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Common Flicker

—Photo by Willis Hall

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In This Number . . .

President's Page

I AM happy to announce the formation of the Editorial Committee for South Dakota Bird Notes. Four of our members have kindly agreed to serve in this capacity. The persons selected are knowledgeable about birds in particular and about special parts of the state in particular. The committee will consist of Herbert Krause, Sioux Falls; Bruce Harris, Clear Lake; J. W. Johnson, Huron; and Les Baylor, Rapid City. As described in the last issue, each paper will be read before publication by one of these committee members or at times by another knowledgeable person as well as by the editor. Any paper by an Editorial Committee member will be read by a different member. We hope this procedure will contribute to the qualitative improvement of the journal.

A high standard of accuracy can be encouraged by the Editor and the Editorial Committee. They cannot, however, have as much effect on the quantity of material published which is determined by the efforts of active members preparing papers and on financial resources. At the present time we are financially able to publish more papers than we have been receiving. This certainly does not mean that there is a dearth of things left to learn about South Dakota birds; the forthcoming Check-List will indicate there is still much to learn. Does the shortage indicate that less field work is being done or that less of it is being prepared for publication in "Bird Notes." Perhaps the Check-List Committee members have written less because of the many hours devoted to their important task. Perhaps effects of age and moving out of the state has not been balanced by new young members and those who have moved into the state. I can speculate but I do not know the reason; I mention it now since we all should be aware of the problem.

Two approaches come to mind. One way is to encourage the preparation of notes or papers on observations already made or being made in the normal activities of our members. It is hard to say how effective periodic exhortations on this subject may be. I suspect the Check-List will help to provide the observer information he needs to decide on the importance of his observations.

Another approach is through organization or projects. Goal directed observations are much more likely to provide publishable material than are casual ones. The cooperative effort of the Check-List has already provided some direction. In a limited way we have done this in scheduling our field meetings in interesting parts of the state. We could organize our own special surveys such as of colonial species. We could make special efforts to fill in details of breeding ranges of selected species; important data would come from such an effort on even our common species. Special studies of banding returns of birds captured in South Dakota could be made. When the Check-List is completed, it might be a good time to initiate some sort of cooperative study.—**Byron E. Harrell**

Avian Fossils of South Dakota

D. G. Adolphson

THE IDENTIFICATION and classification of avian fossils, the forerunners of modern birds, help us understand the process and direction of evolution that has produced the birds we now see and enjoy. The study of the specimens and their ancient environment sheds light on the ecological conditions of past ages, including such factors as climate, plants, food supplies, competition, landscapes, and reasons for extinction.

Ancient bird forms have been preserved as fossils throughout most of the world. Because of the fragility of avian remains, however, the fossils are not common in all sedimentary rocks, but are restricted to certain fine-grained, relatively undisturbed geologic formations. Most avian bones found as fossils are from the limbs of the birds. Due to their fragile nature, complete specimens or even skull fragments rarely occur.

Although the first known appearance of birds was during the Jurassic age in Europe, they did not appear again until the Late Cretaceous age (see Table 1). Jurassic forms were terrestrial; the known Cretaceous forms were aquatic, and the known Tertiary forms were terrestrial.

The most ancient bird fossil found in South Dakota (Macdonald, 1954) was uncovered from the Pierre Shale of Late Cretaceous age in Custer and Pennington Counties. The bird was a flightless toothed water species and was of the Order Hesperornithiformes. There are no living members of this order.

Twenty-five remains dating from the Oligocene, Miocene, and Pliocene Epochs of the Tertiary period, have been found in southwestern South Dakota representing the Orders Ciconiiformes (herons and storks), Anseriformes (water-fowl), Falconiformes (birds of prey), Galliformes (chicken-like birds), Ralliformes (cranes and rails), and Strigiformes (owls).

Bird species represented include one flamingo, four ducks, two geese, two buteos, three Old World vultures, two quail, one grouse, one guan, three with characteristics like chachalacas, five cranes, and one owl.

The following list of avian forms (Macdonald, 1951; Harksen and Macdonald, 1969) is compiled by fauna, formation or age depending upon the availability of information regarding the individual specimens or species.

The faunal list has been kept in the most simplified practical form, listing Order, Family, Genus, and Species. In some cases, the Subfamily is shown; however, in other cases the Species is shown as indeterminate. The name of the person describing the type and the year the type was described is given after its species name.

CRETACEOUS

LATE CRETACEOUS—PIERRE SHALE

Order Hesperornithiformes

Hesperornis regalis Marsh, 1872

TERTIARY

EARLY OLIGOCENE—CHADRONIAN—CHADRON FORMATION

Order Galliformes

Family **Cracidae**

Procrox brevipes

Tordoff and Macdonald, 1957

Order Ralliformes

Bathornis veredus Wetmore, 1942

Era	Period	Epoch	Life-form	Age of Time (millions of years)
Cenozoic	Quaternary	Holocene	Modern Man	.01
		Pleistocene	Stone-age man	1 to2
	Tertiary	Pliocene+	Great variety of mammals. Elephants widespread.	12
		Miocene+	Flowering plants at full development. Ancestral dogs and bears.	25
		Oligocene+	Ancestral pigs and apes.	40
		Eocene	Ancestral horses, cattle and elephants appear.	60
		Paleocene		70
Mesozoic	Cretaceous	Late+	Extinction of Dinosaurs and Ammonites	135
		Early	Mammals and Flowering plants slowly appear.	
	Jurassic		Dinosaurs and Ammonites abundant. Birds and mammals appear.	180

Table 1.—Geologic time scale for the last 180 million years (after Holmes, 1965, p. 157).

