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White-winged Junco

—Don Polovich, Rapid City Journal

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President's Page

THIS VOLUME of "Bird Notes" is a reminder that we are observing the 25th anniversary of the South Dakota Ornithologists' Union. It is quite an achievement that SDOU and "Bird Notes" have been a reality for these 25 years. More than a few publications and organizations have fallen by the wayside in less time than that. In recalling these facts we again honor the memory of Herman F. Chapman, who, more than any one individual, kept SDOU going through its first difficult years. He was the first president of the union, and he served as the librarian-editor of "Bird Notes" during the first five years.

About 50 persons met with Herman Chapman in Sioux Falls on Jan. 15, 1949, to establish SDOU and to originate the Charter Membership Roll which finally consisted of 150 members, some of whom are among our present membership of about 275. During the years following that meeting, many dedicated individuals worked closely with Chapman to develop a firm foundation for SDOU.

The annual meetings and field trips, compilations of South Dakota Christmas Counts, and biographies of the state's early ornithologists and naturalists are current activities that were initiated by Chapman. He also had the foresight to promote a check-list of South Dakota birds, and to plan for its publication ("H. F. Chapman," by Herbert Krause, "Bird Notes," 13:60). We are now editing that book on South Dakota birds. Herman Chapman would have taken quiet pride in all of this. We were fortunate to have had such a man as a native of our state.

In January, I made a trip to Duluth and the north shore of Lake Superior to join 150 Minnesota and Canadian birders on the annual MOS winter field trip. The main attraction for me was the possibility of seeing one or more of the rare owls that are observed during the winter in northern Minnesota—the Great Gray Owl, Hawk Owl, and Boreal Owl. I was fortunate to have had Kim Eckert as a companion for the trip. He is a member of MOS, and has had considerable experience in birding in the Duluth area.

To summarize an enjoyable and interesting trip, I can report that we saw not one but five Hawk Owls. The fourth bird was spied by Kim as we sped past it at 55 miles per hour. It was sitting on the top of a telephone pole in the middle of a four-lane highway, in broad daylight, and we gave it only a glance because we were rushing north for one last search of a Great Gray Owl (reported but not observed by us). We later laughed about two enthusiastic birders who could become so nonchalant about one of the rarest birds in the United States that they would pass it up in that manner.

I was much impressed with the enthusiasm of the birders who traveled to northern Minnesota during January to take part in a field trip. There were four chartered buses, along with many personal cars. Quite a delegation attended from the active Fargo-Moorhead Bird Club.

Should we consider initiating winter meetings in the better birding areas in South Dakota? Such locations as Rapid City, Pierre, Chamberlain or Vermillion would provide excellent birding. And a large group of people is always more successful in finding the rare or elusive species of birds, making such an outing more interesting to all in attendance.—**Bruce K. Harris**

Wood Thrush Nesting Behavior

by Sharon Gullickson Knopf

ACCORDING TO Bent (1949) and the A.O.U. Check list (1957), the range of the Wood Thrush (**Hylocichla mustelina**) is eastern North America from southern Canada to Panama. Bent indicates the breeding range of this species extends into southeastern South Dakota, and Dilger (1956) affirms that the breeding range includes the extreme eastern portion of South Dakota. Over and Thoms (1946) claim this bird is a common resident in the southeastern corner of South Dakota, and the "Check-list of South Dakota Birds" (1956) lists this thrush as a summer resident, probably but not necessarily breeding in the state. Several references in **South Dakota Bird Notes** (Youngworth, 1949; Habegar, 1950; Dahling, 1958; Johnson, 1958) report Wood Thrush observations in different areas of eastern South Dakota. Visher (1915) states that this species "breeds abundantly in Vermillion and in the wooded ravines" near Vermillion. Larson (1925) says the Wood Thrush is a summer resident and breeds within a five-mile radius of Sioux Falls. The above reports, however, make no reference to an actual nest.

Krause (1964) believes that, until recently, the Wood Thrush nested in the Sioux Falls area, but that it is becoming increasingly rare and "the song of the Wood Thrush will probably be heard no more in South Dakota." By contrast, personal correspondence with the late William Youngworth revealed a different viewpoint. He did not believe the Wood Thrush was becoming scarce in southeastern South Dakota. In addition to citing several nests in the Sioux City, Iowa, region, he claimed, "This thrush is a regular summer resident along the Missouri River in South Dakota." Although Youngworth apparently had not found a nest in Newton Hills State Park, he thought the presence of singing pairs of Wood Thrushes was strong evidence of their nesting in the area.

Newton Hills State Park, located about seven miles south of Canton, South Dakota, includes heavily wooded areas interrupted by several open grassy areas. As reported by Bent (1949), Wood Thrushes prefer low, cool, damp forests. Bent (1949), Brackbill (1943), and Dilger (1956) concur that saplings and heavy undergrowth contribute to the suitability of an area for nesting Wood Thrushes, and Dilger also notes the tendency of these birds to occupy the forest edge. The habitat of the nest found at Newton Hills, June 10, 1964, included all the above specifications. It was in a wooded area composed of many saplings and heavy undergrowth, and the nest was near the woodland's edge between an open grassy area and a heavily wooded hillside.

THE NEST

This nest was about 9½ feet above ground in the fork of a small American elm. While the 37 nests studied by Brackbill (1958) in suburban areas ranged from 4 to 35 feet above ground, Preston and Norris (1947) report that two-thirds of the Wood Thrush nests in natural areas are 5 to 10 feet above ground.

The Newton Hills nest was directly against the main stem of the tree in the fork of a branch. This placement is different from Brackbill's (1958) typical finding that nests are nearly always one-third to three-fourths of the way out on branches. Of the 37 nests that he studied, only one was built against the main stem.

Measuring five inches by four inches across the top, the nest was oval with the rounded opening three inches in diameter. The depth of the opening was

only two inches, while the depth of the whole nest was three inches. The outer part of the nest was composed of twigs and a small piece of tissue. The middle layer was dry mud with a small amount of dry grass mixed with it. As Bent (1949) also described, the inner layer of the Newton Hills nest was lined with rootlets rather than the usual dry grass utilized by robins.

NESTING BEHAVIOR

All observations of nesting behavior were made by a spotting scope set 30 to 40 feet from the nest. This method apparently did not disturb the thrushes.

