in large numbers. Birds drastically reduced in number and in range are Burrowing Owl, Chestnut-collared Longspur, Swamp Sparrow, the Golden

and Black-bellied Plovers in migration, the Long-billed Curlew and the Sage Grouse.

However, the Cardinal has steadily advanced both as a migrant and as a nester. In South Dakota it now breeds as far north as Madison and is seen at various seasons of the year in nearly all parts of the area east of the Missouri and occasionally west to the Black Hills. However, Beddall's study in the **Auk** (June, 1963) indicates its decline again, possibly because of the destruction of winter habitat along the Missouri River. The Wood Thrush, whose song is one of the most inspiring one can hear in the forest, nested until recently in the Sioux Falls area. In 1916 it still nested in the Big Sioux bottoms near Newton Hills. I heard it sing there in June of 1956, but found no evidence of nesting. Extensive road improvements some four or five years ago, cleared away the understory in which it likes to nest. The song of the nesting Wood Thrush will probably be heard no more in South Dakota.

The loss is irreparable, if we still are human beings. The consequences, however intangible, may be greater than we are willing to admit. "Can society," asked the editor of the **Christian Science Monitor**, commenting on the near-extinction of the Whooping Crane, "can society, whether through sheer wantonness or callous neglect, permit the extinction of something beautiful or grand in its own character?" The answer to this query may lie in the search each man makes of his own soul—if he has the integrity to face reality. The answer may also lie in the uneasy probing now being made into the national conscience and character and the reluctance many feel about evaluating the exposure.

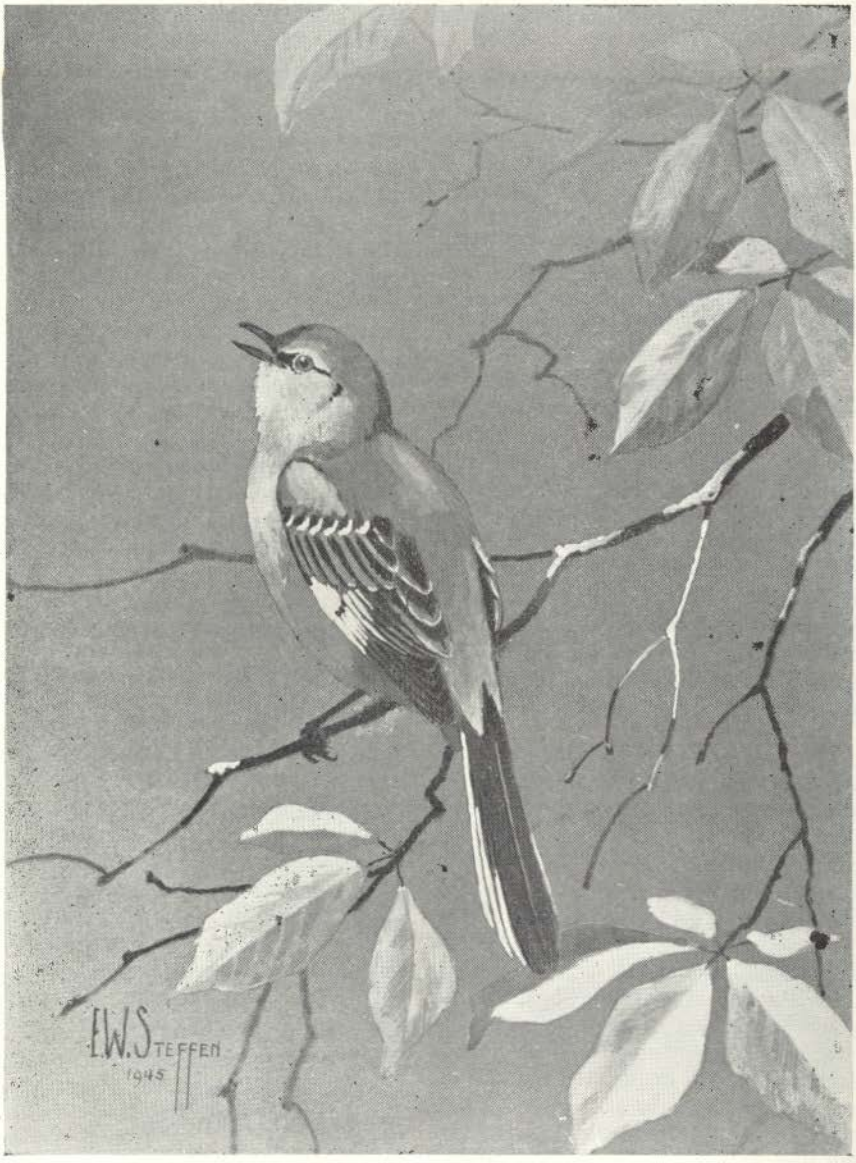
However, if our words are sincere, if we really want to save what still remains, then it now behooves us to study the Great Plains, to become familiar with the habitat of the terrain and better acquainted with its avian inhabitants.