+Epochs in which avian fossils have been found in South Dakota.

MIDDLE OLIGOCENE—ORELLAN—BRULE FORMATION (LOWER)

Order Ralliformes

Badistornis aramus Wetmore, 1940

Bathornis cf. **celeripes** Wetmore

Order Anseriformes

Anatidae, indeterminate (Eggs) Farrington, 1899

Order Falconiformes

Buteo grangeri Wetmore and Case, 1934

LATE OLIGOCENE—WHITNEYAN—BRULE FORMATION (UPPER)

Order Galliformes

Family **Cracidae**

Palaeonossax senectus Wetmore, 1956

Cracoidid n. gen.

Order Ralliformes

Gnotornis aramielus Wetmore, 1942

Bathornis cursor Wetmore

EARLY MIOCENE—MONROE CREEK FORMATION—SHARPS FORMATION

Neognathae, indeterminate Macdonald, 1972

Order Falconiformes

Family **Accipitridoe**

Subfamily **Aegypiinae**

Arikarornis macdonaldi Howard, 1966

Order Galliformes

Family **Phasianidae**

Subfamily **Odontophorinae**

Miortyx aldeni Howard, 1966

MIDDLE MIOCENE—FLINT HILL FAUNA—BATESLAND FORMATION

Order Ciconiiformes

Family **Phoenicopteridae**

Megapaloelodas connectens Miller, 1944

Order Anseriformes
Family **Paranyrocidae**
Paranyroca magna Miller and Compton, 1939
Family **Anatidae**
Subfamily **Dendrocygninae**
Dendrochen robusta Miller, 1944
Subfamily **Antinae**
Querquedula integra Miller, 1944
Order Falconiformes
Family **Accipitridae**
Subfamily **Buteoninae**
Indeterminate buteonine Miller, 1944
Subfamily **Aegypiinae**
Palaeoborus rosatus Miller and Compton, 1939
Order Galliformes
Family **Cracidae**
Ortalis pollicaris Miller, 1944
Family **Tetraonidae**
Tympanuchus stirtoni Miller, 1944
Family **Phasianidae**
Subfamily **Odontophorinae**
Miortyx teres Miller, 1944
Order Strigiformes
Family **Strigidae**
Strix dakota Miller, 1944

EARLY PLIOCENE—BIG SPRINGS CANYON FAUNA—OGALLALA GROUP
Order Anseriformes
Family **Anatidae**
Branta sp. Compton, 1935
Nettion greeni Brodkorb, 1964
Order Falconiformes
Family **Accipitridae**
Neophrontops dakotensis Compton, 1935

CRETACEOUS

Seas covered much of central North America during the Cretaceous period which ended about 70 million years ago. The climate was rather uniform and warm.

During this period the only known birds in existence on the North American continent were diving, fish-eating birds of the shallow, warm seas which once covered the Great Plains and two tern-like birds which inhabited the edge of the seas.

LATE CRETACEOUS

Remains of one of the extinct Cretaceous birds, **Hesperornis**, which means "Western Bird," was first discovered in December, 1870, by Marsh (1872) near Smoky Hill River in Western Kansas. It was a flightless marine form about three feet in height equipped with sharp conical teeth and had habits very similar to those of the Loon. The bird swam the warm shallow seas diving and catching fish.

Remains were first found in South Dakota (Green, 1962) near Fairburn, Custer County, by James D. Bump in 1946 and recently in a quarry near Rapid City, Pennington County. Other recent discoveries have been made in different statigraphic horizons in widely separated geographic locations in Canada.

TERTIARY

During the Tertiary period, which followed the withdrawal of the Cretaceous seas, a blanket of continental sediments was deposited from Saskatchewan to Texas along the eastern front of the newly forming Rocky Mountains. Erosional processes acting on these sediments in South Dakota created the White River Badlands. The Badlands extend from the southeastern slopes of the Black Hills eastward to the south central part of the state. Fossil bird remains have been found in strata of the Oligocene, Miocene, and Pliocene Epochs of the Tertiary Period. The fossils range in age from 40 to 11 million years. Rocks of the Paleocene and Eocene Epochs are missing in southwestern South Dakota.

EARLY OLIGOCENE

The Early Oligocene in South Dakota is represented by the Chadron Formation of the White River Group. The Chadron is

a light-greenish sandy clay underlying the Brule Formation and forms the basal formation of the White River Group. It rests unconformably on the Pierre Shale.

Procrox brevipes was discovered in a fresh-water limestone deposit at the top of the Chadron Formation in Pennington County. This fossil cracid is the oldest known species of the family. The bird was a medium-sized cracid with outstanding flying ability and probably was a tree-top dweller. It had shorter legs and toes and thicker claws than modern members of the family Cracidae including the curassows, guans, and chachalacas, which are Neotropical in distribution and range in the present day from the lower Rio Grande Valley, Texas, south to Argentina.

Bathornis veredus was described by Wetmore of the American Museum of Natural History to have crane-like characteristics.

MIDDLE OLIGOCENE

All birds found in strata of the Middle Oligocene age in the Badlands are from the Scenic Member of the Brule Formation. The Brule directly overlies the Chadron Formation and consists of the Scenic and Poleslide Members. Clay sediments of the Scenic are uniform, widely distributed and are abundantly fossiliferous.

The petrified egg is believed to be of an anatine bird (duck family) which would seem to indicate the presence of aquatic birds in the early Tertiary times (Farrington, 1899).

Badistornis aramus and **Bathormis cf. Celeripes** were identified by Wetmore (1942) to be crane-like birds.

