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A Century of Ornithology in Nebraska: A Personal View*

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ABSTRACT.—The Nebraska Ornithologists' Union celebrated its centennial year during 1999. During more than 65 years it has published a quarterly journal, the *Nebraska Bird Review*, and has also published several proceedings of annual meetings as well as special or "occasional" publications. During this same century one native Nebraska bird species (Passenger Pigeon) has become extinct, another (Eskimo Curlew) has possibly become extinct, and at least 15 species apparently have been extirpated as breeding species in the state. Additionally at least seven species have begun breeding successfully in the state, either through purposeful or accidental human efforts, or by range expansion and associated self-introduction. Several species have also managed to re-establish themselves after near extirpation or severe population decline.

A n attempt to summarize the history of a century of ornithology by a person who has witnessed only the last forty years of it, is perhaps as difficult as it is to describe an elephant when only its retreating rear end has been seen. Misinterpretation as well as an emphasis on the better-known and closer portions are likely to occur. Furthermore, besides being a necessarily myopic view, the following account has a distinctly personal touch, inasmuch as I have seen Nebraska only through my own eyes and experiences. Yet, we have good documentation of the activities of ornithologists at the turn of the last century through the earliest publications of the Nebraska Ornithologists' Union, and these have helped to let me see the front of the elephant with some clarity. I hope others might agree.

The history of scientific ornithology in the state began with the Lewis and Clark expedition, when the group passed northward through what is now Nebraska in July of 1804. About 25 species were observed by them at that time (Swenk 1935). Two decades later, a government expedition headed by Major S. H. Long passed through Nebraska in 1819-1820, and included the naturalist Thomas Say. They spent the winter near the present location of Council Bluffs, and observed a substantial number of species (Thwaites 1905). The Orange-crowned Warbler (Vermivora celata) was discovered near Council Bluffs (perhaps on the Nebraska side) during this expedition. Still later, Prince Maximilian, together with his artist Karl Bodmer, passed upstream through Nebraska's section of the Missouri in April and early May of 1833, and downstream again in May of 1834. At that time such species as the Whip-poor-will (Caprimulgus vociferus) and Wood Duck (Aix sponsa) were heard or

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observed commonly. A decade later, in the spring of 1843, J. J. Audubon traveled up the Missouri River with two friends, Edward Harris and John Bell. They returned that fall, in September and early October. During that trip the Western Meadowlark (Sturnella neglecta) was first discovered (in what is now North Dakota), as were the Harris' Sparrow (Zonotrichia querula) and the Bell's Vireo (Vireo bellii), both in what is now Missouri. Nesting of the Bald Eagle (Haliaeetus leucocephalus) was seen near the mouth of the Platte River, and both Canada Geese (Branta canadensis) and Great Blue Herons (Ardea herodias) were found nesting along the Missouri in what is now Nebraska. In 1833 the Lark Bunting (Calamospiza melanocorys) and Chestnut collared Longspur (Calcarius lapponicus) were discovered along the Platte River in what is now western Nebraska, by the Philadelphia naturalist John K. Townsend and Thomas Nuttall, on their expedition to the Columbia River, as recounted in Townsend's Narrative of a Journey Across the Rocky Mountains.

THE FORMATION AND HISTORY OF THE NEBRASKA ORNITHOLOGISTS' UNION

In 1894 Isadore S. Trostler of Omaha sent out a notice, asking that all persons interested in Nebraska ornithology and oology might submit their names and addresses to him. From this effort he received about ten replies. He tried to arrange a meeting with these persons with a view to forming a state organization devoted to birds, but failed. He tried again in 1895 and 1896, and failed both years. Again in 1898 he tried to organize a meeting in conjunction with the Trans-Mississippi Exposition, but only managed to visit with a few of his now

nearly 25 contacts when they visited the exposition. Finally, in May, 1899, he arranged a preliminary organizational meeting with five others. These people were mostly from the Omaha area, but also included M. A. Carriker, Jr. of Nebraska City. They decided their group should be called the Nebraska Ornithologists' Association. They soon learned that only about three months previously, Robert H. Wolcott and Lawrence Bruner, both well-known biologists of the University of Nebraska, had organized a Nebraska Ornithological Club in Lincoln. The Omaha group thus petitioned the Lincoln group to open their membership to the entire state. As a result, in May of 1899 a committee of the Lincoln club sent out letters around the state, inviting interested persons to join their group. On 15 July 1899, the first meeting was held for the election of officers, with 43 persons attending. The first annual meeting finally occurred in Lincoln, on 16 Dec. 1899. At that time the constitution of the Nebraska Ornithologists' Union was ratified, with more than 90 active and associate charter members.

