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Nebraska Bird Review

Treasurer's Report -- 1965

	Cash	Invest- ments	Total Assets
Balance, January 1, 1965	\$233.46	\$1,149.00	\$1,382.46
Current Operations - Receipts			
Memberships 38 Sustaining	190.00		
161 Active	483.00	\$673.00	
Subscriptions 20 Direct	70.00		
12 Agency	36.00		
2 Foreign	6.33	112.33	
Interest Received - cash	35.54		
- to account		18.18	<u>53.72</u>
Total current receipts			\$839.05
Current Operations- Expenditures			
Printing Review - January	230.00		
April	90.00		
July	160.00		
October	177.00	657.00	
Officer's Expenses-			
Doris Gates	13.17		
Lee Morris	6.80		
R. G. Cortelyou	57.21		
Ruth Wensien	72.90		
Bertha Winter	17.97		
G. W. Keim	3.00	171.05	
Loss on convention	67.95	67.95	
Miscellaneous - State Permit	3.00		
Fidelity Bond	10.00		
Dues notices	26.00		
Bank charge	.50		
Honorary membership certificate	12.50		
Addressing machine and supplies	50.73	<u>102.73</u>	
Total current expenditures		998.73	
Loss on current operations			(159.68)
Other operations			
Increase in prepaid memberships and subscriptions	\$406.17	\$406.17	
Occasional papers sold	108.80		
Paid to Wm. Youngworth	(25.00)	83.80	
Field cards sold	21.80	21.80	
Decals bought	(70.00)		
less sales	37.50	<u>(32.50)</u>	
Receipts from other operations			479.27
Investment transferred to cash	49.00	(49.00)	
Balance, December 31, 1965	583.87	1,118.18	1,702.05

PROGRESS REPORT ON THE PRAIRIE GROUSE NESTING STUDY IN THE NEBRASKA SANDHILLS¹

Lawrence J. Blus and Jerry A. Walker

Two of the more important needs in the management of the plains Sharp-tailed Grouse (*Pedioecetes phasianellus jamesi*) and the Greater Prairie Chicken (*Tympanuchus cupido pinnatus*) are methods for accurately determining reproductive success during the summer and methods of evaluating nesting cover. Since the intensive study of these prairie grouse was initiated in the Nebraska Sandhills in 1958, two of the principal purposes have been to develop means of meeting these needs. Our progress toward attaining these objectives through a nesting study is summarized in this paper along with other pertinent data.

METHODS

As a potential method of determining productivity, randomly selected areas were walked in an effort to locate all prairie grouse nests. Variations in this searching method were tried; the interval between searchers was varied from 6 to 12 feet and from one to eight searchers were employed. Walking sticks were used to facilitate the search, and during 1961, a rope was dragged between investigators. Searching was conducted within the period May 8 through July 13 each year. Since 1959, a reward of \$1.00 to \$3.00 was offered for each nest reported from local study areas. During 1964, a reward was in effect throughout Blaine and Thomas counties. Once located, nests were usually visited once a week in order to determine progress. During 1964, the 3-step Method (Parker and Harris, 1959) was used to sample nesting cover. Modifications of the 3-Step Method included measurement

of certain plants hit and recording all hits on growth from previous growing seasons (GP GS) which were 3 inches or more in height as well as that of the current growing season (CG GS). Range analysis based on quantitative ecology as described by Dyksterhuis (1949) was also utilized and range management terms used are those described by him.

THE STUDY AREAS

The study areas are located in the Sandhills which are comprised of 20,000 square miles in the north central portion of the State. The Sandhills are characterized by alternating ridges and valleys on which is supported a postclimax of tall grasses which occur some distance from their proper climate due to the relatively high chesard (Weaver and Clements, 1938). Because of the susceptibility of most of the Sandhills soils (principally wind-blown dune sands) to eolian erosion, only about 5 per cent of this area is devoted to cultivated crops, chiefly alfalfa (*Medicago sativa*) and other tame hay. The average annual rainfall varies from 21 inches in the east to 17 inches in the west; approximately 70 per cent of the moisture is recorded during the growing season, April through September. The altitude varies from approximately 2000 feet in the east to about 4000 feet in the west. The Sandhills support an economy based on cattle grazing. The mean size of land holdings in this area was approximately 3000 acres in 1959.

Nesting data from 1959 through 1961 were collected from two study areas near Burwell. Each of these is comprised of one township, one lying in northwestern Garfield and southwestern Holt counties (Swan Lake Area) and the other in eastern Loup County (Loup County Area). Data from 1962 through 1964 were collected in Thomas and Blaine

¹This paper represents a contribution from Nebraska Pittman-Robertson Project W-33-R, "Studies in the Ecology and Management of Prairie Grouse".

counties on the Bessey Division of the Nebraska National Forest, which is comprised of 140 square miles. To augment the data, nests located outside the study areas were included in this report. The characteristics of the various study areas differed to some extent. The National Forest is characterized by large hills and narrow valleys; lack of cultivated crops; mowing of about 1 per cent of the land area; and conservative stocking rates which result in most range being in excellent or good condition. The Swan Lake Area near Burwell is characterized by much level terrain and mowing of 45 per cent of the land area. The Loup County Study Area, also near Burwell, is characterized by both large hills and level terrain and mowing of about 15 per cent of the land area. On both the areas near Burwell, the stocking rates are less conservative than those on the Forest with the result that overgrazing is relatively common. In addition, a small amount of land is cultivated on both these areas.

NEST SEARCHING

On 1041 acres searched during this study, six prairie grouse nests were located, indicating a density of one nest per 174 acres. Of these, only one proved successful. The number of nests found per square mile was less than the spring density of displaying males (extremes of 60 and 120 acres per male). This was in agreement with Ammann (1957) who found that cocks normally exceed hens in prairie grouse populations. In addition, the low nest density was partially attributable to the nonrandom distribution of nests and to probable failure of some hens to breed. One of the few studies reporting densities of grouse nests was that of Baker (1953) who found 16 nests of the Greater Prairie Chicken in 610 acres in Kansas by use of a flushing device mounted on a vehicle. Schwartz (1945) reported local concentrations of Prairie Chicken nests in certain

types of cover in Missouri with the greatest density being seven nests in 15 acres of sweetclover.

FATE OF NESTS

Although it seemed impossible to measure prairie grouse productivity through the nest search method, important data concerning other aspects of grouse nesting were obtained. Of 67 nests for which fates are known, (5 additional clutches collected and fate of 1 clutch undetermined), 33 (49.3 per cent) hatched (Table 1). The success of nests was comparable to the 44-per cent success summarized from several studies for both the Sharptail and Prairie Chicken (Ammann, 1957). The per cent of eggs which hatched in successful Prairie Chicken nests was 85.4 compared to 95.5 for the Sharptail (Table 2). The relatively low percentage of hatch of Prairie Chicken eggs was due in part to accidental destruction of 10 eggs by a hen (Blus, 1965). The principal agent of nest destruction was predation which accounted for 38.8 per cent of 67 nests. Striped skunks (*Mephitis mephitis*), coyotes (*Canis latrans*), badgers (*Taxidea taxus*), bullsnakes (*Pituophis sayi*), and thirteen-lined ground squirrels (*Citellus tridecemlineatus*) were common in nearly all types of habitat in the Sandhills and were probably responsible for most nest predation. The principal reason for abandonment was mowing, although this factor was of local importance as mowing of native hay is initiated in July well after the hatching peak.

CLUTCH SIZE

The number of eggs in 20 Prairie Chicken clutches varied from 8 to 17 with an average of 13.3 while the average size of 28 completed Sharptail clutches was 11.7 with a range of 7 to 15 (Table 2). These clutch sizes are comparable to those summarized for several states by Ammann (1957) except that the average clutch of the Prairie Chicken is rather high. The average number of chicks leaving hatched nests was 10.8

Table 1. Fate of 67 prairie grouse nests, 1959 through 1964.