A nearly complete skull of the genus **Buteo** was discovered in 1932. This group of birds is widely distributed over the world today. It includes the species in North America such as the red-shouldered and red-tailed hawks. **Buteo grangeri** was slightly larger than the modern red-tailed hawk. Hawks of this general type are also found in the Pliocene and Miocene of Late Tertiary time, especially in the deposits of Sioux County, Nebraska. This form from South Dakota carries the line back earlier and demonstrates the antiquity of origin of certain extant forms of birds of prey (Wetmore and Case, 1934).

LATE OLIGOCENE

Fossils from the Late Oligocene were found in the Poleslide Member of the Brule Formation in the Badlands. Fossil mammals are numerous and well-preserved in the strata.

Galliformes found include a guan (**Palaeonossax**). This record extends the historical distribution of the strictly American family Cracidae back into the Upper Oligocene. The modern families are now Neotropical in distribution. The two ralliformes, **Gnotornis aramielus** and **Bathornis cursor**, had crane-like characteristics (Wetmore, 1942).

EARLY MIOCENE

Neognathae, indeterminate was identified (Macdonald, 1972) from two bone fragments collected from ant mounds in the Monroe Creek Formation, Shannon County. This is the only indication of birds in the Monroe Creek Formation and "possibly they (bone fragments) belonged to a bird about the size of a quail, but further identification is not possible (Macdonald, 1972, p. 11)."

In 1964, members of the Los Angeles County Museum, Los Angeles, California found a new genus and species of raptor and a new species of quail in the Sharps Formation, Shannon County. The Aegypiinae specimen represents a diurnal raptor comparable in size of the red-tailed hawk, **Buteo borealis**, but more closely resembling the North

American fossil members of the Old World Vulture subfamily (Aegypiinae). These species were more eagle-like than the living members of the group. **Arikarornis macdonaldi** (Howard, 1966) is one of the smallest of the fossil Aegypiinae and represents a new genus and species. North American records of the Aegypiinae are represented from Tertiary horizons in Nebraska, South Dakota, Oregon, California, Mexico, Nebraska, New Mexico, and Nevada. Howard (1966) states that there is a possibility of a generic relationship between A. **macdonaldi** (Sharp's Formation raptor) and the Flint Hill aegypiine, **Palaeoboues rosatus.**

Miortyx aldeni, this galliform fragment of left humerus was collected by H. Garbani of J. R. Macdonald field party, in a gully near Sharp's Corner, Shannon County. The specimen is characterized by the American Quail (Howard, 1966). M. **aldeni** is the largest in size of the fossil quails found in Tertiary deposits from Saskatchewan, South Dakota, Nebraska, Oregon, Kansas, and Florida.

MIDDLE MIOCENE

Field parties from the Museum of Paleontology of the University of California (Miller, 1944) collected fossil vertebrates from a quarry known as Flint Hill, Bennett County, South Dakota. Specimens were found in a stream channel lens of silt, in the upper part of the Batesland Formation, at the edge of a small area of Badlands. Ten bird forms were found from eight different families. There were three new genera and seven new species described by Miller (1944). Miller and Compton (1939), in an earlier expedition to the area, described one new genus and family and one additional species from this horizon.

Megapaloelodas connectens is the first flamingo to be found in the Tertiary of North America. Flamingos appear abundantly in the Late Oligocene of France.

The goose, **Paranyroca magna**, is believed to be a large bird, swan size, but with characteristics of the diving ducks.

Fossil bone fragments indicate that **Dendrochen robusta** is a tree-duck, the earliest known record of this group.

Querquedula integra is very close to the genera of ducks living in North America today.

The incomplete fossil bone suggest that the indeterminate buteonine represents a buteonine hawk or small eagle about the size of a turkey vulture.

Palaeoborus rosatus is from the Old World vulture group which is found from the Miocene to the Pleistocene.

Modern relatives of the galliform bird **Ortalis pollicaris** are Neotropical in distribution.

Tympanuchus stirtoni was the same size as the modern prairie chicken and is closely related to the grouse.

Miortyx teres is related to the North American quail. Howard (1966) found a generic relationship between **M. aldeni** (Sharp's Formation quail) and **M. teres** (Flint Hill quail).

The fossil, **Strix dakota**, was the size of the screech owl and is closely related to the barred owl. It is the only known representative of the order Strigiformes in the Tertiary of North America after the Eocene. S. **dakota** was short-legged, robust and forest-dwelling.

EARLY PLIOCENE

The fossil birds, **Branta** and **Neophrontops dakotensis**, were preserved in the Big Springs Canyon fauna of the Ogallala Group and were collected by Museum of Paleontology of the University of California (Compton,

1935). The area is near the source of the Little White River, Bennett County. The fossils were found in a channel filled with rather coarse unconsolidated sandstone and clay balls.

Compton (1935) described **Branta** from a fragmentary end of a humerus which does not agree in size with any of the described species of this goose from the Early Pliocene. **Branta** represents either a new species or a small race of Canada goose **Branta canadensis.**

Neophrontops dakotensis is closely related to the Old World vulture **Neophron** and Compton suggests that **Neophrontops** may represent a migration of **Neophron** types to North America.

Fossil remains of the teal duck, **Nettion greeni**, were found by Morton Green and Robert W. Wilson, July 22, 1963 from the lower part of the Ash Hollow Formation of the Ogallala Group near Tuthill, Bennett County (Brodkorb, 1964). N. **greeni** is similar to certain southern hemisphere teals. It probably was able to rise from the water in rapid vertical flight (Brodkorb, 1964).