The final choice, however, lies with the people of the Great Plains and of South Dakota. Theirs is the choice. They can preserve what habitat remains; they can enlarge that habitat wherever it is possible. They can inform themselves and educate their neighbors. They can insist that official opinion be based on enlightened leadership and work in harmony with state and local conservation groups. They can do this, or they can watch the disappearance of species after species of bird and mammal as now they are watching the decline of the Whooping Crane, the Masked Quail in New Mexico, the Atwater's Prairie Chicken in Texas. All are being extirpated because their habitat is being changed.

A re-thinking of our hunting practices too seems in order. We have been hunting on the premise of abundance. But the abundance is already gone, tragically, irrecoverably gone. Hunters must adapt themselves to hunting on the premise of scarcity, of making a little go a long way. At the very time when hunters are increasing year by year, game bird and other species are decreasing year by year, available habitat is decreasing year by year. It is not likely that ducks and geese will nest on the asphalt pavements or in the concrete highway cloverleafs.

Where is our courage, our initiative, our inspired leadership?

The Ornithology of the Great Plains once amazed the world. Today the ornithology of the Great Plains amazes few indeed. Tomorrow the ornithology of the Great Plains will amaze—whom? —**Sioux Falls.**



Mockingbird

—Drawing and Halftone Courtesy E. W. Steffen

Trumpeter Swan

(Continued from Page 8)

the period. This pair was often observed on the dike 6 road and had to be chased off the dike to permit vehicles to pass. They would usually follow for a short distance.

The remainder of the free flying trumpeter swans left the refuge shortly after breakup last spring. Reports were received through the summer from ranchers and individuals in the Kadoka-Philip area and as far to the west as Wall, South Dakota, 100 miles.

As far as we know none of these swans nested but would whistle stop from stock dam to stock dam. Eleven of the wayward birds had returned to the refuge by December 1. We hope that the rest will also return to winter here.—**Lacreek.**

* * *

Birding

(Continued from Page 10)

song. A Red-Breasted Nuthatch searched the tree trunk and chattered.

In a narrow gulch two flycatchers called to each other. I waited and finally saw one of them. It was small in size, about five inches, with a white eye-ring, white wing-bars and an overall yellow wash of color. Probably a Western Flycatcher, one of the Empidonax Flycatchers; I wished for someone to coroborate the identification. All these I saw, but no McGillivray Warblers.