Fate	Prairie Chicken		Sharp-tailed Grouse		Both species	
	Number of nests	Per cent of total	Number of nests	Per cent of total	Number of nests	Per cent of total
Abandoned						
Undetermined			1	2.5	1	1.5
Vehicle			1	2.5	1	1.5
Livestock	1	3.7			1	1.5
Mowing	1	3.7	4	10.0	5	7.5
Subtotals	2	7.4	6	15.0	8	12.0
Preyed upon						
Ground squirrel	1	3.7	1	2.5	2	3.0
Snake			3	7.5	3	4.4
Carnivorous mammals	6	22.2	10	25.0	16	23.9
Undetermined	3	11.1	2	5.0	5	7.5
Subtotals	10	37.0	16	40.0	26	38.8
Hatched	15	55.6	18	45.0	33	49.2
Totals	27	100.0	40	100.0	67	100.0

Table 2. Prairie grouse nesting data, 1959 through 1964.

Species	Eggs per clutch		Per cent of eggs hatching in successful nests	Average number of chicks per brood
	Average	Range		
Sharp-tailed Grouse	11.7	7-15	95.5	11.9
Prairie Chicken	13.3	8-17	85.4	10.8
Averages	12.4	----	91.7	11.5

for the Prairie Chicken and 11.9 for the Sharptail (Table 2).

HATCHING PERIOD

The hatching period in prairie grouse is relatively brief as indicated by 32 of 34 hatching dates occurring during the first 3 weeks of June with 27 of these occurring during the first 2 weeks of June (Fig. 1). Although renesting may be dif-

ficult to determine, it was thought that 6 of the 73 nests located were renesting attempts as these were conspicuously later in the season than most nests. These accounted for 8.2 per cent of all nests and only 2.3 per cent of the chicks produced in 34 nests. Of the apparent renests, three of the hens were killed, two by mowing and another by a carnivorous

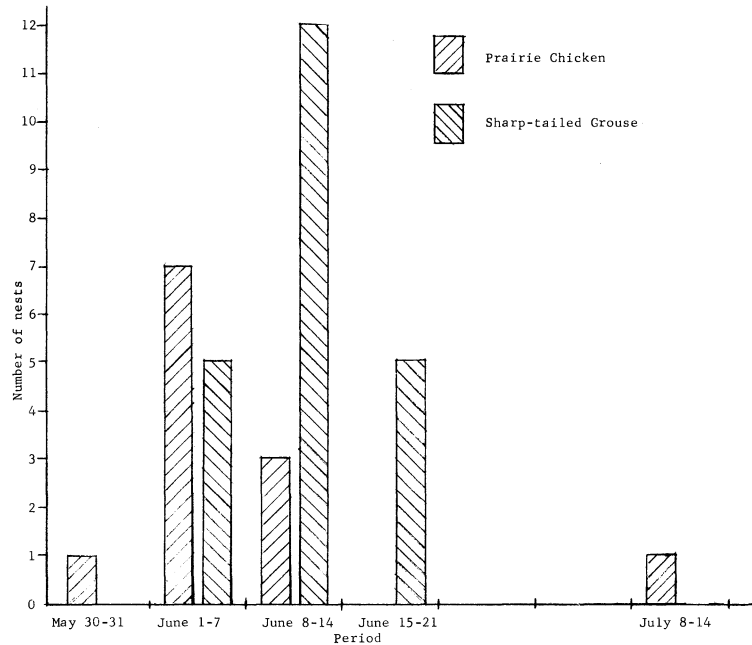


Figure 1. Hatching dates of 34 prairie grouse nests, 1959 through 1964

mammal. There seemed less eggs in renesting attempts (27 eggs in 3 completed clutches), but the sample was too small to determine the uniformity of this decrease.

The relatively short period of sexual activity indicated that, as in Michigan (Ammann, 1957), reproductive success of prairie grouse in the Sandhills is dependent upon the success of initial nesting efforts as prairie grouse hens are unpersistent renesters (Hamerstrom, 1939; Cartwright, 1944). This may be partially explained by the fact that breeding seldom, if ever, occurs after seasonal termination of sexual display by males in early June. In southern Illinois where large numbers of nests are broken up early in the season, renesting by Prairie Chickens is of common occurrence (Yeatter, 1943).

NESTING COVER

Several factors seemed to influence selection of the nest site. Of apparent importance was the presence of fairly dense vegetative cover which con-

tained some growth of the previous seasons (GPGS). Little growth of the current season (GCGS) was present in late April and early May when most nests were constructed. The analysis of nesting cover was carried out near the hatching period when vegetation had advanced considerably in phenology from the period of initial nesting activity. GPGS over 3 inches comprised from 4.8 to 28.0 per cent of the total hits on vegetation encountered in 23 3-Step transects. The height of the nesting cover varied from 3.7 to 9.0 inches with an average of slightly over 5 inches.

The principle plant species forming a canopy (3 inches or more in height) of cover over grouse nests (Table 3) were sand lovegrass (*Eragrostis trichodes*), little bluestem (*Andropogon scoparius*), and prairie sandreed (*Calamovilfa longifolia*). The importance of these three grasses for nesting cover was probably due to their persisting through the winter and spring nearly intact. Little bluestem

Table 3. Frequency index of plant species forming a canopy over nests of 27 Sharp-tailed Grouse and 3 Prairie Chickens, 1962 through 1964.

Species	Sharp-tailed Grouse		Prairie Chicken		Both species	
	Number of nests	Frequency index	Number of nests	Frequency index	Number of nests	Frequency index
<u>Andropogon scoparius</u>	14	51.9	2	66.7	16	53.3
<u>Eragrostis trichodes</u>	13	48.2	2	66.7	15	50.0
<u>Calamovilfa longifolia</u>	9	33.3			9	30.0
<u>Rosa spp.</u>	5	18.5			5	16.7
<u>Yucca glauca</u>	3	11.1			3	10.0
<u>Panicum virgatum</u>	3	11.1			3	10.0
<u>Prunus besseyi</u>	3	11.1			3	10.0
<u>Stipa comata</u>	2	7.4	1	33.3	3	10.0
<u>Amorpha canescens</u>	2	7.4			2	6.7
<u>Andropogon hallii</u>	2	7.4			2	6.7
<u>Sporobolus cryptandrus</u>	1	3.7	1	33.3	2	6.7
<u>Helianthus laetiflorus</u>	1	3.7			1	3.3
<u>Psoralea lanceolata</u>	1	3.7			1	3.3
<u>Cyperus schweinitzii</u>	1	3.7			1	3.3
<u>Erigeron canadensis</u>	1	3.7			1	3.3

comprised 29.4 per cent of GPGS encountered in 21 3-Step transects read around Sharptail nests, while sandreed comprised 18.1 per cent, and lovegrass 10.6 per cent. The principal species recorded on transects around Sharptail nests were little bluestem, prairie sandreed, sand lovegrass, sedges (*Carex* spp. and *Cyperus schweinitzii*), sand dropseed (*Sporobolus cryptandrus*), hairy grama

(*Bouteloua hirsuta*), and sand bluestem (*Andropogon hallii*). Several abundant species including sedges, hairy grama, and sand dropseed, were unimportant as nesting cover primarily because of insufficient height, growth habit, and other factors. Bunches of sand lovegrass or little bluestem commonly comprised all the cover for a nest; whereas, sod-forming grasses such as sandreed and sand

bluestem were rarely found to constitute the entire complement of nest cover. Except for shorter shrubs such as rose (*Rosa* spp.) and sand cherry (*Prunus besseyi*), woody plants were not recorded as nesting cover. Thickets of chokecherry (*Prunus virginiana*) and wild plum (*Prunus americana*) as well as windbreaks of red cedar (*Juniperus virginiana*) and other planted species are relatively common in the Sandhills. The lack of records of Sharptail nests in woody cover is in contrast to studies in Michigan where Ammann (1957) reported that nests are usually located in certain types of woody cover.

Three of the Sharptail nests were located in alfalfa and one Prairie Chicken nest in smooth brome (*Bromus inermis*) and sweetclover (*Melilotus* sp.). All of these nests were located on or near the study areas near Burwell. The three nests in alfalfa were reportedly destroyed by mowing in one field. There were no reports of grouse nesting in alfalfa or other tame hay near the Forest, although effort was extended in contacting ranchers about this matter in 1964.