SUMMARY

The ecological aspects of the geological period can only be described when a large assemblage of fossils are found from a fauna horizon. Habitats can be described for the Big Spring Canyon fauna, Early Pliocene, and the Flint Hill fauna of Middle Miocene of the mid-Tertiary. Remains of geese and relatives of vultures in Early Pliocene indicate an environment of open plains and humid climate.

Miller (1944) states the evidence of the fossil birds suggest "The Miocene, as generally agreed, was a less arid and warmer epoch than the Pliocene in this region—the river valleys of Bennett County were even better wooded and the grasslands probably less continuous and possibly restricted to small openings among the trees."

Comparison of the fossil birds with their modern descendents shows that many families and some genera were established during the Miocene epoch and have remained relatively stable since. Evolutionary change of birds in Late Tertiary was less rapid than in mammals. No avian fossils are known from Late Miocene deposits in South Dakota. Descriptive conditions of the Early Oligocene, Late Oligocene and Early Miocene epochs in South Dakota are difficult because of the scarcity of representatives.

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Black and White Warbler

—Courtesy Wilson Bulletin

CORRECTION

The "Bird Notes" for June, 1973, should be numbered Vol. XXV instead of XXVI.

Book Review

J. W. Johnson

BORN TO SING. An Interpretation and World Survey of Bird Song, by Charles Hartshorne. Indiana University Press. 1973. Illustrated with sound spectrograms, tables, and musical scores. xvi + 304 pp., including Glossary, 15 pages of references, divided: I Books and articles; II Sound recordings, 32 pages of Index, divided: Birds, Persons, and Topics. $10.00.

A fast once-over of this book made clear my peculiar lack of competence for its review. Discouraged, I let it lay for weeks, convinced it was completely outside any reasonable handling on my part, yet unwilling not to do what I could to bring it to the attention of people interested in birds and their songs. I knew of no one both able and willing to take the time to review it. Then, in search of inspiration—or more probably, an excuse, I found it in the first page of the preface.

"The primary aim of this book is to advance what P. Szoke has well called biomusicology, the study of music not just in man but in musical or singing animals generally. Szoke reasonably holds that to work in this field one should be expert both in musicology and in the appropriate branches of biology, especially ornithology. Few persons can altogether meet these requirements. The deficiency I feel most painfully is in music."

While proficient in none of these, my most obvious lack is in music. Thus I cannot judge how well founded is the author's feeling of inadequacy. Hence, with these caveats of both author and reviewer, the reader is warned. But anyone interested in the subject may yet find enjoyable adventure in this new assessment of material, giving another dimension in understanding of birds and their music. I can only hope his pleasure in the book is equal to mine.

The author has worked in widely separated parts of the United States and has spent a total of seven years in other countries: Japan, East Africa, Mexico, Costa Rica, Panama, Nepal, and Australia, to name a few. In addition to his own field work and recordings, he has made wide use of data collected by others, an obvious necessity in a search for meaning and purpose in this area. His field is thus worldwide. But the great availability of material from Europe, North and Central America has not been allowed to obscure that from Asia, Africa, South America, and Australia. While modern technology accounts for most of the data used and has made serious study in this field possible, detailed descriptions by earlier musically oriented listeners are also quoted.

While birds have the main focus, mammals, including marine, amphibians, and insects are not at all ignored. Available data on them are considered where appropriate.

Early, the author arranges common qualitative musical terms, such as unity, diversity, profound, beautiful, etc. into a rational order for ease in understanding and describing birds' songs and comparing them to human music. This serves to make broadly understandable his analysis of individual singing.

The data make clear that birds seem not to have the mental equipment for sustained musical compositions. Most bird songs last less than 20 seconds. But birds do have advantages. For one, they can sing more than one note at a time.

(Continued on Page 54)

Clothes-Line Cafe

Margerey R. Arbogast

WHEN WE put sunflower seeds and suet in our feeders on the clothes-line, we welcomed all winter birds and their watchers to our back yard. One might consider us optimistic to expect birds to find us here so close to the business district of Aberdeen but we knew there were some factors in our favor. Many migratory birds find us each year, trees and shrubs are abundant and it is the nature of birds to go where there is food.

Other factors were the plentiful supply of sunflowers raised by local farmers and their generosity in allowing us to gather all we wanted after the harvesters had done their job. Before too much snow had fallen we collected about 150 big heads. We thought they would be enough to feed the birds all winter. We were wrong. The first few seed heads attracted so many Red Crossbills, Pine Siskins, Purple Finches, Evening Grosbeaks and others that by the end of November we had to resort to buying seeds.

Buell Luce helped with the preparations for our project. He furnished the transportation to and from the fields, converted coat hangers into holders for the sunflower heads (Fig. 1) and made some practical feed trays from corrugated boxes, ¾ x ¾ inch sticks and an assortment of washers and screws (Fig. 2).

We began by hanging the sunflower heads with the seed side turned up. Then we found that we could deter the House Sparrows when we reversed the seed heads and it didn't seem to bother the siskins and crossbills. It also prevented an accumulation of snow on the seeds.

The birds responded well to our invitation. One morning 110 little Pine Siskins fought for places on the four feeders. A siskin with beak open, head low, wings and tail spread looks quite fierce. At least holding their own with the siskins were 15 Red Crossbills. All they had to do to settle a dispute was to thrust their caliper-like beaks in the direction of the siskins.

The gentle timid Purple Finches were another matter. They stood no chance with the siskins so they waited patiently on the trees and wires or ate seed that was spilled on the ground until the others had eaten their fill and moved on. In response to that situation we sprinkled seeds on the ground even though it tended to attract more House Sparrows. Sixteen was the highest number of finches counted at one time.