Near the end of my stay at the lodge, Mr. and Mrs. Guy March of Rapid City and I drove a mile or so up the valley, and then hiked up a lovely gulch toward Harney Peak. A stream flowed down the gulch, unidentified wild flowers enticed us on every side, the pines pointed the way up, up the mountain. Far up we could hear the Swainson Thrush singing its liquid song. A delightful spot and it was here in the bushes by the creek that we heard birds calling and a flash of yellow. I looked through my binoculars and there were two warblers with yellow breasts, olive backs, wings and tails, gray cowls over their heads and a broken eye-ring—the McGillivray's Warbler. My search had ended in success and my vacation was complete.—**Huron.**

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YOUR RIGHT TO KNOW

When an editor has firm but conflicting instructions from people with every right to give them, he is in a quandary. But, when the two estimable gentlemen in conflict are not the type said editor expects to see coming up the walk with a horsewhip---the solution is simple: The people have a right to know.

Accordingly: The center ten pages comprising Mr. Krause's **The Ornithology of the Great Plains with Special Reference to South Dakota** is being included in this issue through the generosity of Herman and Lois Chapman. Not only that but your editor has reason to believe that it was only by considerable bullying over the past year, at least on an intellectual plane, by HF, that caused the paper to ever get prepared for publication.

Of course, with their usual modesty, the Chapmans instruct that mention of their part in the matter be omitted. Herb, in turn, says the members have a right to know.

With that this editor agrees.

Birds' Nests of South Dakota

L. J. Moriarty

A. O. U. #593. CARDINAL

(Richmondena cardinalis cardinalis)

Over and Thoms in birds of South Dakota says "South Dakota is at the northern limit of their range, but several pairs are now annual residents in the timbered area of Union and Clay Counties."

Since this statement was made in 1946 the range has moved north and west, particularly up the river valleys, until in 1963 at least one pair is nesting in Watertown. This is the second pair I have seen at Watertown in recent years. On April 20th I started receiving calls telling of Cardinals in my neighborhood. On April 21st, Peter Beardsley, one of our junior members, called to tell me they were in his yard. I verified the fact and on April 30th they were seen starting a nest in a vine on the Beardsley porch. I told the boys not to disturb them. This instruction was evidently followed and on May 7th they told me the female was spending most of the time on the nest. I went by and as neither bird was present I took a quick look. The nest contained 6 eggs. I waited until incubation had advanced and on May 10th I looked again, measured, and took pictures in color.

The nest was 10 feet up in an ivy vine on the front porch, rather loosely constructed of small twigs, wood, grasses, strips of bark and lined with rootlets, fine grasses and hair. Outside it measured about 7 inches in diameter and 4 inches deep with a rather neat cup about 2½ inches deep by 3 3|4 across. There was only one cardinal egg and 2 cowbird eggs in the nest. Most authorities say 3 to 5 a usual number. They were pale bluish white with spotting of various reddish browns chiefly at the larger end they measured about 1 inch by .7 of an inch and were of a rather oval shape not much pointed. They varied considerable in spotting.

The female did all the incubation but was fed on the nest by the male. However, the male feeds the young as much as the female after they hatch.

The female apparently built a new nest at once, which I was unable to find. But Dr. Harper, who lives 1 block away from the first nest, reported a Cardinal feeding 3 young in his yard on June 20th. His house has many vines climbing on it.

This was the only nesting I have seen. It appeared to be typical, however, as most writers agree that two nestings per season is normal and the most common location is in a vine or bush or small tree from three to ten feet above ground.

From all literature available on Cardinals' nests, I find that cowbirds lay in the majority.

Nests have been reported along the Missouri river to Pierre, along the James to Huron, along the Sioux as far as Brookings, along the Minnesota river tributaries as far as Milbank. This I

(Continued on Page 32)

General Notes of Special Interest

BLACK, RINGNECK DUCKS SEEN IN BROOKINGS COUNTY—On October 10, 1963, Paul Springer, Brookings, and I saw 3 black ducks on a marsh two and one-half miles east of Sinai. On another wetland three miles south of Sinai, a black duck was seen in company with a large flock of mallards. On this same day quite a few ringneck ducks were seen. About 15 were observed on the same wetland with the three black ducks.—**George Jonkel, Huron.**

* * * *

PINE GROSBEAKS AT HURON—On December 14, 1963, about 3:00 P. M., I saw 6 Pine Grosbeaks in a tall bare tree in Riverside Cemetery, southeast of Huron.