The first president of the NOU was Lawrence Bruner, with I. S. Trostler serving as vice-president. The first annual meeting included nine paper presentations. One by J. S. Hunter provided a list of birds seen at the "salt basin" lake west of Lincoln (now Capital Beach), consisting of 85 species (then-current taxonomy) of waterbirds and shorebirds, including such unexpected species as the Whooping (*Grus americana*) and Sandhill (*Grus canadensis*) cranes. Another, by M. A Carriker, Jr., described the nesting of ten species of raptors in Otoe County, at least three of which no longer nest in southeastern Nebraska.

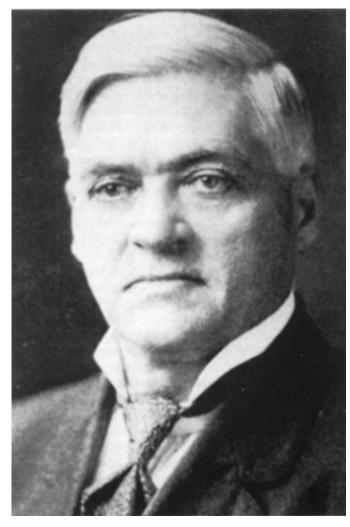


Fig. 1. Lawrence Bruner. Courtesy of the NOU Library and Archives.

The second annual meeting was held in Omaha, on 12 January 1901, with I. S. Trostler now president, and with 64 active members as well as 36 associates and four honorary members. Included in the charter membership rolls were such out-

standing scientific luminaries from the University of Nebraska as E. H. Barbour, Professor of Geology and internationally known paleontologist; Frederick. E. Clements, Professor of Botany and one of the pioneers of American plant ecology; Lawrence Bruner, Professor of Entomology and also already an authority on Nebraska's birds; and Henry B. Ward, Professor of Zoology and nationally-known parasitologist and invertebrate zoologist. Unlike some ornithological groups of the time, there were no restrictions on membership by sex, and there were at least nine women who were full members by 1901 (including the group's vice president), as well as 12 female associate members.

Among 21 papers presented at the second annual meeting, Lawrence Bruner summarized information on the bird species known to be nesting in Nebraska, which totaled 185 species. Another 39 species were listed as undoubtedly breeding, but evidence was lacking. Many of the species listed as then "known" to nest in the state, such as both yellowlegs (*Tringa flavipes* and *T. melanoleuca*), are now known not to be breeders. M. A. Carriker, Jr., later to become famous as a collector of tropical birds in Central and South America for several major museums, also presented two papers.

The third annual meeting was held in Lincoln, in February of 1902, with Erwin Barbour presiding. He presented a long and excellent paper on the probable reptilian ancestry of birds, based on the fossil record (Barbour 1903). He included several fine reconstructions of *Archaeopteryx* and a phyletic diagram suggesting that theropod dinosaurs provided the ancestral origin of birds. Robert Wolcott offered an historical review of ornithology in Nebraska, mainly comprised of an extensive bibliography, Lawrence Bruner described the birds of the eastern Sandhills, and Myron Swenk offered a paper on wintering



Fig. 2. Robert H. Wolcott. Courtesy of the NOU Library and Archives.

birds of Nebraska. An excellent paper on the distributional affinities of Nebraska's birds was presented by Robert Wolcott at the fourth meeting, who judged that by then six species, the Lesser Prairie-chicken (*Tympanuchus pallidocinctus*), Wild Turkey (*Meleagris gallopavo*), Passenger Pigeon (*Ectopistes migratorius*), Carolina Parakeet (*Conuropsis carolinensis*), Northern Raven (*Corvus corax*) and Chihuahuan Raven (*C. cryptoleucus*) were already extinct or extirpated from Nebraska.