Other birds included a pair of White-breasted Nuthatches. When they wanted something to eat they just zoomed in, scattered birds in all directions, selected a seed or peanut, flew off to eat it, then zoomed back for more.

The Chickadees, Hairy Woodpeckers and Downy Woodpeckers did not come as regularly nor stay as long as they did in previous years. The competition might have been too much for them.

On some days, as a bonus, the Evening Grosbeaks would stop by for a snack. Seven was the most we ever had at one time, but they were at the Luce place every day in numbers up to 19. Mr. Luce also was favored with the continued presence of a Red-breasted Nuthatch.

Other bird guests were a Fox Sparrow on Oct. 31 and Nov. 1, a Common Grackle with a broken wing that stayed until Jan.

8, and a pair of Common Flickers that came occasionally.

As the time approached when we would have to say good-by to our winter friends we noticed some of their changing colors. The golds and black of the siskins, the red and black of the crossbills, and the raspberry of the finches became fresher and brighter. During the season I had watched the plumage of one young crossbill change from yellow, red and gray to mostly all red and black.

The winter of 1972-73 was a wonderful experience. As our clothes-line cafe closed for the season we were thankful for the pleasure provided by our guests. We hope they will return.—514 South First Street, Aberdeen, S. Dak. 57401

(The author has confirmed the fact that the siskins ate sunflower seeds on the seed heads and in the trays after the crossbills had departed.—Ed.)

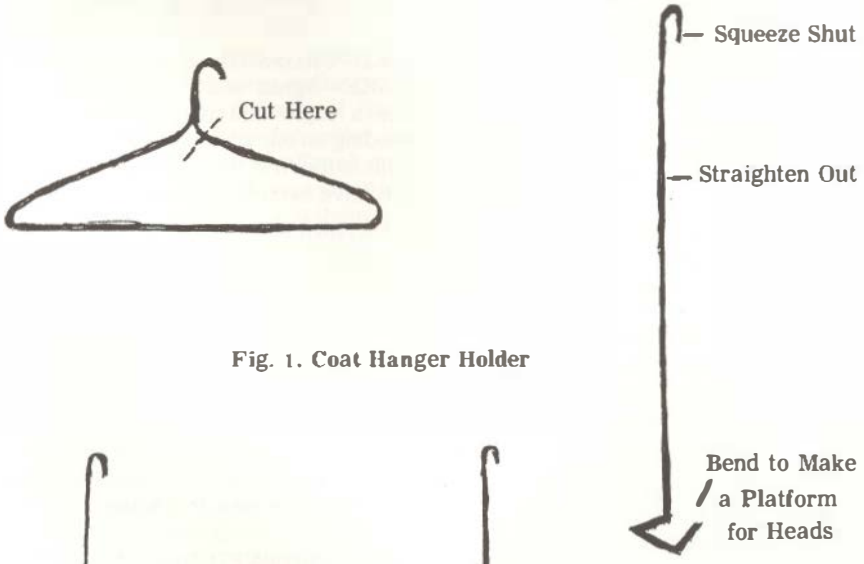

Fig. 1. Coat Hanger Holder

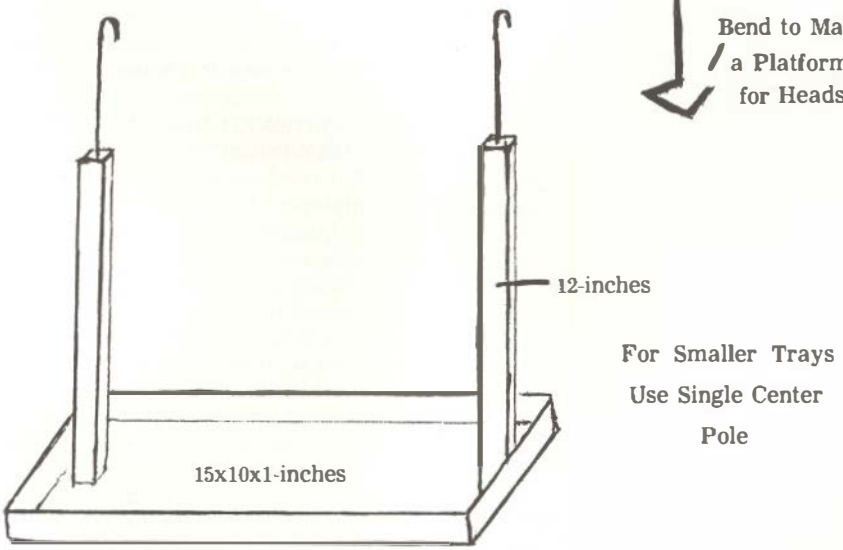

Fig. 2. Feeding Tray

General Notes of Special Interest

PEREGRINES HATCHED IN CAPTIVITY—Twenty-one young Peregrines were the products this year of a captive breeding program which many persons thought impossible. They were the first to be produced by the Cornell Raptor Program of Ithaca, New York.

The previous two springs brought success in eagle and buteo production but the Peregrine score both seasons was zero. Through careful handling and commodious flight cages, the Cornell project has provided an environment in which peregrines can breed. For many years there has been a question as to whether peregrines would breed in captivity. In the wild, peregrine courtship and pair bonding involves magnificent flight displays which cannot be reproduced under captive conditions.

All the young Peregrines were hatched in special incubators. Many were hand-fed but some were cared for by adult birds.

The Cornell program is designed to keep a viable stock of peregrines available for breeding in the wild as soon as chlorinated hydrocarbon residues decline in the environment. The peregrine once bred in most eastern states but was extirpated in the region by the early 1960's. Their known susceptibility to hard pesticides indicates that peregrines probably were eradicated by the chemicals.