Since the nest was not discovered until June 10, 1964, shortly after the young had hatched, observations of courtship, nest building, egg laying, and incubation were not possible. As reported by Brackbill (1958), however, the Wood Thrush lays from two to five plain blue-green eggs, with the more common clutches consisting of three or four eggs. According to Bent (1949), only the female incubates the eggs, and incubation typically requires 13 or 14 days. Although Brackbill (1958) believes that the female always carries the shell away, Bent (1949) reports instances of the female eating the shell as a means of disposal.

At the Newton Hills nest detailed observations of feeding behavior continued from June 10 until the last nestling left the nest on June 20. Actions of the adult Wood Thrushes during feeding and singing or brooding activities immediately following feedings provided a way to distinguish between the male and female parents. The male, recognized by its singing habit, always approached from the right of the nest and perched on the right side to feed the young. The female utilized the left side in the same manner. Only one exception to this pattern occurred. Once the female approached the nest from the right, perched on the right side of the nest, and then moved to her usual perch on the left side before feeding the young.

Table 1 shows the frequency of feedings performed by each parent. A trend evident in this data is the increase in the rate of feeding with the age of the nestlings. The number of feedings ranged from an average of four per hour on the first day of observation to an average of 12 per hour eight days later. In contrast to this fact, Brackbill (1943) claims there is no increase from day to day.

Analysis of Table 1 reveals two divergences from the otherwise steady increase of feeding rate relative to increased nestling age. On June 16, the average of feedings per hour is somewhat lower. Weather conditions probably caused this reduction. That morning featured a cloudy, misty sky and a low temperature. With these circumstances the female brooded during most of the observation period, and relatively little feeding occurred on the part of the male or female. On June 20, the average of eight feedings per hour is also lower. This divergence is related to the fact that one of the two young left the nest two days previous to this date. Although not well observed, some feeding evidently was directed to the juvenile that had left the nest. Thus, the number of visits decreased at the nest with the remaining young thrush.

Although both parents fed the nestlings, differences in the rates of feeding were evident for each sex. After the first two days needed to establish the method of identifying the male and female, the male made a greater number of feedings per hour than did the female. The difference between rates of feeding by each parent was greater during the earlier days of observation. For example, on June 13, 71 percent of the feedings per hour were by the male, while on June 18, the male was responsible for 58 percent of the feedings. These figures are somewhat in agreement with reports by Bent (1949) and Brackbill (1943) that the males make about two-thirds of the feedings while the young are

in the nest. Neither, however, records any difference in percentage of male feedings with increased age of nestlings, as noted in this study.

Table 2 presents feedings per hour during segments of the day for two full days of observation. Despite the limited amount of observation, the facts suggest a probable pattern in rates of feeding at various times of day. The lowest rate seems to be in the cool hours from sunrise to 10 a.m., with the highest rate occurring in the late morning and early afternoon. During the late afternoon the rate of feeding is quite near the average rate for the entire day.

From my vantage point an exact determination of food brought to the young Wood Thrushes was not possible; however, caterpillars, worms, and winged insects were frequently seen. In all cases, the parent brought more than one insect to the young. The feeding process took place as the parent thrust its insect-filled bill into the gaping mouth of a young thrush. Progressive insertion and removal of the parent's bill into and out of the nestling's mouth constituted the essence of the feeding process.

On several occasions, after all the food was out of the adult's mouth, the parent thrust its bill into the nestling's mouth, removed a particle of food, waited a few seconds, and then thrust it again into the nestling's mouth.

At times, when the female was brooding as the male came with food, the female flew away while the male fed the young. Usually, however, the female perched on the rim of the nest while the male fed the nestlings--a pattern also reported by Brackbill (1943). Occasionally, the female snatched the food from the male and fed the nestlings her self. Bent (1949) suggests an explanation for this latter behavior. When the male brings large, hard-shelled, or winged insects, the female often eats the less digestible parts before feeding the remainder to the young.

On two occasions, when the nestlings continued gaping after the male had fed them and eaten the excreta, the male thrust his empty bill into each mouth a few times. Schartz (1939) reports a similar behavioral pattern for the American Robin.

In general, both nestlings were fed at each trip, although occasionally only one received food. A distinctive exception occurred on June 18. By this day one nestling was more developed and active than was the other. When either parent brought food, this more active nestling was much more demanding and usually received all the food. During two hours at midday, this nestling received 25 of 30 feedings.

Following the feeding process, the adult remained for the disposition of fecal sacs and then either left the nest or exhibited a behavioral pattern peculiar to its sex. The male either remained perched on the nest's rim or flew to a nearby branch and sang from one minute to 12 minutes. Following feedings, the female usually remained at the nest to brood. According to Brackbill (1943), the female makes her feedings almost exclusively upon returning from her own meals to resume brooding.

As in the case of many altricial species (Welty, 1962; Van Tyne and Berger, 1961), the Wood Thrush instinctively removes the fecal sacs immediately upon their discharge. During the observations at Newton Hills, the fecal sacs were expelled, almost exclusively, as the young birds were fed. Both male and female attended to nest sanitation. When the female remained at the nest through feedings by the male, the male did not wait for the excreta to appear. Bent (1949) and Brackbill (1943) state that the adults accomplish the disposal either by swallowing the fecal sac or by carrying it away. The latter method was never observed at the Newton Hills nest. In all instances the adult immediately seized and ate the

Table 1

Average Number of Feedings per Hour

Day	Time of Day	Male	Female	Total
06-10	11:00 a.m. - 5:00 p.m.	--	--	4
06-11	5:30 a.m. - 12:30 p.m.	--	--	3
06-12	-- --	--	--	--
06-13	6:45 a.m. - 11:45 a.m.	5	2	7
06-14	5:00 a.m. - 12:00 noon	4	3	7
06-15	6:00 a.m. - 4:00 p.m.	8	3	11
06-16	7:00 a.m. - 12:00 noon	7	3	10
06-17	9:00 a.m. - 6:00 p.m.	7	5	12
06-18	6:00 a.m. - 4:00 p.m.	7	5	12
06-19	-- --	--	--	--
06-20	5:00 a.m. - 10:00 a.m.	1	7	8

Table 2

Average Number of Feedings per Hour

Day	6 a.m. - 10 p.m.	10 a.m. - 2 p.m.	2 p.m. - 4 p.m.	Total (6 a.m. - 4 p.m.)
06-15	7	18	8	11
06-18	8	16	12	12

expelled sac, usually directly from the nestling's anus. This pattern persisted until the young left the nest.