Fig. 3. Myron H. Swenk. Courtesy of the NOU Library and Archives.

Myron Swenk, a charter member while still a high school student, was subsequently destined to follow Bruner as a University of Nebraska Professor of Entomology and spiritual leader of the NOU for many decades. John T. Zimmer was only ten years old when the NOU was formed, but later, while at the University of Nebraska, he too came under the influence of Bruner, and went on to become one of Nebraska's most famous ornithologists, winning the AOU's Brewster medal in 1952.



Fig. 4. Wilson Tout. Courtesy of the NOU Library and Archives.

Working at both the Field Museum and the American Museum of Natural History, he authored a valuable bibliography of the Field Museum's ornithological library (Zimmer 1926), and was a contributing author to the monumental *Catalogue of the Birds of the Americas* and also to J. L. Peters' *Check-list of the Birds of the World*.

The triad of Bruner, Wolcott, and Swenk published "A Preliminary Review of the Birds of Nebraska" (1904), complete with identification keys and documentation of occurrence for

every species then reported from the state. Earlier (1896), Lawrence Bruner had published the first complete checklist of Nebraska birds, totaling (again, in the taxonomy of the day), some 415 forms (species and subspecies), and 225 breeding forms. Viewed in terms of modern taxonomy, the list included some 350 species.

During the early years of the NOU, the Proceedings were produced annually through 1902. From 1908 to 1915 the annual meeting's proceedings were also published (as three additional volumes), but there was still no journal for the NOU. By the 16th annual meeting in 1915, financial or other considerations had seemingly made it impractical to continue publishing the NOU's annual proceedings, and their publication was terminated. Instead, the NOU decided to become an auxiliary of the Wilson Ornithological Club (WOC), with shared membership dues. The Wilson Ornithological Club had been formed in 1886, but did not begin holding annual meetings until 1914. This arrangement of affiliation with the WOC lasted through 1924, and during that period brief summaries of the NOU meetings were published annually in The Wilson Bulletin. Starting in 1925, a mimeographed Letter of Information was periodically mailed to members, with 68 issues written by the end of 1932, most or all being written by Myron Swenk. Apparently only a few intact sets of these still exist, two of which are in the files of the NOU library at the State Museum of the University of Nebraska and in the Special Collections of the University of Nebraska archives in Love Library.

The official journal of the NOU, *The Nebraska Bird Review*, began publication with the January 1933 issue. On its cover was a drawing of a Burrowing Owl (*Athene cunicularia*) by John L. Ridgway, brother of Robert Ridgway. The choice of this species as a logo seemed appropriate, since the type specimen of

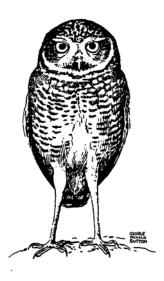
the North American subspecies had been collected near the Platte River of Nebraska during the Long Expedition in 1820. Myron Swenk was editor, and a list of the prior publications of the NOU was included with the first issue. These consisted of six volumes of the *Proceedings* of the NOU annual meetings from 1900–1915, a field checklist of Nebraska birds (dated 1908), the nine years of annual meeting proceedings that had been published in *The Wilson Bulletin* (1916–1924), and the *Letter of Information* series (1925–1932).

By the late 1930s, there were more than 120 active members of the NOU, with three charter members (A. L. Haeker, M. H. Swenk, and Wilson Tout) still active. Since 1925, annual summaries of spring and fall bird migration records have been published, first in the *Letter of Information* series and later in the *Review*, providing an extremely valuable and long-term record of seasonal changes in Nebraska bird populations. With the start of the 1938 volume a new cover sketch, by George Miksch Sutton, was introduced. Sutton had been born in the Bethany area of Lincoln, but the family left while he was still a child. This fine drawing (Fig. 5) has served as a logo for the NOU ever since, except for a brief period when a sketch by the theneditor, Henry Baumgarten, was used.