GRAZING AND MOWING

Grouse nests were usually observed in native prairie on which little or no grazing had occurred. A total of 15.5 per cent of nests were located in prairie which was free of any use by man for at least 2 years in succession. It was thought that less than 1 per cent of the the Sandhills prairie remains unused for such a lengthy period. With the exception of one nest located in fair condition range, all nests found in 1962 through 1964 were located in excellent condition (73.3 per cent) and good condition range (23.4 per cent). According to Bredemeier (1963), 80 per cent of the Sandhills range is classified in the excellent and good condition classes. From this figure, quality nesting cover is apparently in good supply over much of this area. It was thought that proper grazing use improved nesting cover

for grouse on the study areas near Burwell (Schwilling, 1960) as most nests were located in range which was classified as being grazed at a full degree of use. However, it should be pointed out that 13.3 per cent of nests at Burwell were located in unused range which indicated that the best available cover was used. Of nest sites on or near the Burwell areas and Forest, 61.5 per cent and 14.3 per cent, respectively, were recorded as undergoing full or close grazing use. There were no records of nest sites in range which was undergoing severe or extreme grazing use.

The fair condition range used for nesting supported a dense growth of vegetation since mowing occurred the previous July 1. The regrowth in this mowed area was in contrast to sparse regrowth of that native vegetation which is mowed for hay later in the summer. The practice of mowing includes approximately one-eighth of the Sandhills (Blus, 1963) and occurs primarily in areas with little variance in physiography. Apparently, mowed areas with little regrowth are used as a last resort for nesting, but probably provide adequate cover for renesting attempts later in the spring. On one of the Burwell areas, a Sharptail nest was located in mowed prairie in early spring. The sparse vegetation provided a minimum of cover for the hen whose nest was destroyed by a carnivorous mammal.

Of the vegetative types in the Sandhills prairie, those resembling the undisturbed postclimax seem most fully to meet the requirements for prairie grouse nesting cover. The selection of these types for nesting seems related to the density of residual cover at the time of nest construction. The fact that grouse nested in cultivated fields and mowed areas in the Sandhills may indicate a lack of suitable nesting cover in local areas or that plant phenology advanced to a degree where adequate cover was provided by the GCGS. Studies in other localities have indicated that the Prairie Chicken

commonly nests in cultivated grasses and crops (Schwartz, 1945; Yeatter, 1943), and that the Sharptail has adapted to nesting in alfalfa and wheat stubble (Hart, Lee, and Low, 1950).

In regard to the Prairie Chicken, winter food shortages limit populations in most of the Sandhills. The primary chicken range is located on the southern and eastern borders of the Sandhills where grain is available. In these areas, a greater proportion of the range is overgrazed than that located in the interior of the Sandhills (Blus, 1963) which corresponds roughly to the primary Sharptail range. Thus, nesting cover in the primary chicken range is probably of a lower quality than that existing in those regions where grain is lacking. This situation applies to some extent to the study areas near Burwell where overgrazing and overmowing are the rule rather than the exception. Prairie Chicken males make up about 25 to 30 per cent of the spring population of displaying males on the Loup County Area and 80 to 90 per cent on the Swan Lake Area. In contrast, about 1 per cent of males on the Forest are Prairie Chickens. The occurrence of Chickens on these areas seems related to the availability of grain; some grain crops are present on the Burwell areas and none are planted on the Forest. In addition to most nests being located in a lower quality of range on the Burwell areas, a lower hatching success was also suggested. A total of 40.0 per cent of the 35 grouse nests hatched on the study areas near Burwell, while 61.3 per cent of the 31 nests were successful on or near the Forest. The importance of cover to nesting success, and in turn, to grouse populations, is not entirely clear. These birds must utilize available cover for nesting, regardless of its quality, as indications are that hens of both species ordinarily travel but a short distance from the place of breeding to the nest site (Hamerstrom, 1939).

PHYSIOGRAPHY

Most nests located on or near the Forest (77.4 per cent) were located on north and east slopes of large hills. The selection of these areas seemed related to a denser cover of vegetation and litter and the cooler, moister microclimate. Grouse often loaf in these areas on warm days, and apparently seek out such sites for nesting. Nests in the vicinity of the Forest were found on level terrain and slopes (estimated at 10 per cent levels) up to 40 to 50 per cent with 32.3 of these estimated at 21 to 30 per cent. The selection of slopes for nest sites also seemed related to grazing patterns of cattle; that is, valleys in the Sandhills range are usually grazed first as these are most accessible. Although nests were found in level areas, none were located in the narrow valleys which are characteristic of those parts of the Sandhills which contain large hills.

SUMMARY

This study is concerned with nesting of the Greater Prairie Chicken and the Plains Sharp-tailed Grouse in several areas of the Nebraska Sandhills during 1959 through 1964.

A total of 1041 acres was searched afoot for prairie grouse nests; six nests were found in the sampled area which indicated a density of one nest per 173 acres.

Of 67 nests observed, 33 hatched for a success of 49.3 per cent. Predation accounted for destruction of 38.8 per cent of the 67 nests. Mowing was of local importance in nest destruction.

Completed Prairie Chicken clutches varied from 8 to 17 with an average of 13.3, while the average Sharptail clutch was 11.7 with a range of 7 to 15.

The peak of hatching occurred during the first two weeks of June. A total of 27 of 34 hatching dates were recorded during that period; 32 of these occurred during the first three weeks of June. Apparent renesting

accounted for 8.2 per cent of all nests and 2.3 per cent of chicks produced.

Most nests were located in fairly dense vegetation which contained some growth of the previous growing seasons (GPGS). Growth of current season (GCGS) comprised from 72.0 to 95.2 per cent of cover around nests. The height of nesting cover varied from 3.7 to 9.0 inches with a mean of over 5 inches.

The principal plant species forming a canopy over grouse nests were also the three most abundant plants recorded in 3-Step transects around nests. These species were sand lovegrass, little bluestem, and prairie sandreed.

Most nests were located in excellent or good condition range with 15.5 per cent being located in unused range. Based on degree of use, grouse seemed to be using less desirable cover for nesting on two study areas near Burwell than was used on the Nebraska National Forest.

Most nests were located on north or east slopes of large hills, and most nests were located on slopes estimated at 21 to 30 per cent.

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NESTING BIRDS OF THE CRESCENT LAKE NATIONAL WILDLIFE REFUGE

Roger S. Sharpe and Raphael R. Payne

The Crescent Lake National Wildlife Refuge is located in Garden County near the heart of the Nebraska Sandhill Lakes Region. This country is principally rolling mid-grass prairie, the hills reaching a height of as much as 200 feet above the wet meadows. A good portion of the refuge's 46,000 acres consists of these lush meadows which are pocked by marshes, potholes and small lakes. Natural drainage from the surrounding sandhills and springs in the basins feed these water bodies.

The lakes are quite shallow, reaching a depth of perhaps 15 feet. They are alkaline yet are not so highly basic as to inhibit biological production. Aquatic plants and animal life flourish, supporting good fish populations. Surrounding these lakes are extensive marshes in which grow various species of emergent plants. All of these conditions combine to create ideal nesting habitat for aquatic and water-oriented birds.

The surrounding prairie is rich in grassland birds. The few trees and low brush which occur in isolated draws and occasionally on some lake shores harbor the few arboreal species present.

The observers spent five days (June 7-11, 1965) during the peak of the breeding season on the refuge. During this stay, time was spent surveying the refuge and its abundant birdlife. The greater part of one day was spent with a refuge staff member in a jeep, traveling into areas not accessible by car. Another day was spent in a boat on one of the major refuge lakes, Smith Lake. The remainder of the time was spent driving through the refuge and in its vicinity observing birds. Refuge manager, John Wilbrecht, deserves thanks for providing the boat and other transportation through the refuge.

Smith Lake was rather extensively surveyed. Relative number of breeding pairs of various species was estimated from number of nests located and nest contents were noted where possible.

The following is the result of the Smith Lake survey:

Double-crested Cormorant (*Phalacrocorax auritus*) This species was found nesting on the nesting platforms erected primarily for Canada geese. Four platforms were occupied by an estimated 35 breeding pairs. Two platforms supported a total of 17 active nests (nine and eight, respectively). The nests contained an average of 2.6 eggs (1 and 4, extremes). One young was just emerging from the egg. No other eggs were seen to be pipped.