The Massachusetts Audubon Society maintains an account which helps support the raptor program. Tax deductible contributions may be made by sending a check made out to Peregrine Fund—Massachusetts Audubon Society. The address is Massachusetts Audubon Society, Lincoln, MA 01773.—**Massachusetts Audubon Newsletter**

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RED CROSSBILLS AT PICKEREL LAKE—Agnes and I were surprised to see a male and female Red Crossbill feeding on our corn cobs on April 4, 1973. This is the first time in over 20 years that we have seen them eating corn.

On April 8, one male Red Crossbill ate sunflower seeds at our hanging Mason jar feeders. At different times in the past we have sighted them feeding on the ground and in the trees, but this was the first time that they fed at our hanging feeders.

These beautiful birds fascinate us because we never know when they are going to appear, or what they are going to do next.—**Herman P. Chilson**

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GRAY-CROWNED ROSY FINCHES IN GREGORY COUNTY—On Sunday, Dec. 2, 1972, I received a telephone call from my employer, Mr. Dean Frank, whose place of business and residence is located two miles west of Burke along Highway 18. Knowing of my interest in birds he called to tell me about six unusual birds that were feeding on his lawn, and, as he explained it, flying against the picture window of his house as though trying to get inside. I at once drove out there, taking my binocular and "Golden Field Guide." However, as is so often the case, the birds were gone when I arrived. We searched the area around the buildings but we could not find them. I asked Mr. Frank to look through my field guide to find a picture of the birds he had seen.

When he came to the illustration of the Gray-crowned Rosy Finch, he said, "Those are the birds I saw. No doubt about it." As the birds could not be found again that day, I was unable to verify his sighting. I thought that if the birds stayed in the area I would get a chance to see them while I was at work in the days that followed.

However, the finches were not seen again until Dec. 26. On that day, as I was going to my car about 4:30 in the afternoon, I noticed several birds that looked different. They were on the roof of a building with a small group of House Sparrows. After I got the binocular and field guide from my car, Mr. Frank and I walked to where we could get a close look at the birds. We both observed them with the eight-power binocular at a distance of 25 feet. We noted the gray crowns contrasting with the black foreheads, and the pinkish coloring on the wings and sides. I asked Mr. Frank if they were the same kind of birds he had seen earlier in the month. He said they were exactly the same. Upon checking the illustration in the field guide I was able to confirm our sighting of Gray-crowned Rosy Finches. The colors and markings on the birds we saw matched the illustration in the "Golden Field Guide." In fact, I have never seen a better illustration in any of my other bird books.

We watched the finches until dark and saw them go to roost under the eaves of the building the way sparrows do. We saw a total of five finches. However, in the days that followed, Mr. Frank noted that six birds were always present.

Bent's Life History states that it is a common practice for these birds to roost under the eaves of buildings, and, in some cases, inside of open buildings. I also found that Bent lists them as being seen only casually east of the Black Hills. Upon checking my back issues of "South Dakota Bird Notes," I found only one other record of a sighting east of the Black Hills. That was the single Bird sighted at Volin in 1961 (**Bird Notes** XIII : 36).

On Jan. 17, 1973, Mr. Don Wilson, Burke, had an opportunity to observe the finches in company with Mr. Frank and me. We don't have a record of the last date they were present, but Mr. Frank saw them nearly every day until approximately the first of March.—**Galen L. Steffen, Burke, S. Dak.**

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SURF SCOTER--On Oct. 17, 1972, Mr. Gerald L. Peterson, a student at South Dakota State University from Wheaton, Minn., submitted for identification a duck obtained while hunting the previous day. The specimen proved to be an immature female Surf Scoter (Melanitta perspicillata). It was shot Oct. 16 at the north end of Lake Traverse, approximately one-fourth of a mile south of what is locally known as Reservation Dam (Section 23; T. 127N., R. 47W.). Mr. Peterson was hunting on a resident Minnesota hunting license, and although the exact kill site was in Minnesota, according to Mr. Peterson, it was " . . . only 100 or so yards removed . . . " from the South Dakota line. The specimen has been preserved as part of the South Dakota State University bird collection in the Department of Wildlife and Fisheries Sciences.

In Roberts' "Birds of Minnesota" (1932: 276), the Surf Scoter is reported as occurring rarely throughout Minnesota on migration, with several records from the southwestern and western portions of the state, particularly in the Heron Lake vicinity. Apparently it is more regular in occurrence on Lake Superior, where most observations are obtained in

autumn and consist of females or young of the year.—**John M. Gates, Brookings, S. Dak.**

(South Dakota has five records, all specimens, of the Surf Scoter, with the first occurring in 1914.—Ed.)

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CHANGES IN NAMES—When the Thirty-second Supplement to the A.O.U. Check-List was published in The Auk in April (90: 411-419) it effected a number of changes in the South Dakota Check-List. Some of the changes involved the Latin names only and complied with revisions in the International Code of Zoological Nomenclature. Other changes were made for taxanomic reasons or to in some way improve upon the common names.

Since the policy of South Dakota Ornithologists' Union is to follow current A.O.U. usage the following list, in check-list order, covers the changes in common names as they pertain to the birds of South Dakota. Contributors of articles to "South Dakota Bird Notes" should note the changes before submitting material to be published. An asterisk denotes the new species name.

Common Egret is now Great Egret+. Blue Goose and Snow Goose+ are color morphs of the same species, which regularly interbreed.

Widgeon becomes Wigeon+ to agree with the British spelling.

Shoveler becomes Northern Shoveler+.