Only one bird was a well colored male. The other five were immature or females in gray and yellow on which no pink could be made out. The characteristic stubby dark bills could be clearly seen.—**J. W. Johnson.**

* * * *

PRAIRIE CHICKEN OBSERVED NEAR HURON—On October 26, 1963 a flock of Seven Prairie Chickens were observed four miles northwest of Broadland. A single one was also seen in that same area that day.

A flock of eight Prairie Chickens was seen on November 4, 1963 three miles south of Lake Byron.—**Tal Lockwood, Huron.**

* * * *

SAY'S PHOEBE IN YANKTON COUNTY—While on a trip to Fort Randall on May 29, 1963, Mrs. Youngworth and I saw a Say's Phoebe near Gayville, Yankton County. The Phoebe started to fly across the road in front of the car. By slowing down, I allowed it to continue its flight and cross directly in front of us.

The lateness of the date would indicate a nesting bird. This spring Eldon J. Bryant of Akron, Iowa, reported the Say's Phoebe first on March 24 and again on March 26.—**Wm. Youngworth, Sioux City, Iowa.**

* * * *

EASTERN BLUEBIRDS NORTH OF HURON—About noon, October 22, Grace Vanderstein took a circle route past the airport to a swampy spot surrounded by trees which has often produced interesting birds during migration. The car of a hunter parked nearby might have discouraged any search for birds had not a lonely bluebird settled down on the gravelled road ahead of the car.

There it was, a beautiful blue in the October sunlight and as it turned, the reddish breast and white underparts identified it as an Eastern Bluebird.

By 1:30 p. m. I was with Grace when she returned to the spot. We parked the car and waited for any show of wings in the tall cottonwoods where the bird was last seen. It was only a matter of minutes when a light-breasted bird flew out from the trees and settled on the gravelled road. As it turned its bright blue color was breathtaking. Then another came, and still another. They flew into the fence row where many tall sunflowers stood—well dried and evidently full of the seeds

bluebirds like. The flock increased to six before it flew farther up the road and out of sight.—**Carrie Pierce, Huron.**

* * * *

LACREEK NATIONAL WILDLIFE REFUGE—The only observed stopping of Sandhill cranes occurred at Deadman's Lake located 1 mile west and 3 miles north of Lacreek Refuge. Section 8, T. 37 N., R. 36 W. in Bennett Co., South Dakota. The lake, dry at the time, is surrounded mainly by wheat land.

On the evening of October 23, 125 sandhill cranes stopped at Deadman's Lake. They had departed by the following morning. No measurable footprints were observed.

The following are observations of sandhill cranes in migration:

10|10|63: About 600 sandhill cranes passed over refuge at noon. Weather mild—strong north wind.

10|25|63: 150 sandhill cranes passed over refuge headquarters.

10|26|63: 450 sandhill cranes observed passing over the refuge.

10|27|63: About 100 sandhill cranes observed over headquarters.

10|29|63: About 1,000 sandhill cranes observed over headquarters.

11|19|63: 5 sandhill cranes observed passing over the refuge. Cold, strong NW wind.

Sandhill cranes were observed in migration during varying wind and weather conditions. No crop depredations were observed or reported in this area.

No whooping cranes were sighted or reported during the past migration period.—**Jerry J. Schotzke.**

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WATERFOWL AND SHORE BIRDS—LATE SEPT., 1963—Mr. W. A. Rose, of Clear Lake, offered to drive his car to Waubay Sept. 29, and we made a trip of some two hundred miles, with more good luck than I had hoped for or expected.

A mile north of Florence: 11 Dowitchers, many ducks and Coots and quite a showing of Barn Swallows.

On Rush Lake: 7 Snipe, about 20 Western Grebes, 1 Herring Gull.