Eared Grebe (*Podiceps caspicus*) This species nested in colonies containing 20 to 100 nests. The nests consisted of mats of floating vegetation on which the eggs were laid. We observed the incubating adult covering the eggs with vegetation as we approached. The 17 nests examined contained an average of 2.8 eggs (1 and 4, extremes). No young were observed. An estimated 400 breeding pairs of Eared Grebes resided on Smith Lake, nesting in approximately eight colonies.

Black-crowned Night Heron (*Nycticorax Nycticorax*) This was the only heron species observed in the area. It was abundant on the larger water bodies and upon close observation could be seen stalking among the reeds of any lake. Smith Lake appeared to contain the major nesting colonies. It was difficult to determine whether these were just small colonies or one large one, as they seemed to nest in almost every large cane (*Phragmites*) stand. It was estimated that at least 150 pairs were nesting

on Smith Lake. The nests were well-built of pieces of cane and other aquatic reeds, being built from the water level up to a height of about a foot. Of the 19 nests examined, 13 had eggs only, averaging 3.3 eggs per nest. The other six ranged from one egg and one young to a total of three young. One nest contained two eggs and three young. The young varied in age from newly emerged to as much as an estimated twelve to fifteen days old.

American Coot (*Fulica americana*) Two nests of this species were found. Both were well-constructed of reeds in clumps of *Phragmites*. They were constructed to a height of about a foot above water level. One nest contained nine eggs and the other seven. No estimate was made regarding the number nesting on the lake. These birds were quite secretive, stealing off into the vegetation as one approached.

Forster's Tern (*Sterna forsteri*) Several hundred Forster's Terns were present on Smith Lake. Although many exhibited territorial behavior as we moved through the reeds, only one nest, containing three eggs, was found. This was located on what appeared to be an abandoned muskrat lodge.

Black Tern (*Chlidonias niger*) This species was equally as abundant as Forster's Tern on Smith Lake. The only nest examined contained two eggs. Both tern species were commonly seen feeding on all the refuge lakes. However, the Black Tern appeared to be present in somewhat larger numbers throughout the refuge.

Franklin's Gull (*Larus pipixean*) Approximately thirty pairs were nesting on Smith Lake. The birds appeared to nest in a loose colony among the less dense emergent vegetation. The two nests found, each containing two eggs, consisted of shallow depressions in piles of vegetative debris.

Other birds found nesting on or in the vicinity of the refuge, but not on Smith Lake:

Canada Goose (*Branta canadensis*) Several broods were seen on the larger refuge lakes. Nest platforms have been constructed on these lakes specifically for these geese. A resident flock has been maintained on the refuge for a number of years, the offspring being left unpinioned. The flock has increased in number, and many of the birds resulting from the original stock return each year to nest. These geese are of uncertain lineage, appearing somewhat smaller than *B. c. maxima*, the probable subspecies that nested in the sandhill lakes region originally.

Canvasback (*Aythya valisineria*) A single nest of this species was found on a small island in a pothole near the western edge of the refuge. It contained eleven eggs. Very few Canvasbacks were seen on the refuge. Golden Eagle (*Aquila chrysaetos*) A destroyed nest containing the partial remains of one young was found nine miles south and one mile east of refuge headquarters on Blue Creek. The nest was approximately forty feet above the ground in a cottonwood tree. The nest was apparently destroyed by wind. The remains of the young now constitutes a specimen (ZM10877) in the zoology collections of the Nebraska State Museum, Lincoln.

American Avocet (*Recurvirostra americana*) Although avocets were found on almost every small pond throughout the refuge, only two nests were found. Each contained two eggs. Undoubtedly many other nests were overlooked, since nearly all of the avocets encountered exhibited territorial aggression as one walked in their vicinity.

Killdeer (*Charadrius vociferus*) This shorebird was very common in the moist meadows and around the small potholes throughout the refuge. The single nest, found at the edge of the

main refuge access road, contained four eggs.

Great-horned Owl (*Bubo virginianus*) Two half-grown young were found near the nest in a grove of cottonwoods near the western edge of the refuge. These were the only owls seen on the refuge.

Long-billed Marsh Wren (*Telmato-dytes palustris*) This wren was quite common in marshy cane and cattail stands, especially those found near the edge of larger bodies of water. Although difficult to see, singing males could be heard in nearly all of the larger stands. The single "oven-like" nest examined contained four eggs. This nest was located in reeds near Smith Lake.

Yellow-headed Blackbird (*Xanthocephalus xanthocephalus*) Both the Yellow-headed and Red-winged Blackbirds were common around the marshes and lakes. The Yellow-headed appeared to be more common than the Red-wing. As is generally the rule, the Yellow-headed was found nesting in emergent vegetation over water. The one nest checked contained three eggs.

Other birds seen and presumed breeding, but of which no nests were found:

Western Grebe (*Aechmophorus occidentalis*) About forty adults were observed at most times on Smith Lake. One individual, found by scanning the lake with binoculars from a nearby hill, appeared to be incubating on a pile of debris. This nest was not located while surveying the lake by boat. Refuge Manager Wilbrecht indicated that Smith Lake was one of the main breeding areas for this bird on the refuge and that broods have been successfully reared on this lake in past years. Individuals were also seen on other major refuge lakes.

Pied-billed Grebe (*Podilymbus podiceps*) Several were seen on the marshy edges of the larger lakes. It could not be considered common.

Common Mallard (*Anas platyrhyn-*

chos) The mallard was common on most potholes. Although no broods were seen during the survey, refuge personnel had seen them.

Gadwall (*Anas strepera*) Every large pothole contained a pair.

American Pintail (*Anas acuta*) Pintails were occasionally seen. Several downy young were taken in a duck trap earlier in the season (May) by refuge personnel.

Blue-winged Teal (*Anas discors*) This was one of the most common duck species on the refuge. Refuge personnel had found several clutches during this season. No broods had yet been sighted this season, however.

Shoveller (*Spatula clypeata*) The Shoveller was nearly as abundant as the Blue-wing.

Redhead (*Aythya americana*) Several pairs of Redheads were seen on nearly every large body of water.

Ruddy Duck (*Oxyura jamaicensis*) Ruddy Ducks were present in relatively large numbers on most large bodies of water. Males appeared in peak breeding condition.

Hooded Merganser (*Lophodytes cucullatus*) A single female of this species was flushed on Blue Creek approximately nine miles south and one mile east of refuge headquarters. This species may breed in suitable areas where trees with nesting cavities are present. The area where this bird was seen contained several large cottonwoods on the creek banks.

Swainson's Hawk (*Buteo swainsoni*) This hawk was fairly common and was the only buteo seen in the area. **Sharp-tailed Grouse** (*Pediocetes phasianellus*) Several were flushed in meadows. This species far outnumbered the Prairie Chicken in this area. Occasionally a male Prairie Chicken is seen on Sharptail dancing grounds in the spring. Several hybrids between these species have been recorded in the area (Wilbrecht, pers. comm.).

Long-billed Curlew (*Numenius americanus*) This magnificent shorebird

was found in nearly every meadow. Many adults exhibited territorial behavior indicating probable nesting, while others were observed feeding in small groups. As many as thirteen were seen in one group.

Upland Plover (*Bartramia longicauda*) This sandpiper was quite common in all of the meadows of the area. Its characteristic call could be heard nearly everywhere. A nest of this species was found this season by refuge personnel.

Willet (*Catophrophorus semipalmatus*) Although not as common as the curlew, territorial adult Willets were occasionally encountered. No nests were found, but the behavior of the adults suggested that breeding territories were established.

Ring-billed Gull (*Larus delawarensis*) This species is not listed in the Revised Checklist of Nebraska Birds (Rapp, et al, 1958) as a breeder in Nebraska. However, small numbers were encountered on all of the larger lakes. While surveying Smith Lake, several exhibited territorial behavior, but no nests were found.