In 1941 Myron Swenk died, after having served the NOU long and well. Not only had he served as its president (1907–1908), but also as secretary or secretary-treasurer from 1904 to 1937, as the editor of the *Proceedings* for many years, as writer of the *Letters of Information*, and as editor of the *Nebraska Bird Review* from its beginnings throughout the 1930s. He also served as president of the Wilson Ornithological Club in 1918–1919. He published over 70 ornithological papers in his career, plus many others in entomology and mammalogy. His collection of several thousand bird and mammal specimens, and an

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Fig. 5. Drawing of a Burrowing Owl by George Miksch Sutton that has served as the NOU logo and cover illustration for *The Nebraska Bird Review* nearly continuously since 1938. Courtesy of the NOU Library and Archives.

insect collection, with more than 142 type specimens, was given to the University after his death. The first issue of the 1942 volume was a special memorial issue devoted to Swenk and his lifelong devotion to the NOU.

Through 1942 annual meetings had been held in many cities of the state, with Lincoln serving as host most often (17 times), followed by Omaha (10 times). By then there were some 140 NOU members, and there were active bird (or nature) clubs in Lincoln, Omaha, North Platte, Superior, Hastings, Fairbury, and Chadron. The NOU also became an Affiliated Society of the Nebraska Academy of Science, and for a few years had a separate papers session during that group's annual meeting. For a time there was also a mid-winter NOU meeting, for the purpose of presenting papers.

An annotated check-list of the birds of Nebraska was produced by the NOU, and was published in the *Review* (Haecker et al. 1945). A revised version of this list was later produced (Rapp et al. 1958). The latter list included four hypothetical species plus 393 accepted species, of which 218 were judged to be breeders. It was reprinted unchanged, but with a short supplement by R. ("Rusty") G. Cortelyou and Kent L. Fiala, in 1970. Cortelyou served as a long-term editor of the *Review*, from 1965 to 1990, and Kent Fiala also produced (1970) a checklist of the birds of Gage County while still an undergraduate student at the University of Nebraska.

The NOU suffered constant financial problems during the 1930s and 1940s, and there is indirect evidence that Myron Swenk personally helped keep the organization financially afloat during the Depression. Even when William Rapp took over the editorship of the *Review* in 1949, he found that the local printer was unwilling to undertake the printing of his first

issue until a payment of five hundred dollars in back payments was made. This amount was personally covered by the then NOU president, Allyn Moser.

PERSONAL REFLECTIONS

The mid-1950s was a time of great interest in Platte Valley birds by nationally known ornithologists. Charles Sibley of Cornell University led his students (especially Lester Short. Jr., and David West) on a series of summer collecting expeditions to central Nebraska, studying breeding biology and collecting specimens of several east-west species-pairs of birds that hybridize extensively in that valley. These studies (Sibley and Short 1959, 1964; Sibley and West 1959; West 1962; Short 1965) proved the importance of the Platte Valley, and to a lesser extent the Niobrara Valley, as dispersal corridors and major evolutionary "suture zones" between eastern and western avifaunas. Their findings spurred a revision in our taxonomic interpretations of such hybridizing birds as the Yellow-shafted (Colaptes auratus) and Red-shafted (C. cafer) flickers (= Northern Flicker), the Eastern (Pipilo erythropthalmus) and Spotted (P. maculatus) towhees (= Rufous-sided Towhee), the Baltimore (Icterus galbula) and Bullock's (I. bullockii) orioles (= Northern Oriole), and several others. Later work out of the University of Kansas on the orioles by J. Rising (1973, 1983), and on the Great Plains meadowlarks by S. A. Rohwer (1971, 1973) provided additional evidence for the importance of the Great Plains river valleys as major zones of genetic interactions among closely related birds.

During 1956–59 I attended at Cornell as a doctoral graduate student under Sibley, and listened in awe to the stories my

graduate student friends told me of the beauty of Nebraska's Platte Valley in spring, and of its wonderful bird life. Little wonder that, when I learned of a job opening for an ornithologist at the University of Nebraska during 1961 while doing post-doctoral study in England, I wasted no time in applying for the position. I had never set foot in Nebraska at that time, but was certain that I would love the state. I also knew that Nebraska's Sandhills were a major waterfowl breeding region, but was unaware of another great ornithological attraction of Nebraska, its amazing Sandhill Crane migration. I moved to Lincoln in the fall of 1961, and soon joined the NOU. However, my early interests during that period primarily concerned the biology and behavior of world bird groups, especially waterfowl.