On Salt Lake: 6 Black-bellied Plover, 2 Greater Yellowlegs, 3 of the Lesser, 5 large Canada Geese, about 10 smaller Canadas, 10 Snows, thousands of ducks and many Coots.

The 4 Pectoral Sandpipers and about 25 Golden Plover, seen on our trip the 28th, taken with the foregoing, make up a nice little group to finish out the month, and perhaps the fall season. A lot of miles were needed to bring the several species together as of one group.—**Alfred Peterson, Brandt.**

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KING RAIL RECORDS—Several seen at various grassy ponds in Northern Iowa and Southwestern Minnesota while on duck shooting trips. Not recorded previous to 1916.

1916: A specimen shot by A. D. Gile at Lake Benton on October Sunday (sic), brought to me for identification. At Lake Wilson I put up by companions from heavy grass and sedge several rods from water side, flew to edge of water and disappeared. Could not be raised again.

1920: September 1 seen at edge of water in creek near old sand pits at Pipestone. It walked on mud slowly a distance of 2 or 3 rods before entering cover of cat-tails and other marsh plants. 9|22, saw 1 at 6 p. m. in the hands of a shooter who had just secured it at the Indian Reservation at Pipestone.

1924: Sept. 14, 2 on Lake Preston and 1 at Lake Benton.

1925: Sept. 1, 1 at Arco.

1955: Aug. 9, I saw a King Rail on

the south bay of Lake Alice near the town of Altamont. It stood at attention on the roadway through the swamp, and then, as I watched for twenty minutes, it alternately moved about with caution or hustled to nearby cover. It was about three rods away at first, and then two rods before its last disappearance. Its occurrence is called "rare" in this area.—**Alfred Peterson, Brandt, S. Dak.**

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BLACK-THROATED BLUE WARBLER AT SIOUX FALLS—We read with interest of the sighting of a male Black-throated Blue Warbler at Huron on October 7, 1963. On September 8, 1963, Mrs. Rogge and I were delighted to sight a male of this species in our back-yard.

We hastily called Max and Alice Pierce, our neighbors, and the four of us observed the bird as it flitted about our back yard, from fence, to bush, to tree. We had seen this beautiful bird in Michigan in previous years and so recognized it at once. Of course, we checked and reechecked with Peterson and binoculars. It was most accomodating, remaining in our yard about thirty minutes.

This was our first sighting in South Dakota.—**Charles Rogge, Sioux Falls.**

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FALL TO WINTER IN BELLE FOURCHE—Seen any birds lately?

Yes, lots of them, flocks of little fellows which move so quickly from shrub to shrub that it's difficult to tell exactly what they are now, in late October, when the foliage still is of summer density. Now and then, however, we catch them resting in the open long enough to identify them.

One flock that looked like sparrows proved to be goldfinches..

Some of the birders on our hill have been reporting flocks of tiny birds that show flashes of pink. They are so on the move that the description is no more specific than that. Saturday we too saw the flash of pink in a flock of small birds and found them to be redpolls.

There's another smaller flock—about a dozen birds—which has been flitting around the golden elders near the pond. They are Gambel's sparrows, and are the western form of the white-crowned sparrow. It's all right to call them white-crowns, because they are the same bird in our area form. They have the same puffy black and white striped crowns, like a baker's cap, on a brown and gray sparrow body. The only difference in the two is that the Gambel sparrow's white eye stripe begins at the bill, not the eye, as does the white crown's.

Since these striking black and white capped birds have been nesting on our hill for several years, we believe this to be a local flock.

Of course, there are lots of all the regulars—chickadees, juncos. But for two weeks there have been no robins. Usually there is a flock of them delaying flight until they are caught by the first snow.

Still lots of birds. But so far, not a single English sparrow.

Few Callers

By mid-November, stocking the bird station on the terrace usually is a once-a-day chore, and sometimes more than that. In snappy Novembers we frequently have replenished stocks at noon and always at dusk, so that there would be a good breakfast to greet the first visitor the next morning.