Mourning Dove (*Zenaidura macroura*) Mourning Doves were common and undoubtedly nest on the ground in the absence of trees and shrubs. Eastern Kingbird (*Tyrannus tyrannus*) This bird was common around refuge headquarters where the many trees and shrubs offered suitable nesting habitat.

Western Kingbird (*Tyrannus verticalis*) Common in the vicinity of refuge headquarters.

Horned Lark (*Erimophila alpestris*) This bird was probably the most abundant passerine in this area. Individuals were constantly flushed as one drove through the refuge.

Barn Swallow (*Hirundo rustica*) A number were seen around the buildings of refuge headquarters.

Yellowthroat (*Geothlypis trichas*) The Yellowthroat was the only parulid seen in the refuge vicinity and was occasionally encountered in the tall

reeds and grass in and around pot-holes.

Bobolink (*Dolichonyx oryzivorus*) Bobolinks were locally common in some meadows. The males were exhibiting territorial singing, suggesting breeding populations.

Eastern Meadowlark (*Sturnella magna*)

Western Meadowlark (*Sturnella neglecta*) Both meadowlark species were present in the area. No determinations were made of the relative numbers of each species.

Lark Bunting (*Calamospiza melanocorys*) This fringillid was very common especially in the uplands. Individuals were seen carrying nesting material.

Grasshopper Sparrow (*Ammodramus savannarum*) Several singing males were observed.

Lark Sparrow (*Chondestes grammacus*) This sparrow was abundant throughout the sandhill grassland.

Crescent Lake refuge is a wonderful birding area, but is of difficult access. From the north the refuge may be reached by a single-lane black-top road from Lakeside on Highway 2. The trip is about 25 miles and takes an hour or better because of road-surface conditions.

From the south the refuge may be reached by a county gravel (sand) road from Oshkosh. This trip is also about 25 miles. At present this road should not be taken during or following heavy rain. Refuge personnel do not attempt to travel this under adverse conditions even with four-wheel drive vehicles except in emergencies.

Presently no campsites or overnight accommodations are available at the refuge. Picnic facilities do exist on several of the larger lakes, however. No motels or hotels are available at Lakeside or Ellsworth near the northern approach, but such accommodations are available at Oshkosh.

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1965 CHRISTMAS COUNT

Eighty six species were included on the various Christmas counts in this report, and five additional species were seen during the count period but not on the count day. (These are indicated by "p" on the tabulation.) This high figure can be attributed to two factors: the unusually open winter, and the increase in the number of areas reported. Not all of the counts were made in strict accordance with the national rules for the counts. Several years ago the members decided that strict observance of those rules would not be required of reports published in the *Review*.

Two more species would be added to the count if Flickers and Meadowlarks were split. Scottsbluff, Sutherland, Kearney, and Omaha-Plattsmouth reported both Yellow-shafted and Red-shafted Flickers; North Platte, Maxwell, and Stapleton reported only "Flickers"; and Hastings, Lincoln, Wymore, and Peru reported only Yellow-shafted Flickers. Omaha-Plattsmouth reported both Eastern and Western Meadowlarks; Lincoln and Wymore reported only "Meadowlarks"; and Scottsbluff, Sutherland, Maxwell, Stapleton, Kearney, Greeley, and Hastings reported only Western Meadowlarks.

The columns are arranged in an approximate west (left) to east (right) order, and for localities of about the same longitude the northernmost is given first. The available details on the different reports are:

Greeley, January 1, Scott Moody. The observations were on the Moody farm, five miles west of Greeley.

Hastings, December 29. All points within a 15-mile diameter circle with its center two miles south of Hastings at Frisch's pond, to include Crystal Lake area, woodlands along Little Blue River, adjoining fields, city parks, Parkview Cemetery, Lake Hastings. Weather: clear in the morning, cloudy in the afternoon, temperature 35-48 degrees, wind 5-15 mph, no

snow, ponds frozen. Fifteen observers in five parties: Mrs. R. R. Damerell, W. E. Eigsti, Charles Hansen, Mrs. Ray Horrigan, Mrs. Geo. Janko, Mrs. A. M. Jones, Mrs. C. E. Kennedy, Mrs. H. L. Marsh, Mrs. Marie Marsh, Mrs. Willard Palmer, Mr. and Mrs. Eldon Percival, Mrs. O. W. Ritchey, Miss Bernice Welch, and Miss Vera Maunder, who also compiled the report for the Brooking Bird Club.

Kearney, January 1. All points within a 15-mile diameter circle, center at the Platte River bridge, to include Harmon Park, Cemetery, Cotton Mill Lake, Robinson's Woods, Fort Kearney State Park, and Sand Pits. Deciduous woods 40%, open fields and pastures 30%, roadside ditches 20%, town 10%. 7:45 AM to 5:30 PM. Cloudy sky, temperature 24-34 degrees, wind calm, river open, lakes frozen. Six observers in one party. Party hours 8, total miles 82. George W. Brown (compiler), Laurie Brown, Marian G. Brown, Randy Brown, Ronny Marrow, Norma Radford.

Lincoln, December 26. Fifteen-mile diameter circle centered at 14th and A Streets, to include Pioneers Park, Wyuka Cemetery, area east of Holmes' Park, Dale Weiss farm on Stevens Creek, and the North 27th Street flats. Heavy overcast, wind SE-NW 5-15 mph, temperature 25-31 degrees, light skiff of snow on the ground, creeks open, ponds partly frozen. Eleven observers: Oscar Alexis, Jim Commers, Mr. and Mrs. George Keim, Dr. Rosalind Morris, A. E. Morris, Doris Gates, Ann Laing, Shirley Pogge, Mary Alice Vernon, and Ralph Harrington who compiled the report.

Maxwell, January 1. North Platte to Maxwell, west end of Brady Island, Moran and Box Elder Canyons. 9 AM to 5 PM, weather foggy to clear, 28-43 degrees, calm. About 70 miles in car, 1 on foot. Gail Shickley and

text continued on page 38

	Sctsblf	Tryon	Suth	N.P	Max	Stp.	Kearn	Grly	Hast	Linc	Wym	Om-Pl	Peru
Great Blue Heron	1	-	-	-	8	-	-	-	-	-	-	-	-
Canada Goose	40	-	x	-	-	-	-	-	-	-	-	115	-
Snow Goose	-	-	-	-	-	-	-	-	-	-	-	42	-
Blue Goose	-	-	-	-	-	-	-	-	-	-	-	43	-
Mallard	30,400	-	x	-	3026	200	400	-	17	2000	-	30	-
Gadwall	-	-	-	-	-	-	-	-	p	-	-	-	-
Green-winged Teal	-	-	-	-	-	-	15	-	-	3	-	2	-
Blue-winged Teal	-	-	-	-	-	-	-	-	6	-	-	-	-
Shoveler	-	-	-	-	-	-	-	-	40	-	-	-	-
Redhead	-	-	-	-	-	-	5	-	p	-	-	-	-
Ring-necked Duck	-	-	-	-	-	-	-	-	2	-	-	-	-
Canvasback	-	-	-	-	-	-	-	-	6	-	-	-	-
Lesser Scaup	-	-	-	-	-	-	-	-	p	-	-	-	-
Common Goldeneye	1	-	x	-	3	-	-	-	p	-	-	1	-
Bufflehead	-	-	-	-	-	-	-	-	p	-	-	-	-
Ruddy Duck	-	-	-	-	-	-	-	-	p	-	-	-	-
Common Merganser	2	-	x	-	-	-	-	-	-	-	-	-	-
Red-tailed Hawk	-	-	-	-	4	-	-	-	-	6	6	12	1
Red-shouldered Hawk	-	-	-	-	-	-	-	-	-	-	-	1	-
Rough-legged Hawk	2	-	x	-	-	1	1	-	1	1	-	-	-
Golden Eagle	2	-	-	-	-	1	-	1	-	-	-	-	-
Bald Eagle	2	-	x	1	6	-	3	-	-	-	-	1	-
Marsh Hawk	3	-	x	-	3	2	2	-	6	3	1	4	-
Prairie Falcon	-	-	x	-	-	-	-	-	-	-	-	-	-
Peregrine Falcon	-	-	-	-	1	-	-	-	-	-	1	-	-
Pigeon Hawk	-	-	-	1	1	-	-	-	-	-	-	-	-
Sparrow Hawk	3	-	x	-	4	1	8	-	2	3	2	13	-
Sharp-tailed Grouse	-	6	-	-	-	-	-	-	-	-	-	-	-
Bobwhite	p	-	-	-	-	-	-	-	1	-	-	6	-
Ring-necked Pheasant	6	3	-	13	3	6	2	2	1	1	2	-	-
Killdeer	-	-	-	-	-	-	-	-	1	-	-	-	-
Herring Gull	-	-	x	1	-	-	-	-	-	-	-	-	-
Ring-billed Gull	-	-	x	2	3	-	2	-	-	-	-	6	-
Rock Dove	-	-	-	-	-	-	-	-	-	-	27	108	-
Mourning Dove	10	-	-	-	-	-	-	-	42	108	4	6	-
Screech Owl	p	-	-	-	-	-	-	-	-	-	-	-	-
Great Horned Owl	2	1	-	-	1	-	-	-	3	1	3	1	1
Long-eared Owl	-	-	-	-	-	1	-	-	-	-	-	-	-
Belted Kingfisher	2	-	x	1	-	-	7	-	2	-	-	2	1