I first attended and spoke at a NOU meeting in 1963, when I met some of the state's most active bird-enthusiasts, such as Doris Gates of Chadron, and Mr. and Mrs. John Lueschen of Wisner. Doris Gates was then editor of the Review, and served as such from 1955 to 1965, when Rusty Cortelyou assumed that role. Some others who served long periods as editor of the Review included William F. Rapp, Jr., serving from 1948 to 1955, and Rosalind Morris, editor from 1992 to 1998. Neva Pruess served as librarian from 1979-1988. Mary Lou Pritchard has served the NOU in various capacities, most recently as librarian and custodian of NOU papers and records. Ruth C. Green has served the NOU in several roles over the years including the presidency (1979-1981, 1982-1984), and has inspired a whole generation of bird-banders and bird-enthusiasts. An interesting account of early bird-banding activities in Nebraska was provided by H. Weakly in the July-December, 1939, issue of the Review.

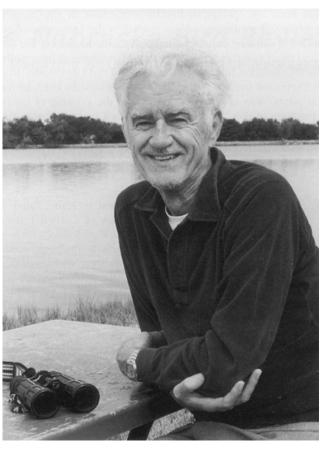


Fig. 6. Paul A. Johnsgard, September 1999. Photo by Linda Brown.

After the death of Willetta ("Willie") Lueschen, who had also been an active bird-bander, as well as president and membership secretary of the Inland Bird Banding Association, her husband John donated her extensive ornithology library to the City of Norfolk, and it became a special wing of the Elkhorn Valley Historical Museum (The Willetta Lueschen Library) in 1997. The NOU library is now located with the vertebrate collections at the State Museum at Lincoln, and includes some rare

items, including early correspondence, many specialized monographs, more than forty state or regional journals and several hundred books. I used it extensively during my research on the breeding birds of the Great Plains, as it contains many state journals not otherwise available in Lincoln. It has recently (1998) been computer-inventoried and documented by Neal Ratzlaff and Mary Lou Pritchard.

I perhaps paid too little attention to the birds of Nebraska until I began work on my *Breeding Birds of the Great Plains* in the late 1970s. At that time I decided that a new checklist of the birds of Nebraska was badly needed, so I wrote "A Preliminary List of the Birds of Nebraska and Adjacent Plains States" (1980a), and produced a revised account later that year. This list was initially published as No. 6 in the series titled "Occasional Papers of the Nebraska Ornithologists' Union." I also published an annotated list of the breeding birds of Nebraska in the *Nebraska Bird Review* (1979), and a two-part paper on migration schedules of Nebraska non-passerine and passerine birds (1980b,c).

The last 20 or so years of the NOU membership have been marked by a greatly increased number of "hard-core" birders. Their enthusiasm has resulted in the addition of many new rare or accidental species to the Nebraska bird list, which now totals more than 430 species. The NOU Records Committee was formed in 1986, and an "Official List of Nebraska's birds" now exists, with periodic updates in the *Nebraska Bird Review*.

A newsletter to NOU members was begun in 1979, and by 1998 the membership list had reached about 230 active members. There are now many more professional ornithologists on the scene than when I first arrived, mostly working for state and federal agencies such as the Fish and Wildlife Service, Nebraska Game and Parks Commission, public and private universities



Fig. 7. Doris Gates. Courtesy of the NOU Library and Archives.

and colleges, the National Audubon Society, the Nature Conservancy and various municipal or private nature centers. A Nebraska Breeding Bird Survey that was organized by the NOU in the 1980s has recently been completed and is being edited for publication through the Nebraska Game and Parks Commission by Wayne J. Mollhoff. Half-century sequences of Christmas Bird Counts have been attained for Lincoln, Scottsbluff, and Omaha,

and there are also fairly long, albeit interrupted, sequences for Grand Island, Sioux City, Norfolk, and Crete.