On 5 occasions the male Wood Thrush exhibited a peculiar behavior related to nest sanitation. Following each of five feedings when the young failed to expel fecal sacs, the male remained at the nest, cocked his head to the side, and uttered several faint chipping sounds. As soon as the young expelled a fecal sac, the male ate the sac and flew from the nest. Perhaps the behavior in these circumstances indicated the male's impatience while waiting for the extremely regular excretions by the young, or possibly the behavior was a stimulation for defecation by the nestlings. Herrick (1900) states that the robin characteristically stands on the brim of the nest, usually with its head inclined, "as if doting on her young and thinking what fine children they are, when this attitude is really one of sanitary inspection."

As revealed by Bent (1949) and Brackbill (1943; 1958), the female alone brooded the young. The brooding female's attitude varied considerably. In her most frequent position, she faced in a northeasterly direction. Less frequently, the female faced toward the northwest, southwest, and southeast. While brooding, the female usually looked warily about, but at times she closed her

Table 3

Percentage of Observation Time Spent in Brooding

Day	Time of Day	Percentage
06-10	11:00 a.m. - 5:00 p.m.	54%
06-11	5:30 a.m. - 12:30 p.m.	60%
06-12	-- --	--
06-13	6:45 a.m. - 11:45 a.m.	54%
06-14	5:00 a.m. - 12:00 noon	55%
06-15	6:00 a.m. - 4:00 p.m.	43%
06-16	7:00 a.m. - 12:00 noon	76%
06-17	9:00 a.m. - 6:00 p.m.	29%
06-18	6:00 a.m. - 4:00 p.m.	36%
06-19	-- --	--
06-20	5:00 a.m. - 10:00 a.m.	38%

eyes for brief periods.

Table 3 shows the percentages of time spent in brooding during the observation periods. The record indicates that more brooding occurred in the cool early morning than in the late morning and afternoon. Bent (1949) substantiates this conclusion in noting that during the cool hours of morning, the female broods oftener and for longer periods than during the hotter part of the day. Other weather conditions also influenced the amount of time spent in brooding. For example, the morning of June 16 was very cool and rainy, and on this day the female devoted 76 percent of her time to brooding.

While Bent (1949) and Brackbill (1943; 1958) claim there is no progressive daily decrease in brooding, a slight decrease in brooding time occurred at the Newton Hills nest. For the mornings of June 11, 14, and 20, the respective percentages were 60 percent, 55 percent, and 38 percent.

Despite the decreasing amount of brooding, the female brooded the young until they left the nest. On the days when each nestling left, the female spent considerable time on the nest, even though the active nestlings made her effort quite difficult. During the last few hours before leaving the nest, the young often squirmed from under the brooding female and sat next to her on the nest. Finally, the last nestling to leave once perched on the rim of the nest while the female continued to brood on the empty nest.

Two nestlings were present when the nest was discovered on June 10. One young thrush left the nest eight days later, on the afternoon of June 18; the other remained in the nest until the morning of June 20. Distinctive differences were evident in the development of the nestlings. Two days before the first one left the nest, it became very active and performed preening and stretching activities. During this

vigorous activity the other nestling remained very quiet, its principal behavior being gaping and feeding.

According to Bent (1949), young Wood Thrushes generally leave the nest 12 or 13 days after hatching. Thus, the nestlings at Newton Hills probably were from one to three days old when first discovered.

Until June 13, the young birds could be seen only when they were gaping. During these early days, the mere arrival of either adult, with or without food, stimulated the nestlings to gape widely and straight up out of the nest with no directional gaping toward the parent. Then, on June 13, when the nestlings were approximately six days old, they began to gape toward the feeding parent. This age approximates the average age of five days for the development of directional gaping by small, open-nesting, altricial birds (Welty, 1962). Even at this age, the nestling thrushes gaped whenever an adult came to the nest. Apparently just the approach of a parent, or possibly even the movement of the nest, is sufficient stimulation for gaping. Not until the last few days before leaving the nest, when the young were about 10 days old, did they at times gape only when the parent had food in its mouth. Even at this late date, the nestlings gaped occasionally when a parent was at the nest with no food.

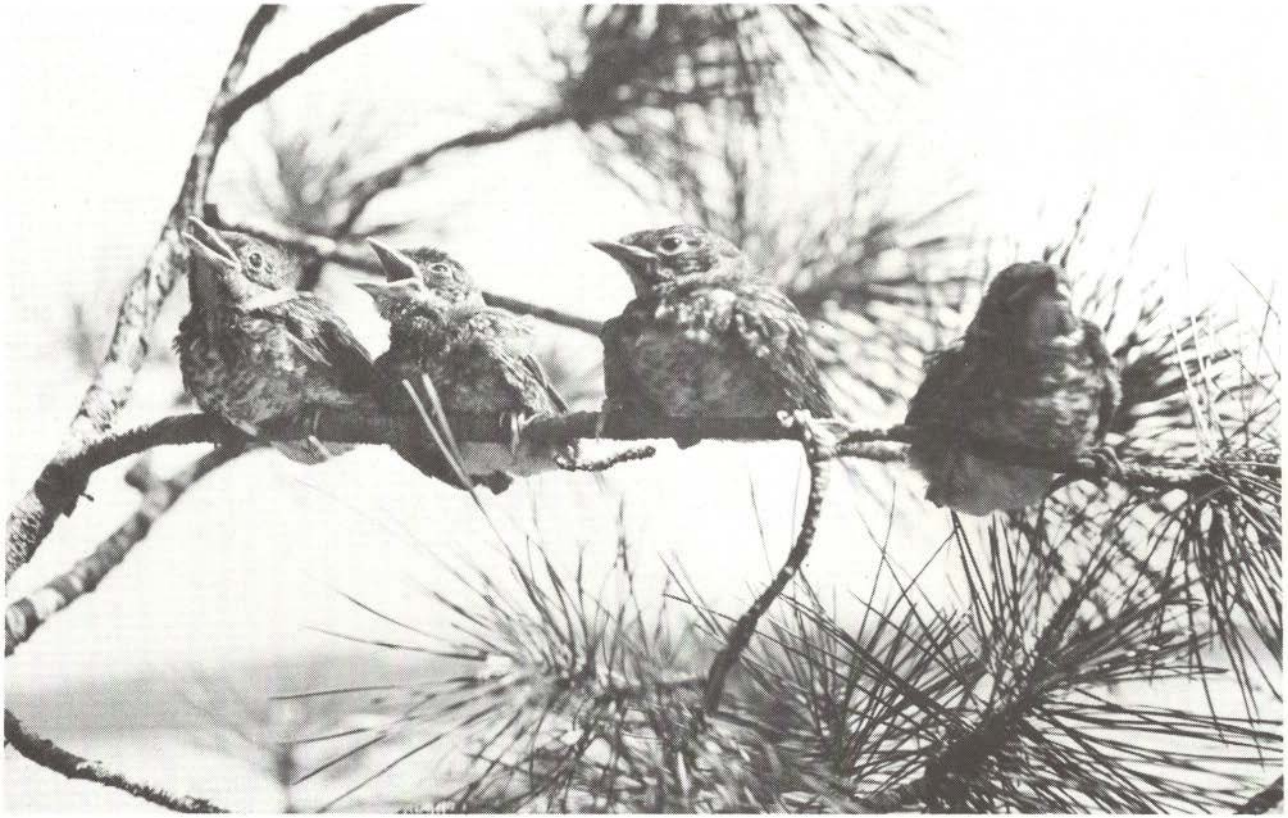
On June 18, when the first nestling left the nest, the female, with no food in her mouth, approached the nest and perched on the rim. The extremely active young thrush gaped immediately and continued to do so as the female attempted to brood. After squirming from under the female, this nestling continued to gape and made several pecks at the adult's upper breast and throat.