Common Scoter is now Black Scoter+.

Harlan's Hawk is eliminated as a species, being now considered a morph of the Red-tailed Hawk+.

Pigeon Hawk becomes Merlin+, to correspond with international usage.

Sparrow Hawk is now American Kestrel+.

Upland Plover becomes Upland Sandpiper+ (the bird is not a plover).

Yellow-shafted and Red-shafted Flickers are now considered races of the single species Common Flicker+ as they regularly interbreed.

Traill's Flycatcher is now separated into two species, the Willow Flycatcher+ (fitz-bew song type) and Alder Flycatcher+ (fee-bee-o song type).

Catbird becomes Gray Catbird+.

Robin is renamed American Robin+.

Parula Warbler becomes Northern Parula+.

Myrtle Warbler and Audubon's Warbler regularly interbreed and are now considered races of a single species, the Yellow-rumped Warbler+.

Yellowthroat becomes Common Yellowthroat+.

Baltimore and Bullock's Orioles become races of Northern Oriole+ because they regularly interbreed.

White-winged, Slate-colored and Oregon Juncos are now considered races of the one species, Dark-eyed Junco+.—**June Harter**

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PINE SISKINS AT PICKEREL LAKE—Agnes filled the bird feeders on Sunday, March 25, and we were surprised to find them almost empty when we returned on March 28, 1973. The feed normally lasts a week or 10 days at this time of the year so we assumed that the recent cold snap had increased the appetite of the chickadees and the nuthatches. Then we were amazed to see four Pine Siskins at three feeders. This was a new experience. We could not recall a single instance in the past 20 years when we had seen Pine Siskins at our hanging Mason jar feeders.

We were perturbed when the siskins threw out eight or 10 sunflower seeds for every one that they ate. Now we knew why the feed had disappeared so rapidly. The siskins completely dominated the feeders, remaining 30 minutes to an hour at each feeding. They eventually became so tame that they sat inside the Mason

jars half of the time while eating. It bothered us to see our favorite Chickadees sit around and wait.

Bent said, "Siskins can be attracted to feeding stations by millet seed . . .," so I filled one Mason jar feeder completely full of millet seed and the other four feeders with the usual sunflower seeds. Now for the big surprise! The siskins avoided the millet completely and still dominated the sunflower feeders. The chickadees naturally flew to the unoccupied millet feeder, discovered the millet seed, and flew away.

I later scattered millet seed on the lawn and in no time at all we had on the average from five to six siskins, and at times up to 10 siskins feeding at one time.

We watched the Pine Siskins closely for any indications that they might nest in our area but we could observe no signs of mating or courtship behavior. Our first observation was March 28, and the last was May 14.

There was an unusual influx of Pine Siskins all over eastern South Dakota. Everett Sewell and Dr. Allan Anderson observed them in Webster, while Ken and Patsy Husmann saw a group in Brookings. Don Allen fed them in Watertown and the James Iversons had them at their feeder in Sioux Falls. Jim and Lucille Johnson told us that they still had siskins at their place on May 30.—**Herman P. Chilson**

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MOCKINGBIRD IN ABERDEEN—On Saturday evening and again on Sunday morning, April 28 and 29, 1973, I observed a Mockingbird in my back yard at a distance of 80 feet. It is the first Mockingbird I have seen this far north by several hundred miles.

The bird was observed through 7x35 Bausch and Lomb binocular and I could clearly identify it by the white stripes on the wings and tail, the over-all grayish white underparts and darker gray on the back.—**Jerome H. Stoudt, Research Biologist, Bureau of Sport Fisheries and Wildlife**

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CURVE-BILLED THRASHER'S STAY AT GANN VALLEY—The Curve-billed Thrasher visiting the Irving Knight ranch near Gann Valley from February, 1971 (BN 23:80) until Dec. 1, (BN 24:21) remained about the house through the winter of 1971-72. It built another "nest" or roosting platform under the eave of porch roof but this time a little west of the earlier location, on the phone wires. It ate shelled corn and dominated a Blue Jay that also remained for the winter. About the middle of May of 1972 it disappeared and has not been seen again.—**J. W. Johnson, Huron**

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SNOWY EGRETS AND WHITE-FACED IBIS—At 9:15 a.m. on August 10, 1972, Gerald Thoms and I observed 12 Snowy Egrets and two White-faced Ibis feeding together in a scattered group in a slough. The location was on the west side of the road two miles west and three miles south of Lake Preston.

Under good light conditions, within a distance of 125 yards, we watched the birds with our binoculars and noted the yellow slippers on at least three of the egrets. We used the bird book for checking out the various points of identification. Additional confirmation by other viewers was not made at the time.—**Larry Fredrickson, Research Biologist, Department of Wildlife and Fish Sciences, South Dakota State University, Brookings**

SONGS AND SOUNDS OF BLACK-BILLED CUCKOO—It becomes difficult at times to separate for positive identification the sound of the Black-billed Cuckoo from that of other species in his area that are all vocalizing at the same time.

This can become a special deterrent if his "cousin," the Yellow-billed Cuckoo, is in the same vicinity and has been heard near the same time. Since cuckoos prefer to be hidden in thick, leafy foliage, one is hard put to be able to use sight identification.

But the ear detects a slightly higher pitch in the Black-billed Cuckoo's notes, more resonance, and a plaintive quality. His tones are grouped, evenly spaced, and never retarded toward the close of an utterance. The last is an especially significant distinction from the phrases of the Yellow-billed Cuckoo.