But since this November has continued with more and more of the same mild weather, bird feeding has tapered until one stocking a week is ample. In fact, we wonder some days if the regular visitors have even bothered to pay a check-in visit to assure themselves of a food supply should they need it. Some

days we wonder if the winter regulars —the chickadees, bluejays, flickers, grosbeaks, varied sparrows, including the ubiquitous English variety—haven't decided that this mildness is a permanent state.

Earlier this fall, jays were cleaning off an ear of corn a day. But now an ear lasts over a week. And when we planted bulbs along the terrace a week ago, we found peanuts in the shell hidden under the leaves. The jays weren't hungry, certainly, but they may expect to be someday.

Now and then we put out special treats—an apple or lumps of peanut butter and peanuts in the shell—and even the treats go untouched or show only a peck or two for several days. However we still see birds. The traffic to the spring is as heavy as ever.

Not a tree sparrow has appeared this year, though it is Nov. 20. These little fellows with the black stickpin in a pearl gray vest, always mean winter and cold weather. They like it—the colder the better, and as soon as the days warm, they disappear. They are northern birds, and this area is their idea of a winter resort.

But for something contradictory, take the redpoll. He too nests far north. For several weeks, and as recently as yesterday, the redpoll was feeding in our yard on woodbine, golden elder and honeysuckle berries. We have seen more redpolls this fall than in any year we can remember.

Apparently, our half-dozen wild mallards have decided that this weather is permanent. They are back on the pond, feeding around the rim, as if it were early September. In the wind they follow the protected shorelines, so close to the bank that unless you catch movement, you'd never notice them at all.

In spite of the few bird callers at the feeding station, we are more careful than ever to see that it always is stocked. We believe that the regulars still call daily to make sure we remember.

Now We Know

In winter storms, we have always believed that birds found a spot somewhere out of the wind, ruffed up their feathers for insulation and waited for the weather to settle. In the heavy wind and deep cold last week it ceased to be a generalization. We saw what birds do in a storm. A flock of sparows, over 50 birds, weathered the worst in a cluster of junipers and cotoneasters at the east wall of our house—really southeast, since our house faces southwest. Thus, the spot was as completely broken from the northwest wind as outdoors could be. Sun on the brick and some heat from the house must have raised the temperature a little.

And what sparrows they were—the Harris, the white-throat and the Gambel, which is the western form of the whitecrown.

While the cold wind was tearing its worst, a flock of sparrows flew the first morning of the storm, to the aspen above the bird feeding station and dropped to the feeding tray below, only 15 feet from our big window. They showed at a glance that they were no ordinary sparrows by their pink to orange bills, their black and white markings and light breasts.

While they fed, it was possible to see the flock held about 10 of the Harris sparrow; the rest were the black and white capped varieties. Never before have we had these birds at our feeder in winter. They have come at migration time, usually, especially the Harris. However, in recent years both of the other sparrows have nested on the hill and flown south for winter.

How we discovered their haven was

Mourning Dove

—Drawing and Etching Courtesy E. W. Steffen

this: After feeding the flock would fly around the corner of the house to the east. Usually bird flight takes the opposite direction. By looking through the glass in the front door, we found them—all huddled on the low branches in the protected nook. Through the daylight hours they flew in groups to the feeder and back to shelter. And the streetlight showed the flock spent the nights here.

Since the sparrows weathered the storm on our hill, we believe they will spend the winter with us. It's a bright prospect, and we shall not complain about having to stock the feeder three times a day, as we did through last week's storm—**Irma Weyler, Belle Fourche Daily Post.**

RED CROSSBILLS AT VERMILLION —On October 22, 1963, I saw my first Red Crossbill in this part of the state. I first heard them and then saw them in the top branches of a tall (70') pine in Prentis Park. Only a pair was present at the time, the male showing his red back as he hung head downward probing a small cone, the female flying in with her "chip, chip" notes.