For two days before leaving the nest, the first young thrush preened its feathers. It also began stretching its legs while standing. This nestling often stood on the edge of the nest, stretched its legs, fluffed its feathers, and flapped its wings vigorously. It then spent the entire next day in preening, wing flapping, and feeding. The second nestling exhibited the same behavioral patterns on its final day in the nest. Unfortunately, observations were not possible the day before it left.

When the first nestling left, it did so by merely walking out on the branch next to the nest. It remained perched there for 10 minutes and then flew to a slightly higher branch. The male fed the young thrush at this perch until, during one of the feedings, the young bird lost its balance and flew clumsily to the ground. The male followed the fledgling to the landing place about 10 feet from the nesting tree. Leaving the nest was less deliberate for the other nestling. While perched on the nest's rim, the second nestling stretched, flapped its wings, lost its balance, fell in a wing-flapping flight, and landed on a dead branch about four feet above ground.

Bent (1949) states that the male Wood Thrush "takes charge of feeding certain of the the young out of the nest while the female feeds certain others." The data in Table 1 show that the male did more feeding than the female while the young were in the nest. Then, on June 20, the female brought over 87 percent of the food to the nest. Since one young thrush had already left the nest, the male probably was feeding this bird while the female served the remaining nestling. Although observations continued after both young had left the nest, the behavior described by Bent could not be noted due to the inability to differentiate between the two adults and the two young thrushes.

Daily observations continued until June 27, but keeping track of the young thrushes was difficult because they moved quite freely. The first few days after the young birds left the nest, they stayed relatively close to the ground in shrubs and on low branches of saplings. On the fourth day they began moving to



Wood Thrushes Leaving Home

—Photo by R. D. Hildebrand

—Courtesy of U.S. Fish and Wildlife Service

higher perches, where they remained until they began foraging. On June 26, and thereafter, the two young birds hopped about on the ground and foraged in the manner of adult Wood Thrushes. The young birds were approximately 18 and 20 days old when they first exhibited this foraging behavior. Bent (1949) reports that young Wood Thrushes do not forage for themselves until they are 20 to 23 days old. By June 27, both fledglings had departed from their home territory.

HOSTILE BEHAVIOR

The territory of the nesting Wood Thrushes at Newton Hills was approximately 80 yards long and 40 yards wide. In addition to defending this area from certain intruders, the adults did the majority of their food gathering within the territory.

Various territorial trespassers stimulated varied responses from the Wood Thrush. Birds such as the House Wren (**Troglodytes aedon**), Scarlet Tanager (**Piranga olivacea**), and Rose-breasted Grosbeak (**Pheucticus ludovicianus**) frequently flitted about the trees in the Wood Thrush territory. The thrush, however, paid no attention to these intruders. Interspecific hostility was directed toward only the Robin (**Turdus migratorius**) and the Blue Jay (**Cyanocitta cristata**). Usually, the male thrush merely chased these intruders from the territory, returned to a singing perch, and burst forth with a loud, long song. Occasionally, however, a considerable fight, with much noise and wing flapping, occurred before the trespasser left the Wood Thrush's territory.

Dilger (1956) discusses this chasing activity in territorial defense. Known as supplanting attack, this behavior consists of the bird "with the higher relative attack motivation flying toward the other individual, which flees . . . " Four other thrushes—Hermit Thrush (**Catharus guttatus**), Swainson's Thrush (**C. ustulatus**), Gray-cheeked Thrush (**C. minimus**), and Veery (**C. fuscescens**)—exhibit this same behavior.

The observed vigorous territorial defenses by the male Wood Thrush at Newton Hills are not in accord with observations by Brackbill (1943). The Wood Thrushes that he studied were very tolerant of species such as starlings, sparrows, and robins, even when these species were in the thrush's nest tree. According to Brackbill, no hostility was displayed to robins that nested within 50 feet of a Wood Thrush nest and that called, scolded, and sang only one or two yards from the thrush.

On several occasions both the male and female Wood Thrushes raised and lowered feathers on their heads—a behavior pattern termed hostile by Dilger (1956). Generally this raising and lowering of head feathers occurred when the adult was perched on the rim of the nest. Bent (1949) attributes such behavior to an alarm reaction. Dilger (1956) believes this crest raising is "probably associated with the common behavior of many animals to look larger under attack motivation" and is much like the tail raising of the Hermit Thrush in both action and motivation. Dilger also states that this quick raising and slow lowering of the reddish crest may serve as a species-specific recognition signal, as well as have hostile components.