In recent years graduate and faculty research on the birds of western Nebraska has been greatly facilitated by the University of Nebraska's establishment of a biological field station near Ogallala, in Keith County. Many dissertations and publications have resulted, perhaps the most conspicuous of which have been the studies by Charles and Mary Brown (1996), on the costs and benefits of colonial nesting by Cliff Swallows (Petrochelidon pyrrhonota). After a long period of inactivity, the bird collection of the Nebraska State Museum is once again receiving active curating, largely through the efforts of Thomas Labedz. He has been adding several hundred specimens per year to the Museum's roughly 12,000 specimens. About 70 percent of these are from Nebraska, and the total includes some 3000 skeletons and about 1200 eggs. The earliest data specimen is from 1854, and some series begin in the 1880s. The largest numbers have been collected by Thomas Labedz (ca. 1000), followed by John T. Zimmer, at almost 800. About 300 each were obtained by Myron Swenk, Lawrence Bruner, and M. A. Carriker, Jr., and nearly 200 each were collected by George E. Hudson and Robert Wolcott. Besides the State Museum collection, there are about 1200 bird specimens at Wayne State College, Wayne, Nebraska, and a few hundred at the University of Nebraska at Omaha. The Hastings Museum has no reference collection, but its exhibits do include mounts of some rare Nebraska birds, especially Whooping Cranes.

Gary Lingle, a past president of the NOU (1983–1986), produced a bird-finding guidebook and checklist for the Platte Valley (1994). The birds of the Platte Valley and of the Nebraska Sandhills have also been separately documented in books (1984, 1996) by me, and my Nebraska checklist, originally produced in



Fig. 8. Left to right: Rusty Cortelyou, Mary Lou Pritchard, and Thomas Labedz. Photo by Linda Brown.

1980, has been periodically revised and reprinted. A bird-finding guide to the state was also prepared (Johnsgard 1997), complementing a similar one by Knue (1997). A critically evaluated list of Nebraska birds was published by Tanya E. Bray, Barbara K. Padelford and W. Ross Silcock (1986). A book on the breeding birds of Nebraska (with an estimated 215 species breeding since 1960) was provided in 1988 by James E. Ducey, and a more comprehensive state bird book is in preparation by W. Ross Silcock, Joel Jorgenson, and Roger Sharpe. There is now even a NOU website on the Internet for reporting bird sightings, discussing Nebraska birds and exchanging NOU news (http://rip.physics.unk.edu/nou/).



Fig. 9. Golden anniversary meeting of the Nebraska Ornithologists' Union, Lincoln, Nebraska, 6 May 1949. Courtesy of the NOU Library and Archives.

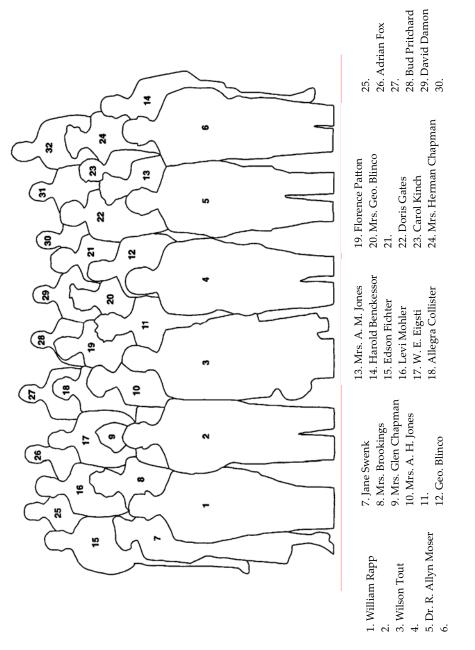
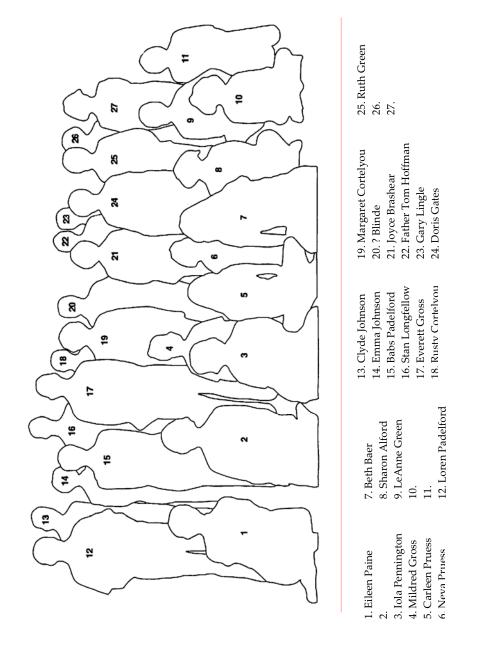