	Sctsblf	Tryon	Suth	N.P	Max	Stp.	Kearn	Grly	Hast	Linc	Wym	Om-Pl	Peru
Flicker	23	-	x	1	5	2	13	p	9	2	2	45	3
Red-bellied Woodpecker	-	-	-	-	1	-	-	-	3	1	10	45	1
Red-headed Woodpecker	-	-	-	-	-	-	-	-	-	-	-	3	-
Yellow-bellied Sapsucker	-	-	-	-	-	-	-	-	p	-	1	-	1
Hairy Woodpecker	2	-	x	1	-	-	1	1	3	1	6	22	1
Downy Woodpecker	12	-	x	3	1	1	3	-	11	6	6	70	3
Horned Lark	50	400	x	-	15	16	185	10	100	-	20	7	-
Blue Jay	9	-	-	-	-	1	9	-	11	22	10	19	7
Black-billed Magpie	40	-	x	1	34	6	1	1	15	-	-	-	-
Common Crow	3	-	x	5	10	14	10	90	20	65	13	50	200
Black-capped Chickadee	23	-	x	15	7	2	17	p	100	32	14	158	17
Tufted Titmouse	-	-	-	-	-	-	-	-	-	2	3	16	1
White-breasted Nuthatch	2	-	-	1	-	2	1	-	10	10	4	35	6
Red-breasted Nuthatch	3	-	-	3	-	-	-	-	6	8	-	1	-
Brown Creeper	p	-	-	1	-	-	1	1	3	4	1	3	-
Carolina Wren	-	-	-	-	-	-	-	-	-	-	-	-	1
Mockingbird	1	-	-	-	1	-	-	-	-	1	-	-	-
Brown Thrasher	-	-	-	-	-	-	-	-	-	1	-	1	-
Robin	14	-	x	16	30	28	4	-	50	-	1	1	1
Eastern Bluebird	-	-	-	-	-	-	-	-	-	-	1	23	-
Townsend's Solitaire	10	-	-	1	1	1	-	-	-	-	-	-	-
Golden-crowned Kinglet	1	-	-	14	-	-	2	-	p	7	-	1	-
Cedar Waxwing	p	-	-	-	-	-	-	-	3	42	-	-	-
Northern Shrike	2	-	-	-	-	-	-	-	-	-	-	-	-
Loggerhead Shrike	-	-	-	-	1	-	-	-	-	1	2	-	-
Starling	2227	20	x	7	36	17	497	100	500	179	182	589	15
Myrtle Warbler	-	-	-	2	-	-	-	-	-	-	-	-	-
House Sparrow	1297	100	x	27	155	3	131	60	500	1000	310	5230	125
Meadowlark (sp)	31	-	x	-	6	9	47	1	150	32	107	111	-
Redwinged Blackbird	5062	300	x	-	694	22	1	-	75	-	375	15	-
Rusty Blackbird	-	-	-	-	-	-	-	-	25	-	-	86	-
Brewer's Blackbird	-	-	-	-	1	-	-	-	-	-	-	-	-
Common Grackle	-	-	-	-	-	-	-	-	25	-	506	5	-
Brown-headed Cowbird	-	-	-	-	-	-	-	-	30	-	-	9	-
Cardinal	-	-	x	2	3	-	9	-	20	32	20	94	21
Evening Grosbeak	p	-	-	-	2	-	-	-	-	-	-	-	-
Purple Finch	-	-	-	-	-	-	-	-	19	9	-	-	-
House Finch	44	-	-	-	-	-	-	-	-	-	-	-	-
Common Redpoll	-	200	x	-	-	-	-	-	-	-	-	-	-
Pine Siskin	109	p	x	-	7	-	17	-	50	18	-	-	-

	Scotsblf	Tryon	Suth	N.P	Max	Stp.	Kearn	Gryl	Hast	Linc	Wym	Om-Pl	Peru
American Goldfinch	49	100	x	3	45	-	12	-	60	8	12	33	27
Red Crossbill	-	-	x	-	-	-	-	-	-	-	-	-	-
Rufous-sided Towhee	-	-	-	-	-	-	-	-	p	3	-	-	-
Junco (sp)	-	-	-	-	50	-	-	-	-	-	-	-	-
Slate-colored Junco	21	-	x	6	30	3	83	4	25	126	44	152	50
Oregon Junco	30	30	-	-	9	4	8	-	1	-	-	5	-
Tree Sparrow	22	200	x	3	168	108	22	1	30	12	39	393	6
Harris' Sparrow	3	-	x	-	50	-	14	-	60	145	68	35	14
White-crowned Sparrow	13	-	-	-	-	-	12	-	6	-	1	5	-
White-throated Sparrow	-	-	-	-	-	-	-	-	-	1	-	-	-
Lincoln's Sparrow	-	-	-	-	-	-	-	-	-	-	-	1	-
Song Sparrow	1	-	-	1	-	-	12	-	p	5	4	4	-
Lapland Longspur	-	-	-	-	-	17	-	-	p	-	-	-	-
Total Individuals	39580	1360	-	132	4425	468	1557	272	2050	3901	1808	7660	503
Total Species	42	11	32	26	36	25	35	12	44	38	35	50	22
Species present not seen	5	1	-	-	-	-	-	2	11	-	-	-	-

Edith McIntosh. There was probably another Peregrine Falcon, but the bird flew too soon to be identified. This area and those reported under North Platte and under Sutherland are adjacent but not overlapping.

North Platte, December 31. Cody and Bill Wood Parks and adjoining river. 9 AM to 11:30 AM, partly cloudy, 30-35 degrees, calm. Gail Shickley.

Omaha-Plattsmouth, January 2. 15-mile diameter circle centered on Offutt Lake (about three miles north of the junction of the Platte and Missouri Rivers), including the Plattsmouth Waterfowl Management Area, Fontenelle Forest, and, in Iowa, Lake Manawa State Park. Treva Burd, Mrs. Paul Heineman, Mrs. Jean Schneider, and Mrs. Don Wood, Plattsmouth; Carl Swanson, Bellevue; John Plank, Council Bluffs, Iowa; Grover C. Bramel, Rev. Alban Dachauer, Marian Dennison, Michael Hansen, Glenn H. LeDioyt, Violette E. Madsen, James Malkowski, Donald Nelson, Mrs. Joseph Pluta, Dr. Leon Powell, David Skryja, E. Thomas Stacey, Roger Sylvester, and Doris S. Wallace, Omaha.

Peru, January 1. 8 AM-4 PM. Misty, dark, and foggy all day, difficult

to see colors forty feet away. Ida May Heywood (reporter) and Mary Alice Vernon, Peru; Mrs. Loy Mowery, Auburn; and Mrs. Jessamine McMullin, Stella.