SONG

In the literature the Wood Thrush is often called the top soloist of the eastern woodlands. Bent (1949) says, "The nature lover who has missed the bell-like notes of the Wood Thrush ... has missed a rare treat." Saunders (1924) describes its elaborate song: "Each phrase may have three parts, an introduction of two or three short notes, usually low in pitch and not especially musical; a central phrase of two to five notes, most commonly three, loud, clear, flute-like, and extremely musical; and a termination of three or four notes, usually high-pitched,

not so loud, and generally the least musical part of the song." Wing (1956) states that the Wood Thrush is one of the few birds whose songs contain chords and that this songster may sound as many as four notes simultaneously. In another report Saunders (1961) presents an extensive study of the Wood Thrush's songs and calls.

At Newton Hills only the male Wood Thrush sang. He had three singing perches. One was at the nest, on either the rim or the nearby branch. Another perch was a fallen log about 20 yards to the left of the nest. The third perch was a low branch of a basswood tree about 15 yards to the left of the nest.

Although the female Wood Thrush did not sing at Newton Hills, Brackbill (1948) tells of a female that sang frequently during egg laying and incubation. He also reports female songs in two related species—the Veery and the **bicknelli** form of the Gray-cheeked Thrush.

The only sounds emitted by the nestling thrushes were faint peeps usually heard during the feeding process. These sounds were first heard on June 17, the day before the first nestling left the nest.

SUMMARY

Although the breeding range of the Wood Thrush includes southeastern South Dakota, apparently no recent records exist for its nesting at Newton Hills. State Park prior to the nest found on June 10, 1964.

The nest observed in this study was in a wooded area of the park, the habitat including many saplings and heavy undergrowth. The nest was 9½ feet above the ground in a fork of a young American elm.

Since this Wood Thrush nest was discovered after the eggs had hatched, observations of courtship, nest building, egg laying, and incubation were not possible. This study thus reports the behavioral patterns exhibited by the adults and the two young Wood Thrushes from the time the nestlings were about two days old until they left the nest 10 days later. Although not so extensive, observations continued until the two young were sufficiently independent to leave the territory established by their parents.

Both parents performed the feeding activities, although the male accomplished a larger percentage of the feedings. The frequency of feedings increased with the increase of the nestlings' ages. The time of day and weather conditions also seemed to influence the rate of feeding.

The female alone brooded the young. Although brooding continued until the nestlings left the nest, there was a progressive daily decrease in the time spent by the female on the nest. Brooding also was affected by the time of day and weather conditions.

Instinctively, both the male and female disposed of the fecal sacs expelled by the young. Immediately after the young were fed, the fecal sacs were expelled and were eaten by whichever adult was present.

During the first days of observation, the young Wood Thrushes exhibited nondirectional gaping at the mere arrival of a parent. At approximately six days in age, the nestlings began to face the adults in gaping. Activities such as preening, feather fluffing, stretching, and wing flapping were not performed until the nestlings were about 10 days old. One nestling began these activities two days before the other.

After leaving the nest, the young thrushes remained on or near the ground in heavy undergrowth for three or four days. On the fourth or fifth day, they began moving to higher branches where they remained, almost exclusively, until they began foraging for themselves at the age of 18 to 20 days.

The defended territory was about 80 yards long and 40 yards wide. The

thrushes did most of their food gathering within the territory. While the male Wood Thrush paid no attention to House Wrens, Scarlet Tanagers, and Rose-breasted Grosbeaks, he chased many Robins and an occasional Blue Jay from the territory.

Both the male and female exhibited crest raising and lowering.

The male used three singing perches. The female did not sing, and the only sounds emitted by the nestlings were faint peeps that began the day before they left the nest.

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(Editor's note: Among the ornithological files of the late Dr. Willard N. Rosine, L. M. Baylor found Mrs. Knopf's extensive Wood Thrush paper, originally composed in the summer of 1964 for the ornithology class at Augustana College. With approval from Mrs. Knopf and the Department of Biology, Baylor condensed the paper for publication in **Bird Notes**.)

A Review of Wood Thrush Records in South Dakota

June Harter

SHARON GULLICKSON KNOPF'S account of Wood Thrush nesting behavior at Newton Hills prompts this supplemental review of the species' status in South Dakota. The Wood Thrush records acquired by the Check-List Committee of the South Dakota Ornithologists' Union are few in number and apparently reflect the known status of the bird in this state. Available literature indicates that the bird is an uncommon migrant along the Missouri River and through the counties bordering Minnesota; it is still less common between those areas, and it has never been reported west of the river. The bird is a summer resident in the extreme southeast part of the state and along the Missouri to Farm Island, Hughes County. Recent studies suggest that more research may be necessary before the status of the Wood Thrush as a nesting bird in South Dakota can be properly defined.

Bertin Anderson, Ray Daugherty, and others worked for two to three years along the Missouri River below Chamberlain, and encountered many Wood Thrushes each year. Anderson and Daugherty found two nests in June 1969 at locations between Pickstown and Greenwood, Charles Mix County (Bird Notes, 22:64). Each nest contained four eggs.

Gregory County, along the Missouri River, was the site for five active nests found by Bruce Harris and Bertin Anderson in June 1972. A nest and one adult were taken for specimens (Bird Notes, 24:56). Harris also stated in recent correspondence and the September 1972 issue of Bird Notes that he found and took a nest, 20 June 1972, in Newton Hills, Lincoln County. It was eight feet above ground in a small sapling. He is confident it was a 1972 nest from which the young had already departed. A singing male was near the abandoned nest.

Newton Hills was the location for one banding and six sight and sound records reported by Mr. and Mrs. Charles Rogge; all occurred in the Boy Scout area. Their description of the song was "tee-oh-lay," with the distinctive chord quality. Dates ranged from 26 May and 3 June 1957 to 28 August 1970. Other dates were 6 June 1958, 24 May 1959, 17 May and 17 June 1962.

The Rogges also have 10 records for Farm Island; six of those were banded birds (Bird Notes, 24:46). The observations occurred in September 1965, May 1968 and 1970; the banding dates were May 1964 (1), May 1965 (2), September 1965 (2), July 1966 (1) and May 1969 (1).