The usual routine of the Black-billed Cuckoo consists of a series of cu-cu-cu or kuk-kuk-kuk notes repeated again and again with more tone quality than the staccato croak of the Yellow-billed Cuckoo. At times, only one kuk or two may issue from the depths of a tall elm or other full-leaved tree.

This bird is heard from the middle of May through the summer, and even into the fall months of September and October, and often at night. My records show that I have heard him after the 10 o'clock hour, and after midnight, as late as the middle of October in this southeastern corner of South Dakota.—**Adelene M. Siljenberg, Vermillion**

Book Review

(Continued from Page 47)

The author, comparing bird and human composition says: "I incline to think if a human composer were to subject himself to the same drastic limitations in the time span of patterns he could not greatly surpass the birds and he might easily do less well. True, he could achieve a higher proportion of pure tones than most birds do (but this would perhaps only accentuate the meagerness of the result, since the mixture of tones and semitones is one way of securing richness of contrast from few sounds)."

Evolution of song in the evolution of species has not been neglected in this study and appears as a significant factor in the conclusions. The author shows that his own list of about 200 outstanding singers of the world have also been praised by others and include a large majority of the most praised singers in the literature of several languages. His first point: If the selections are only subjective, then their preference is a general human subjectivity. His second: If the list is of only human import, the distribution over the bird families should be random. The fact: All are perching birds and only two, Lyrebirds, are Suboscine.

But the author's most interesting thesis will probably strain relations with the ultra cold, scientific in bias: In addition to all the accepted reasons birds have for singing, they sing because they enjoy it. And, even more interesting, they enjoy hearing others of their species sing. Perhaps there is no absolute proof in the sense that we cannot enter the relatively simple mind of the bird and show what is going on there. But the author's mass of data and his rational handling of it are convincing enough, at least until someone finds a better envelope for the total of the observation.—**Huron**

About Birds

Irma G. Weyler

ONE OF the first questions people ask after they have put up a bird feeder is: How do you drive the House Sparrows away?

Our answer is: We don't, we accept them. We have found that they serve as pilots to draw other birds to the feeder and, as a rule, the house sparrows tend to withdraw to the escape trees, like social outcasts, when other birds come.

There are, of course, sparrow traps--a screen enclosure, stocked with food, that has a door that drops shut when a bird enters. This is messy business because desirable birds enter as well as sparrows. Some birders say not to put out food that sparrows like, but they seem to like everything, even to taking sunflower seeds from the pendant feeders and pecking at the suet ball. So we accept the sparrows along with the rest and have not considered them a problem.

This winter, however, we accidently kept sparrows from the terrace feeders, though we were putting out the same foods. It happened like this: We feed the pheasants under the Russian olive hedge west of the house. The feed consists of ground corn placed in little piles. The sparrows found it, liked feeding in the open with quick escape to the branches above, and the supply was enough to last all day. As a result few, if any, sparrows came to the terrace stations. Since pheasants have stopped feeding in the yard now that the weather is mild, we do not put out corn daily as we did in the winter, but the sparrow feeding habits seem to be so established that they still do not come to the terrace.

The waxwings have cleared the dried crabapples from most of the trees in town and are now concentrating on the big juniper on the hill which still is blue with berries. The whole tree quivers as they feed. Early in the winter the waxwings cleared out the cedar berries, next they ate the dried fruits, and now, in April, they are clearing the blue sheen from the juniper. Every winter they follow this order. Whether it's the best, or the worst, that is left for the last, the waxwings don't say.

Ice, snow and dreariness greeted the first Red-winged Blackbird when he arrived on March 18, 1973. He had come to stake his claim to the cattail draw for a nesting site and he will defend it vigorously from all contesters of his own kind and larger birds flying over that might be a threat to his home and family.

The Red-winged Blackbird has about six weeks in which to play, to sing and to defend his chosen homesite before the females arrive. The blackbird on our hill usually contents himself with one mate and finds himself plenty busy protecting that one and helping with the feeding of the young. (The red-winged blackbirds feed at our terrace tray and we have seen the male bring the young there and feed them a few bites of ground corn until they learn how to pick for themselves.)

The various choices for nesting sites include the cattails, the red osiers and golden elders in front of our house, and the native brush in the draws.—**Daily Belle Fourche Post**

Winter Meeting at Sioux Falls

November 9-10-11, 1973

HEADQUARTERS

Room 101, Gilbert Science Center, Augustana College, 33rd and Summit, Sioux Falls.

PROGRAM

Friday, November 9

7:00-10:00 p.m.—Informal get-together and registration (Registration fee for local expenses, $1.25)

8:00 p.m.—Coffee

Saturday, November 10

9:00 a.m.-12:00 noon—Registration, Business Meeting, Paper Session

10:30 a.m.—Coffee

1:30 p.m.-5:00 p.m.—Paper Session, Directors Meeting

3:00 p.m.—Coffee

6:30 p.m.—Banquet, Marshall Room, Augustana Commons ($2.50). Special Program . . . following in the Auditorium of Gilbert Science Center.

Sunday, November 11

9:00 a.m.-12:00 noon—Check-List Committee Meeting

CALL FOR PAPERS

Those who plan to present papers should send title, time, and projection equipment needed to B. E. Harrell, Biology Department, University of South Dakota, Vermillion, South Dakota 57069.

ACCOMMODATIONS

Most Convenient Motels—Downtown Holiday Inn, 100 West Eighth; Airport Holiday Inn, 1301 West Russell; Ramada Inn, Junction Highways 38 and 29; Howard Johnson's, 3300 West Russell; Town House, 400 South Main; Lindendale Motel, South Highway 77; Smith's Uptown Motel, 1223 West 12th; Travel Lodge, 809 Northwest.