Scottsbluff, December 30. Fifteen mile diameter circle centered on the Gering-Scottsbluff bridge. Cloudy, 36 to 56 degrees, wind in the morning 5 to 10 mph, in the afternoon up to 30 to 40 mph. Mrs. J. W. Brashear, Mrs. Alvin Vance, Mr. and Mrs. Roy Witschy, Mr. and Mrs. S. R. Young, Lydia Bolz, and Mrs. Harry Banghart. Reported by Mrs. Witschy. Jim McCole counted the Mallards by plane.

Stapleton, January 1. 9 AM to noon, 1 PM to 4:30 PM. Temperature 26 to 40 degrees. Forenoon cloudy with fog; afternoon partly cloudy. Nearly calm throughout the day. Covered South Loup Valley, sandhills, upland. Habitats: wooded, swampy, pasture grass land and fields. Earl Glandon.

Sutherland, December 29. Forebay to Lake Maloney and along the canal to Sutherland. 9 AM to 5:30 PM. Nineteen degrees, wind North, 5mph. Catherine Viehmeyer and Gail Shickley. Species seen were checked but not counted.

Tryon, December 29. Seen at the feeder, bird bath, and on her daily walk by Mrs. Oona Bassett on her ranch in northwestern McPherson County.

Wymore, December 29. Temperature 35 to 40 degrees, wind about 25

mph, cloudy. Mrs. Lynn Harden, Miss Verneil Griffin, Paul Marshall, and Mrs. Floyd Patton, reporter. The Peregrine Falcon was identified by Mr. Viehmeyer from the detailed description sent to him.

EXCERPTS FROM LETTERS

During October the water in Lake Maloney was lowered several feet to permit repairs of various sorts to be made. This left a wide expanse of smooth, sandy lake bottom around the lake, a pleasant area for walking.

On October 20 there seemed to be little in evidence other than gulls, scattered all over the lake. Since the great majority of them were Ring-bills, with a few Herrings, there seemed to be no reason to examine them with my binocular. My attention was attracted to one group on the shore which was permitting me to come close to them, and it finally became a challenge to see how close I could walk before the birds flew away. When part of the flock did fly I raised my binocular to watch as they flew away and was startled to note that one of them had a prominent black spot back of the eye and that the rear edge of the wing appeared to be dark. This was about all I could note as the bird flew directly away from me. I was not carrying my field guide and doubted I could identify the bird from what I had seen. Luck was with me, for when I scanned the birds still standing on the shore another gull with the black dot on the head stood among the Ring-bills. I examined it at length, noting the dark eye, black bill, and red legs. The bird was noticeably smaller than the Ring-bills standing beside it. Eventually I startled the birds into flight and noted again the dark rear edge of the wings, and also a narrow tail band. With these features in mind, I was able to identify the birds as Bonaparte's Gulls. In

looking back over the Migration reports I find there are only a few records of Bonaparte's Gulls in Nebraska, and most of these are from Adams County east. The two exceptions are one report from Keya Paha County (*NBR*, 23:70) and one report from Garden County (*NBR*, 32:15). All of the previous reports of Bonaparte's Gulls in the state were of observations made during spring migration. No observations during the fall migration were reported in any of the literature I had available.

On October 23 I was walking on the beach with Ella Nielsen, attempting to get closer to a flock of ducks resting on the water. As we neared the water's edge we became aware of small water birds scattered over the water. Western Grebes were easy to identify, but the smaller ones were in eclipse plumage and we could not be sure of their identity beyond the fact of their being grebes. Their silhouettes and behavior determined that. These birds dotted the water as far as we could see them, some alone, many of them in small flocks. Their constant diving and bobbing up and down on the water made it difficult to estimate their numbers, but it is safe to say there were hundreds of them, and I think it no exaggeration to say there were in the neighborhood of 1,000 grebes on the lake that day. On October 25 I returned to the same area with Edith McIntosh, taking my Zoomscope. We found many grebes still remaining in the area, although less than half as many as had been there two days before. With the Zoomscope it was easy to identify Western,

Horned, and Eared Grebes (the last two species in eclipse plumage), divided about evenly in numbers, and a very few Pied-billed Grebes, at least part of them juvenals. This is the only time I have ever observed all of the grebes together in such immense numbers.

Also on October 25 we found our attention attracted by one gull standing with a small group at the water's edge. There were several Ring-bills in the flock, and a few Herring Gulls, but the bird that drew our attention seemed to be somewhat between the two in size. It was about 150 feet away, so we set up the Zoomscope to observe it more closely. The Zoomscope ranges from 15x to 60x and gave us a good observation of the bird at that distance. We could see no dot on the rather bright yellow bill, but were agreed on green legs and a dark eye, which would indicate a California Gull. There is no authenticated record of the California Gull in Nebraska, but I report it here in the hopes that others will be on the lookout for it, too. Peterson gives the breeding range of the California Gull as extending as far east as North Dakota so it seems entirely possible that it could migrate through Nebraska occasionally, but at a casual glance an observer would certainly think it was a Herring Gull.

—Gail Shickley, North Platte

I made yet another delightful bird observation for 1965 when I caught sight of a female White-winged Scoter at the nearest farm pond on my beat, about a quarter mile from home. I make it a practice to approach carefully, in case there be ducks. I peeked over the dam on October 11, and apparently none were present. Without caution, I then quickly progressed into view, and to my surprise, a cootlike duck dove into the water at the edge of the pond. Even with only that brief glance I was aware that it could not be the common Coot. Shortly a strange sound greeted my ears and I thought

that perhaps the frogs jumping into the water ahead of me were the source, although it hardly sounded natural.

While I was trying to locate the raspy-toned croak definitely I had a second surprise in glancing out across the pond. There, to the farther side, was my "coot-duck", swimming buoyantly across the water's surface and giving me a good view of its white wing-patch which, according to the books, sometimes cannot be seen until the bird raises its wings. This one soon flew, pattering along a few yards on the water in doing so, and then more white was visible in the wing, as Peterson's guide describes. It also states that the whitish face patches are often obscure, and are more prominent in young birds. I did not notice the patches, and concluded that it was an adult female, as the light seemed favorable enough.

The books that I have do not mention any call notes for the Scoters, and it is my belief that, in this case, it was frightened at my sudden appearance and the fright caused it to give this buzzy rattle-like sound.

So—another new species is added to my life list.

—Harold Turner, Holstein

In January I got a female pheasant, taken near Columbus, which is of special interest because of marked male characteristics. The neck is colored like that of a male, and the tail is 17.5 inches long, colored like that of a hen but with markings like those of a male. The ovaries seemed normal except for some seemingly fatty tissue which was brownish in color. I have another hen pheasant which I mounted years ago with a normal tail but the plumage of the belly closely resembles that of a male. I know this aberration occurs, but I do not know how common it may be in our area. I have never seen a male pheasant with even a trace of the coloring of a hen pheasant.

Ralph Velich, Omaha

The day after I returned from Thanksgiving vacation (November 29) I discovered a number of dead Cedar Waxwings in the school patio where they apparently had struck glass panels when attempting to fly through the area where there is glass on each side of the hall, giving a "through-way appearance". During the day additional birds were located dead, dying, or at least dazed, so that at the end of the day I had picked up ten birds and released one which apparently was only temporarily dazed. The following day an additional three Cedar Waxwings were picked up.

These birds had been eating the apples from a crab-apple tree located on the east side of the patio, and they apparently would fly from the tree and hit the glass. Though I am not certain of this, I believe they may have been "under the influence of one-too-many apples", because the apples were rotting and souring on the tree.

Probably the most important find,

however, was a single Bohemian Waxwing which I found stunned during the noon hour of November 29. This bird was taken to the biology room where he received his share of attention until after school that afternoon, when he was released. Like the Cedar Waxwing which was released, the Bohemian Waxwing flew to a low branch of a maple and remained there as long as I was watching him.

Earlier in the fall a couple of Robins were noted near the glass where they apparently suffered a similar fate. Most birds with all their faculties (not under the influence) seem to realize the situation in time to fly over the roof.

C. W. Huntley, Crete

Glenn LeDioyt photographed an unusual bird in the yard of Mrs. Joseph Pluta on January 9. The picture was shown at the next meeting of the Omaha Bird Club and it was agreed that it was a Western Tanager.