Nelda Holden has three banding records for the Wood Thrush. One occurred 8 May 1963 at her home on the south edge of Brookings County; two were 16 May 1964 and 19 May 1970 on Farm Island. Mrs. Holden also noted hearing a Wood Thrush 17 May 1959 at Yankton, and observing one as it sang 19 May 1959 in Conservation Park, Brookings County.

Other records for Farm Island include one individual heard and observed in May 1964 (reported by Mrs. J. W. Johnson and Herb Krause), one bird banded by Scott Findley in May 1965, and two observations in June 1969 (Harris).

Additionally, we have a 12 May 1949 record for Union County (Wm. Youngworth) and a 2 May 1968 sighting six miles northeast of Woonsocket, Sanborn

(Continued on Page 26)

Specimen Records for Smith's Longspur in Deuel and Roberts Counties

Bruce Harris

ON OCTOBER 18, 1973, I collected what may be the first specimen of Smith's Longspur for South Dakota. It was one of a scattered flock of about 12 birds moving about a rather heavily grazed pasture just east of Ketchum Lake, Deuel County, three miles north and one mile east of Clear Lake. A second specimen was taken on October 19 from a group of about 45 longspurs in the same area. On October 23, a third specimen was shot in Roberts County, three miles north and one mile east of Summit. All specimens will be deposited at the W. H. Over Museum, University of South Dakota, Vermillion.

The Over Museum has three specimens that were taken in Sully County in 1917, but they have not been confirmed as Smith's Longspurs. Also, there are four sight records for Stanley, Minnehaha and Pennington Counties, but the dates given for those records are not within the range of the prairie states migration dates given by Kemsies in Bent's "Life Histories of North American Birds," Bulletin 237, pages 1628-34. It is possible that they represent other species. My personal experience in collecting immature Chestnut-collared Longspurs during September 1971, and mistaking them for Smith's Longspurs, leaves some questions about the September sight records; September 15 and 23 would be early records for either of the Dakotas according to Kemsies (op. cit.). But as he points out, the movements and migrations of Smith's Longspur are not well documented, and we have so few records in the literature that much more field work must be done before any definite conclusions can be drawn about migration patterns and dates.

The immature Chestnut-collared Longspurs that I took in Deuel County in 1971 were very huffy on the underparts, and white markings on the shoulders of the wings were readily perceivable. I was sure that they were Smith's Longspurs until I took specimens and found the buffy coloring was formed by juvenile feather edgings overlaying black feathers on the crown and underparts. During the winter months the buffy tips wear off rapidly, leaving the black-bellied birds in first nuptial plumage (op. cit., p. 1646).

The records above represent what was evidently unusual concentrations of Smith's Longspurs along the Coteau des Prairie in Roberts, Grant and Deuel Counties during October 1973. The available literature indicates that the numbers of birds observed would definitely constitute a heavy movement of this species for any location in the United States. The Smith's Longspur is considered one of the least known rare birds in the country, and its migrations and movements are not well defined at the present time (op. cit.).

My first specimen taken at Ketchum Lake on October 18 was literally a "shot in the dark." The longspurs were located just before dark, and were settling down to roost. I thought that the call notes were not those of the Lapland Longspur so I shot the only bird sighted on the ground, and it was a Smith's Longspur.

On October 19 I returned to the same locality shortly after sunrise, and the second specimen was taken from a group that moved restlessly about the prairie overlooking Ketchum Lake. In the late afternoon I returned to the area for some duck hunting. The wind had died down,

the skies were sunny and clear, and I spent more than two hours observing Smith's Longspurs flying about me continually. They sometimes came within 15 yards, in loose groups of five to fifteen birds. I had ample time to learn the call notes, to observe the distinctly buffy underparts, and to see the white barring on the wings of many birds. A few Lapland Longspurs were also in the area, giving me the opportunity to compare the calls of the two species.

On October 20, David and Nelda Holden joined me at Ketchum Lake. We found a number of Smith's Longspurs in a plowed field and along a nearby strip of hayland on the west side of the lake. The wind was quite strong and the birds were not moving as much as they had on the previous day. But we had excellent views of birds on the ground and sitting on a wire fence, getting up to within 20 yards of them on several occasions. We found that they could be extremely difficult to spot once they dropped down to the ground, even in plowed fields or on fairly open short grassland.

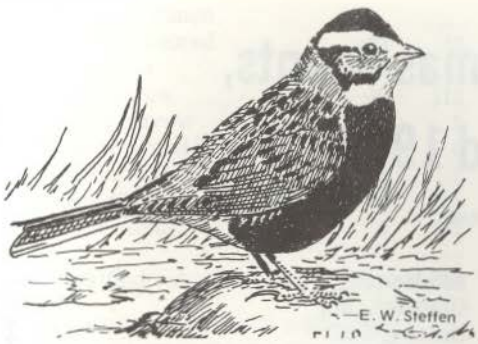
On October 22 I decided to check various areas in Deuel and Grant Counties to ascertain the distribution of the birds in the region. From Ketchum Lake I drove five miles southeast to the Bar-X Ranch where I found a single Smith's Longspur in flight, identifying it by the rattling call notes. Then I drove to a point 17 miles northwest, on top of the coteau, where I observed Smith's Longspurs (including one group of 11 birds) at three locations in a three-mile area. From there I moved still further northwest to a location in Grant County, three miles north of the Deuel County line and north of Round Lake. At that point a Smith's Longspur flew by me, along with five unidentified longspurs (not calling) and a group of 29 Lapland Longspurs.

On that and other days the birds were observed flying close to the ground, sometimes within 15 yards of me; distinguishing marks could easily be seen, enabling me to determine species by plumage as well as by call. The notes of the two species were readily separable when both longspurs were in the same area. Although the two species were sometimes in view at the same time I did not see them in mixed groups. The Smith's appeared to keep somewhat apart from the more common birds, even when the two species were moving in the same direction or circling together in the same vicinity.

The weather on October 22 was cool, with fine visibility. Nearly all of the longspurs noted on that date were flying low over the coteau in a northwesterly direction, just the opposite of what one might expect at that time of year. But I did not get the impression that they were migrating; rather that they were making shorter, local movements. If I remained in one location for five minutes or more some longspurs were sure to appear in flight.