On October 24, again a warm sunny afternoon, the birds were chattering in the tall pines. When they had left the park and settled in a nearly bare hackberry I followed and was able to count the flock and see their crossed bills. There were 3 males and four females or immatures.—Adelene M. Siljenberg, **Vermillion.**

BLUE GROSBEAKS AND LARK BUNTING IN MINNEHAHA COUNTY—On July 27, 1963, three members of the Avifaunal Club (from Minneapolis) were birdwatching in Rock County, Minnesota. Our objective was to search for the Say's Phoebe (heretofore unrecorded for Minnesota) and the Blue Grosbeak (one specimen taken in Rock County, Minnesota in 1961). Our chosen area for intensive coverage was the Minnesota-South Dakota boundary (dirt road) between Manley, Minnesota and Spring Valley, South Dakota, south to the Iowa line. This is a six-mile stretch of pasture, cornfield, willow-bordered creeks and farms surrounded by Boxelders. The edges of the cornfields and pastures were usually bordered by giant ragweed, shrub-sized Boxelders and Plum thickets.

Slightly more than a mile south of the Great Northern Railroad tracks, we found a singing male Blue Grosbeak. The sky was overcast and a light, drizzling rain was falling. At a distance, the grosbeak looked like a Cowbird on the wires, except for the huge beak which gave it a top-heavy appearance. As we drew closer, we heard the soft, Purple Finch-like song and noted the deep blue color, horn-colored beak and buffy wing patches.

In a moment, he was joined by a female that had been watching silently from a nearby Boxelder tree. Both birds were on the South Dakota side of the road (Minnehaha County, NE¼, S10, T101N, R47W). We watched them for several minutes, noting that the male jerked his tail nervously as he sang in the rain. Then both birds flew to the Minnesota side of the road where they joined a third grosbeak. He had been sitting completely unnoticed atop the corn tassles. He was brown like the female but had the dark, horn-colored beak of the male, and numerous dark blue patches on his head, nape and upper breast. A young male of the year? He did not sing. For the next half-hour, the three birds flew randomly about in the corn and to the Boxelder. The molting bird was far less active than the other two.

Of added interest, we found a pair of Masked Shrews (**Sorex cinereus** **baydeni**) under a board almost at the foot of the Boxelder. I do not know if there are any previous Minnehaha County records. One specimen was taken.

About a mile farther south, another pair of Blue Grosbeaks was spotted. They flew across the road into South Dakota and lingered in a Honey Locust along the edge of a farm, again close to a cornfield. Less than half a mile farther south from this pair, another adult male was singing in a cornfield, near the road, and next to a soybean field. A total of three adult males, one molting (immature?) male and two females.

The following week end, on 3 August 1963, more Avifaunal Club members visited the same area. At the first locality noted above, near the Boxelders, we again found the grosbeaks. Two adult males were singing on the wires while a silent female attended two brown immaturish-looking grosbeaks in the corn-tops. The latter duo remained motionless for the entire time of our observation. Except for shorter tails and a more downy appearance, they in every way resembled the female.

On 1 September 1963, three of us returned to try and secure a September date for this species. A careful search revealed no grosbeaks. We did find, in the Boxelder, an adult Yellow-billed Cuckoo with an immature. The immature had the rufous wing patches, dark

upper and lower mandibles and white outer edges on the tail like a Mourning Dove. A Prairie White-footed Mouse (Peromyscus maniculatus bairdii) was taken about fifty yards across the pasture from the Boxelder. Again, I do not know if there are any Minnehaha County records. A Red-spotted Purple Butterfly was taken also. As we headed south toward the Tri-state Monument, we found a fall plumaged male Lark Bunting perched on a fence near the Honey Locust farm mentioned above. The drab brown plumage was misleading but the white wing patch showed well both in flight and when the bird perched. The dorsal aspect of the primaries still showed some black and we suspected that this may have been from an incomplete molt.—**Ronald L. Huber, 3121 Georgia Ave. So., Minneapolis, Minnesota.**