NESTING REPORT, 1965

This report covers specific instances of nesting, or indications of attempts at nesting, observed in Nebraska in 1965. Sixty-one species are listed. The following symbols are used:

B building a nest, or bird at or on a nest for which there is no mention of eggs or young being seen.

C common nester - used only if no other information is available.

F feeding young away from the nest.

G gathering or carrying food.

M gathering or carrying nesting material.

N nest in which eggs or young were seen, including parasitical eggs found. This symbol is used in preference to any other.

X reported only as "nested" with no further details.

Y young observed, away from nest, and no feeding mentioned.

Where dates were mentioned in the reports they have been used, with the following abbreviations for months. Mr, Ap, My, Je, Jy, Au, S, O.

The columns are arranged in approximate west (left) to east (right) order. The participants and special comments are:

Adams, Central. Miss Vera Maunder for Brooking Bird Club. Miss Maunder and Mrs. Ritchey found a number of Mourning Dove nests in Parkview Cemetery in Hastings, but apparently no young were successfully raised there. They attribute the failure to the many Grackles in the area.

The Eldon Percivals, from Sutton, Clark County, had many Lark Bunting nests in their milo stubble. Mr. Percival tried to avoid the nests when he worked the field, and was at least partially successful.

Adams, South. Harold Turner, Holstein.

Dawes. Doris Gates, Chadron, Mrs. W. A. Neeland, Hemingford, and Mrs. Roy J. Witschy. Mrs. Neeland saw few Nighthawks during the summer, but they were numerous on August 24 and she believes the increase was due to young ones which had left the nest.

Douglas-Sarpy. Mrs. S. A. Perkins, Dr. Leon Powell, Carl Swanson, R. G. Cortelyou.

Lincoln, Mrs. Bernadine Cox, Hershey.

Scotts Bluff, Mrs. Roy J. Witschy, Scottsbluff. On June 15 Mrs. Witschy saw a Swainson's Thrush building a nest at Sylvan Lake, South Dakota, which is not too far north of the Nebraska Line.

	Dawes	Scotts Bluff	Lincoln	Adams South	Adams Central	Douglas- Sarpy
Great Blue Heron	--	--	--	--	B	--
Mallard	--	--	Y Au	X	--	--
Blue-winged Teal	--	--	--	--	Y Au 31	--
Wood Duck	--	--	--	--	--	Y Jy
Sharp-tailed Grouse	Y Jy, 0	--	--	--	--	--
Bobwhite	--	--	X	X	Y Mr	--
Ring-necked Pheasant	--	--	Y Au	X	--	--
Killdeer	--	--	--	X	--	--
Long-billed Curlew	--	Y My 30	--	--	--	--
Upland Plover	Y Jy 5	--	--	Y Jy	--	--
Mourning Dove	--	N Jy, Au	G M	--	N My Je	G Ap My
Black-billed Cuckoo	--	--	--	N	--	--
Screech Owl	Y Je 17	Y Je 13	--	--	--	--
Great Horned Owl	--	N My 27	--	--	--	--
Chimney Swift	--	--	--	--	N	--
Flicker	--	--	Y Je	X	--	--
Red-headed Woodpecker	--	--	Y Au	--	Y	--
Hairy Woodpecker	N Je 16	--	--	--	--	--
Eastern Kingbird	M G Je	--	Y S 1	X	--	--
Western Kingbird	C Je-Au	N Je 3	--	X	--	--
Great Crested Flycatcher	--	--	--	X	--	--
Eastern Phoebe	--	--	Y Au 10	--	--	--
Say's Phoebe	B Ap-Je	N Au 22	--	--	--	--
Empidonax sp.	--	--	--	--	--	M My 25
Barn Swallow	N My, Jy	N Au 21	N Je Jy	X	--	--
Cliff Swallow	B My	B Je 13	--	--	--	--
Purple Martin	--	--	--	--	X	--
Blue Jay	--	--	--	--	--	M My
Black-billed Magpie	--	N Je 2	--	--	--	--
Black-capped Chickadee	--	B Je 2	--	--	--	--
House Wren	B My N Je	--	Y Jy 5	Y	N	--
Carolina Wren	--	--	--	Y Jy 13	--	--

	Dawes	Scotts Bluff	Lincoln	Adams South	Adams Central	Douglas- Sarpy
Catbird	--	--	--	X	Y	M My Je
Brown Thrasher	C	N My Je	--	X	M F My Je	--
Robin	Y Jy 5	N Je	--	X	Y	N My
Eastern Bluebird	--	--	Y Jy	--	--	--
Mountain Bluebird	X	--	--	--	--	--
Loggerhead Shrike	B G My	--	--	--	--	B Y Ap-Jy
Starling	--	N Je	M G My-Au	--	--	--
Red-eyed Vireo	--	B Je	--	--	--	--
Warbling Vireo	--	N	--	--	--	--
Yellow Warbler	--	N Je-Jy	--	Y Jy	--	B My Je
House Sparrow	--	--	B Mr	X	C	--
Bobolink	--	--	Y Au	--	--	--
Eastern Meadowlark	--	--	Y Jy-Au	--	--	--
Western Meadowlark	Y Jy	--	--	X	--	--
Red-winged Blackbird	--	--	Y Au	X	--	--
Orchard Oriole	--	--	--	X	--	--
Baltimore Oriole	--	--	--	--	--	M B My Je
Bullock's Oriole	B My Je	B Je 2,6	--	--	--	--
Common Grackle	--	--	Y Au	X	Y Je	--
Brown-headed Cowbird	--	N Je, Jy	Y S	N	--	--
Cardinal	--	--	--	X	Y Jy Au	N Je 2
Rose-breasted Grosbeak	--	--	--	--	--	N Je 2
Dickcissel	Y Au 23	--	Y Au	--	--	--
House Finch	--	N Ap-My	--	--	--	--
Lark Bunting	N Je, Y Jy	--	Y Au	X	Note	--
Grasshopper Sparrow	G Jy Au	--	--	X	--	--
Lark Sparrow	--	--	--	X	--	--
White-winged Junco	Y	--	--	--	--	--
Chipping Sparrow	--	--	--	Y Jy	--	--

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WESTERN KINGBIRD NESTING IN THE NEBRASKA SANDHILLS

The nesting success and activities were recorded on 10 western kingbird (*Tyrannus verticalis*) nesting attempts in the trees around the headquarters of the Valentine National Wildlife Refuge during the summer of 1965.

The study area was approximately 10 acres in size and contained woods, native grassland, lawns and various buildings. Most common tree species were black locust (*Robinia pseudo-acacia*), willow (*Salix spp.*), cedar (*Juniperus virginiana*), and ponderosa pine (*Pinus ponderosa*), in order of abundance.

Eighty (80.0 percent) of the 10 western kingbird nesting attempts produced young—a total of 33. From three to five young were produced per successful nest with an average of 4.1. Only two nests were unsuccessful. One nest contained three eggs which were deserted. The other unsuccessful nest, which had four young initially, was found empty and partly destroyed. These young birds may have been taken by a longtail weasel (*Mustela frenata*), because one was observed in an adjacent tree a few days later.

All ten nesting attempts were apparently the result of ten different adult pairs, because all were active

during the same period. No renesting was observed during the season. It is interesting to note that the young in nine nests hatched within a five day period, from July 2 to July 6, 1965 inclusive. Fledging took place between July 15 and July 20, indicating that the brooding period lasts about two weeks.

Ronald D. Klataske
University of Maine

HOODED WARBLER IN LOGAN COUNTY

On November 10, 1965, a warbler with yellow markings about the head was observed in the shrubbery at the edge of the garden. On the 12th it was again observed with binoculars at close range and it was identified as a Hooded Warbler. Mrs. Glandon saw the bird at the bird bath on the 13th and corroborated Mr. Glandon's identification. It was again seen early in December. This is a new record for Logan County.

About November 5th, Clarence Lan-
ka reported three Swans on Cody
Lake, about 14 miles north of Staple-
ton. One was an adult, two were im-
mature. The adult swan was there
for about a month but the immatures
were gone soon after the first obser-
vation. Species identification was not
made but it is believed that they were
Whistling Swans. —Mr. and Mrs.
Earl W. Glandon, Stapleton.