From that locality I drove to a point 4½ miles east and two miles south; it was one mile from the Grant-Deuel line and within Grant County. Still on the coteau, I found many longspurs milling about a half section of overgrazed pasture where the tall stalks of Solidago sp. was the dominant forb. I observed the birds for more than an hour at that spot, finding one group of 18 Smith's Longspurs and a flock of at least 100 Lapland Longspurs. On all occasions it was very difficult to arrive at an estimate on the numbers of Smith's Longspurs because they moved about constantly in smaller groups than the Lapland Longspurs, and they were more widely scattered about the area. Both species were very flighty, moving in all directions about the large pasture, circling and alighting continually.

Although I repeatedly tried to locate birds on the ground, I did not succeed in finding them in the dry grassland, even though I carefully marked the spot where they landed. They invarably got on the wing before I could observe them at rest.



Chestnut-collared Longspur

But I had many fine views of both species on the wing, often at close range, and I was able to make good studies of the birds in this manner.

I was then convinced that there was a major movement, or concentration, of Smith's Longspurs along the entire coteau, and I decided to verify the conclusion by checking further northwest in to Roberts County.

The next day, October 23, I drove to a location four miles northeast of Summit, on the eastern edge of the coteau. It is approximately 50 miles northwest of the Bar-X Ranch in Deuel County. There I took a specimen of Smith's Longspur from a scattered group of at least 35 birds located in corn stubble. Getting the bird was a frustrating experience because I was unable to locate the longspurs after they alighted among the rows of corn stubble. Time and again I marked birds down, and walked to within 15 feet of them, only to have them get on the wing before I could spot them on the ground. It required more than an hour to collect the specimen, although I continually flushed Smith's Longspurs about me, usually in widely dispersed groups of two's and three's. They often landed again within 50 yards of the place where I flushed them. Lapland Longspurs were also in the field, and I noted that they flew in more compact flocks than the Smith's did. The latter species regularly got up from the ground as widely scattered singles or doubles, usually five to ten yards from their companions.

The flight calls of the Smith's Longspurs are quite distinctive, and once learned one probably would not mistake them for the notes of other longspurs. But they are not so distinctive (to me, at least) that they would be immediately distinguished from the calls of the Lapland Longspurs unless one was carefully looking for the species. The notes of the Smith's Longspurs are more "creaky" or "clicking" than those of the Lapland Longspur. They have been discribed as "staccato" and like the winding of a cheap watch (op. cit.). The harshness is more readily apparent at close range. Individual notes are not rolled together in the soft chatter that seems characteristic of the calls of the Lapland Longspur. Clicking is the best described as "staccato" and like the to me that a person might mistake the calls of the Lapland Longspur for those of the Smith's, at close range, but the situation would not occur once the birds are well known.

Eastern South Dakota is directly in line with the route that Smith's Longspur must take to its wintering grounds in Illinois, Ohio and Arkansas. It is quite likely that it moves across the state regularly, although there are no records in Bent or the AOU Check-list; there are records, however, for all the states around South Dakota. According to Kemsies, we should look for it in this state in the spring after the flight of Lapland Longspurs has moved north (available dates for Smith's for our region are April 18 through 28) and in the fall before the Lapland Longspurs move into the state (available dates are October 5 through 18). It is easy to see how the bird might have been overlooked in South Dakota, but persistent searching at the proper time of the year should give us more information on this interesting longspur.--Clear Lake

Pierre Christmas Counts, 1972-73 and 1973-74

B. J. Rose

Date	Dec. 26, 1972	Dec. 29, 1973
Species on count day	58	55
Other species	15	14
No. of observers	16	18

Snow cover—None 1972; 2"-3" 1973.

Temperature—20 to 48 degrees 1972; -5 to 3 degrees 1973.

Wind--0-15 mph 1972; 0-5 mph 1973.

Sky--Clear 1972; mostly cloudy 1973.

—SPECIES—		
Canada Goose	1,975	3,076
Mallard	2,197	6,263
Black Duck	0	2
Gadwall	2	2
Pintail	2	1
Green-winged Teal	0	3
Northern Shoveler	1	0
Wood Duck	1	1
Redhead	0	5
Ring-necked Duck	0	1
Canvasback	1	2
Lesser Scaup	13	7
Common Goldeneye	14	51
Common Merganser	35	5
Turkey Vulture	1	0
Sharp-shinned Hawk	0	1
Red-tailed Hawk	2	5
a. Harlan's	1	1
Rough-legged Hawk	2	0
Ferruginous Hawk	1	1
Golden Eagle (adults)	0	1
Bald Eagle (adults)	7	9
Peregrine Falcon	0	1
Merlin	1	2
American Kestrel	7	6
Sharp-tailed Grouse	92	22
Ring-necked Pheasant	41	30
Turkey	0	11
Killdeer	0	1
Glaucous Gull	1	0
Herring Gull	2	0
Mourning Dove	4	0
Screech Owl	2	2
Great Horned Owl	5	11
Short-eared Owl	0	1
Belted Kingfisher	1	3
Common Flicker (Yellow-shafted)	2	0
Hairy Woodpecker	14	12
Downy Woodpecker	16	21
Horned Lark	28	903
Blue Jay	0	1
Black-billed Magpie	21	33
Common Crow	4	5
Black-capped Chickadee	48	114
White-breasted Nuthatch	7	11
Red-breasted Nuthatch	0	1
Brown Creeper	4	2
Winter Wren	1	0
Mockingbird	1	0
Gray Catbird	1	0
American Robin	51	0
Townsend's Solitaire	8	3
Golden-crowned Kinglet	4	1
Bohemian Waxwing	237	0
Cedar Waxwing	19	0
Northern Shrike	2	5
Starling	347	299
House Sparrow	1,504	3,859
Western Meadowlark	24	10
Red-winged Blackbird	9	7
Rusty Blackbird	3	0
Common Grackle	10	1
Cardinal	0	5
Evening Grosbeak	1	0
Purple Finch	41	0
Common Redpoll	0	139
Pine Siskin	61	0
American Goldfinch	5	0

Dark-eyed Junco		
a. Slate-colored	13	12
b. Oregon	0	4
Tree Sparrow	49	112
Harri's Sparrow	2	5
White-crowned Sparrow	2	0
Song Sparrow	1	3
Lapland Longspur	0	51
Snow Bunting	0	362
Total Individuals	6,951	15,508