Fig. 10. Nebraska Ornithologists' Union meeting, Chadron, Nebraska, 1982. Courtesy of the NOU Library and Archives.



BIRD-LIFE CHANGES

Avifaunal changes in Nebraska have also been great during this century. At the time the NOU was formed the Eskimo Curlew (Numenius borealis) was still a common migrant, and the Passenger Pigeon was to be seen in small migrating flocks. Yet, the Carolina Parakeet was by then probably already extirpated, and the Wild Turkey and Ruffed Grouse (Bonasa umbellus) had probably also virtually disappeared. The Swallowtailed Kite (Elanoides forficatus), Bald Eagle, Osprey (Pandion haliaetus), Trumpeter Swan (Cygnus buccinator), Greater Sandhill Crane (Grus canadensis tabida), Pileated Woodpecker (Dryocopus pileatus) and Northern Raven were probably also gone as breeding birds by then as well. Several warblers, including the Blue-winged (Vermivora pinus), Prairie (Dendroica discolor) and Northern Waterthrush (Seiurus noveboracensis) also disappeared around the turn of the century as breeders, as well as the Sage Grouse (Centrocercus urophasianus), Northern Sawwhet Owl (Aegolius acadicus) Yellow-bellied Sapsucker (Sphyrapicus varius), and Baird's Sparrow (Ammodramus bairdi). The Red-shouldered Hawk (Buteo lineatus) was probably never common nor widespread as a Nebraska breeder, but was also barely hanging on by then. One of the last Eskimo Curlews to be collected in North America was shot near Hastings, in April of 1915; it had once been avidly hunted by market hunters. The Greater Prairie-chicken (Tympanuchus cupido) peaked and then began a gradual decline as natural grasslands increasingly gave way to croplands. The Lesser Prairie-chicken disappeared from Nebraska in the 1920s or 1930s, but breeding in the state was never documented.

The House Sparrow (Passer domesticus) was already well es-

tablished in Nebraska by 1904, having been introduced into the United States in the early 1850s and arriving in Nebraska in the 1870s through releases by farmers who vainly hoped it might help control the locust plagues. The Rock Dove (Columba livia) arrived in North America with the earliest settlers of the 1600s, but records of its first Nebraska appearance are lacking. The Ring-necked Pheasant (Phasianus colchicus) was successfully introduced in 1909, and the Wild Turkey was re-introduced in the early 1960s. Gray Partridge (Perdix perdix) introductions were only marginally successful in northern Nebraska, and several other gamebird introduction attempts such as the Chukar Partridge (Alectoris chukar), Scaled Quail (Callipepla squamata), and Crested Tinamou (Eudromia elegans) were failures. The European Starling (Sturnus vulgaris) did not appear in eastern Nebraska until 1930, about 60 years after it was released in New York City. The House Finch (Carpodacus mexicanus) reached eastern Nebraska in the 1980s, some forty years after also having been released in New York. However, it was present in western Nebraska at least as early as 1919, and has slowly progressed eastwardly. The two populations have recently met along the Platte Valley. Other recent self-introduced arrivals include the Cattle Egret (Bubulcus ibis) in 1965, the Great-tailed Grackle (Quiscalus mexicanus) during the mid-1970s, and the Collared Dove (Streptopelia decaocto) unexpectedly appeared in the late 1990s.