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FALL MIGRATION OF GOLDEN PLOVERS—The Atlantic seaboard fall migration of the Golden Plover has been much publicized, but the inland migration has had little. Apparently this year the inland migration was much heavier than we are used to seeing. A large flock of around 100 were observed this fall about a mile south of Brookings by Dr. Donald Progulske, Mary Taylor, David Holden and myself. They were the first noted by Dr. Progulske around September 25th and were seen either on the driving range grass or on the plowed field next to it. They remained in this area about two weeks before moving on. The birds were in their full fall plumage and could not be confused with the less common Black-bellied Plovers for they lacked the black areas under the wing and the white rump patch of the Black-bellied Plovers.

Regarding the fall migration of Golden Plovers in the interior of the country we read in Bents "Life Histories of North American Shore Birds" (Part 2, page 186) "Much has been written about the Atlantic flight of the golden plover and remarkably little has been said about the southward flight in the interior, but such a flight occurs regularly, though in much smaller numbers." Apparently most of the birds that use the interior route are young birds of the year for he goes on to say: "Apparently most of the adults take the Atlantic route; the young birds are spread out over the whole country, but are much more inclined to the eastern route."—**Nelda Holden, Brookings.**

Baltimore Oriole

—Drawing and Etching Courtesy E. W. Steffen

TOWNSEND'S SOLITAIRE AT HURON—On December 14, 1963, about 3:30 P. M., Lucille and I saw a Townsend's Solitaire in Riverside Cemetery, southeast of Huron. The bird was in company with two robins and the three were contending over the possible fruit on a clump of red cedars.

The bird was clearly seen with 7 x 50 binoculars at 50 feet and displayed the usual gray color, lighter below, white eye-ring, and white feathers on the sides of the tail. Also its fluttery hovering in the air about the tree, looking for fruit, and its general behavior were as usual in previously observed individuals of the species.

Since all wild fruit is scant this year it is not expected that this bird will long remain in the area.—**J. W. Johnson, Huron.**

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Birds' Nests

(Continued from Page 24)

believe is the first authentic nesting found as far as Watertown, at an altitude of over 1700 feet.

This northward movement has evidently taken place in South Dakota largely in the last 15 years, and about 30 years in Minnesota. Evidence points to its continuation as more sightings farther north are reported, until at present several are seen as far north as Winnepeg.

Dr. Coues gave the range north to the middle States, mentioning Kansas and Nebraska with none found in Dakota.—**Watertown.**

LATE TOWHEE AT HURON—In the afternoon of December 15, 1963 we had a phone call from Mrs. R. M. Russell, 840 Kansas SE, Huron, who described a bird she believed was like a towhee except that it had a forked tail.

Lucille and I went to see and found that it was in fact a Rufous-sided Towhee—and the sub-species that used to be called the Eastern or Red-eyed Towhee (**P. e. erythrophthalmus**). The bird had been coming to their feeder for a couple of days, at least, and made a couple of trips while we watched. It ate sunflower seeds with the easy technique of a cardinal and as rapidly.

We had good views of it at close range. While the bird was on the ground directly under the window we made sure that its back and wings were completely free from white marks except at the edge of the wings. The head, back, and wings were the dark reddish brown of the female.

The "forked" tail was studied at close range and we are convinced that the condition, really a fairly shallow notch, was due to damage to the tips of the center tail feathers.

Contrary to our understanding of the standard literature, this is not the towhee we commonly see in this area and west, which is **P. e. arcticus.** In fact we have no recollection of previously having certainly identified this subspecies at Huron or in the vicinity, while arcticus is seen in numbers, at least as a migrant, every spring and fall.

Later checking with Judge and Mrs. Russell added the information that the bird was not seen after December 26, 1963.—**J. W. Johnson, Huron.**