The Trumpeter Swan resumed breeding in the northern Nebraska Sandhills in the late 1960s, as a result of re-introductions in nearby South Dakota. The Bald Eagle began nesting again in Nebraska during the 1980s, after recovering from the dismal DDT era. If provided with suitable nesting platforms, the Osprey would certainly also return. Eastern Bluebirds (*Sialia sialis*) and Tree Swallows (*Iridoprocne bicolor*) have likewise recently

become fairly common in Nebraska through bird house erection and monitoring programs. Aided by restoration efforts, Canada Geese have become common breeders across the state, and Peregrine Falcons (*Falco peregrinus*) are also nesting locally again, through captive breeding and hacking programs. Under management efforts, Snow Geese (*Chen caerulescens*), Sandhill Cranes, and Whooping Cranes have also flourished.

The Chuck-will's-widow (Caprinulgus carolinensis) apparently invaded extreme southeastern Nebraska from Kansas by 1965, and has now reached the lower Platte Valley, and the Wood Duck has gradually moved westward across the entire state over the last few decades. Breeding American Woodcocks (Scolopax minor) have also moved west along the Platte Valley, to at least as far as Kearney. The growth of trees along our major waterways has improved foraging habitat and opportunities for east-west dispersal among not only these but many other woodland-dependent birds, while at the same time has reduced it for open water and bare shoreline-dependent species, such as cranes, Least Terns (Sterna antillarum) and Piping Plovers (Charadrius melodus).

The construction of dams and resulting reservoirs has increased surface waters in the state, and has much affected wintering and migration patterns of fish-eaters or other water-dependent species, such as waterfowl, eagles, grebes, and loons. Minimum flow rates for the Platte have been established, and many wetlands in the Rainwater Basin have come under protection, also helping water and shoreline birds. Milder winters have also allowed many migratory species that once rarely, if ever, wintered here to remain during milder years, at least in small numbers. Since the 1970s several species have been identified as threatened or endangered either statewide or nationally, such as Least Terns, Piping Plovers and Whooping

Cranes, and efforts are underway to preserve them. As a result several new refuges or nature sanctuaries have been established, including two important migratory stopover sites for Sandhill and Whooping cranes along the Platte River.

At the same time many of our most spectacular grassland-dependent birds such as Burrowing Owl, Greater Prairie-chicken, Upland Sandpiper (*Bartramia longicauda*), and Long-billed Curlew (*Numenius americana*) have seriously declined, as have most of our grassland sparrows. Many Neotropical woodland-adapted migrants have also declined, whereas city-adapted and crop-dependent species such as Brown-headed Cowbird (*Molothrus ater*), Rock Dove, European Starling, American Crow (*Corvus brachyrhynchos*) as well as blackbirds and grackles have vastly increased and have sometimes become serious pests.

The past century's most obvious bird gains (European Starling, House Sparrow, Rock Dove, House Finch, Cattle Egret, Great-tailed Grackle, Chuck-will's-widow, American Woodcock, Ring-necked Pheasant), when balanced against the three extinctions (Passenger Pigeon, Carolina Parakeet, Eskimo Curlew) and the many extirpations of our breeding species (Ruffed Grouse, American Swallow-tailed Kite, Greater Sandhill Crane, Northern Saw-whet Owl, Yellow-bellied Sapsucker, three warblers, etc.) would seem to leave us both aesthetically and numerically poorer than we were at the turn of the past century. Our logo-species, the Burrowing Owl, may well disappear from Nebraska in the next few decades, and our State Bird, the Western Meadowlark, is also in decline.

Yet, skeins of Snow Geese still can etch a March Nebraska sky from dawn to dusk, prairie-chickens still annually greet the spring sunrises with their ancestral rituals, and the spine-tingling cries of Sandhill Cranes coming to roost on the Platte still

bring with them distant echoes of thundering bison, trumpeting mammoths, and even of times before recorded time. We can still totally lose ourselves in their grace and beauty, imagining that we have discovered some other Eden, and hopefully resolving to act in such a way that these birds might still be able to cast their marvelous spells just as strongly on our descendants a century hence as they do today.

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