CRESBARD AND WEBSTER CHRISTMAS COUNTS, 1972-1973

CRESBARD (Wagar)	1972	1973
Red-tailed Hawk	2	0
Ring-necked Pheasant	203	101
Screech Owl	1	0
Common Flicker	1	0
Hairy Woodpecker	0	2
Downy Woodpecker	2	2
Horned Lark	500	400
Black-capped Chickadee	2	0
White-breasted Nuthatch	2	2
Northern Shrike	2	0
House Sparrow	200	100
Tree Sparrow	1	0
WEBSTER (Chilson)		
Great Horned Owl	1	0
Hairy Woodpecker	2	1
Downy Woodpecker	4	6
Horned Lark	75	35
Blue Jay	2	1
Black-capped Chickadee	8	6
White-breasted Nuthatch	2	2
Starling	2	0
House Sparrow	20	8
Purple Finch	3	0
Snow Bunting	10	5
Observed during count week, but not on count day:		
(CD—for species seen on count day)		
Rough-legged Hawk	CD	1
Herring Gull	CD	1
American Robin	CD	1
Observed during count period, but not on count day:		
Pied-billed Grebe	1	0
Green-winged Teal	2	CD
American Wigeon	3	1
Red-breasted Merganser	4	0
Bufflehead	0	1
Rough-legged Hawk	CD	2
Prairie Falcon	0	1
Golden Eagle	6	CD
Gray Partridge	0	1
Herring Gull	CD	2
Ring-billed Gull	1	1
Short-eared Owl	2	CD
Burrowing Owl	1	0
Common Flicker (Red-shafted)	1	0
Red-breasted Nuthatch	2	CD
American Robin	CD	2
Hermit Thrush	0	1
Cardinal	2	CD
Purple Finch	CD	8
American Goldfinch	CD	85
Dark-eyed Junco (Oregon)	9	CD
Fox Sparrow	1	0
Lapland Longspur	16	CD
Snow Bunting	2	CD
Total individuals	53	108

SPECIAL INVITATION TO CHARTER MEMBERS OFSDOU

This year marks the 25th anniversary of the founding of the South Dakota Ornithologists' Union, and our activities in 1974 are of particular significance because of this fact. As part of our observance we plan to make a special effort to get all charter members out for the Spring Meeting at Vermillion, May 24-26.

The continued interest and participation of the charter members is much appreciated, and we would like to give them appropriate recognition at the banquet to be held May 25.

We hope to communicate with all charter members during the next few weeks, and we will try to pool cars and transportation for all those who plan to attend the meeting.—**Bruce K. Harris, Clear Lake**

New Check List: Progress Report

N. R. Whitney

THE CHECK-LIST Committee was originally constituted in 1964, and, since completion of "The Birds of the Black Hills" in 1965, has been working consistently on the proposed new book on the birds of South Dakota.

Current progress is as follows: Bruce Harris has compiled species accounts of the water birds, starting with the loons, and going through to ducks. Don Adolphson has compiled the species accounts on the hawks and owls, and currently Byron Harrell is reviewing and revising them. Dr. Whitney has written accounts for species from the cranes through the woodpeckers. B. J. Rose has assembled information on the grouse, quail, and introduced game birds and is in the process of assembling this in species account form. J. W. Johnson has written species accounts for all birds from the flycatchers through the vireos, and Nelda Holden has done species accounts for warblers, blackbirds, tanagers, and buntings. We are all in the process of compiling distribution maps for the same groups.

Dr. Whitney has written a preliminary introduction, which is in the process of revision. It is hard to say when we can complete the work. We would very much like to get it to the publisher by the end of 1974, although this may not be possible.

Byron Harrell has arranged for the book to be published under the auspices of the W. H. Over Museum in Vermillion. This is especially appropriate since the previous two editions of "The Birds of South Dakota" were written by Dr. Over, and were published through the museum at that time.

It has been more than 50 years since Dr. Over's original publication. The book was slightly revised and reprinted approximately 30 years ago, but with 25 years in the South Dakota Ornithologists' Union we have had a substantial amount of additional information through our knowledge of the birds of the state, and our attitudes have changed in many situations. On this we feel a need for a new book as soon as we can get it published.

The Check-List is an important working tool. It will give observers the status of birds they see in South Dakota, based on the current level of knowledge. It will also provide a foundation for assessment of new information and accumulation of additional data rather than duplication of records; and it will remove from the area of speculation the changing status of various species.—**Rapid City**

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WHITE-WINGED CROSSBILL IN HYDE COUNTY—A White-winged Crossbill was feeding on a spruce by my house every day from Nov. 2 through Nov. 8, 1973. A window that is nine feet from the closest branches of the tree became my vantage point for watching the bird several times each day.

The crossed mandibles, flashy white wingbars, the general brownish color with some areas of buffy yellow, and the streaked underparts were noted and compared with the illustration in Birds of North America. In each case they were the same as those shown for the female crossbill.

Single White-winged Crossbills, both males, were observed on the same spruce on Aug. 17, 1969, and Oct. 11, 1971.—**June Harter**

General Notes of Special Interest

GRAY-CROWNED ROSY FINCH (HEPBURN'S FORM) AT ABERDEEN—It was November 14, 1972 when Buell and Edith Luce noticed a strange bird feeding on their driveway with a flock of House Sparrows. They consulted Peterson's **A Field Guide to Western Birds** and concluded they were viewing a male Gray-crowned Rosy Finch, Hepburn's form (L. t. littoralis). After also noting that its range does not include northeastern South Dakota they phoned to give me a detailed description and to ask for my opinion. I checked my field guides, agreed with their identification, and went to the Luce home where we observed the bird several times at a distance of 6-15 feet. Binoculars were not necessary, but we used them to get even closer views of the Rosy Finch markings and to observe the way that the gray of the crown came down over the cheeks.

Larry Lynch came to see the bird, and he concurred with our identification. Mr. Lynch stated that he knew of no previous record for the species east of the Missouri River in South Dakota. We found that Over and Thoms (**Birds of South Dakota**, rev. ed., January, 1946) listed the Hepburn's Rosy Finch as "a frequent winter visitor in the Black Hills." The only record published in **Bird Notes** (16:6) told about a February 1963 observation at Lake Sheridan in the Black Hills.

The finch was seen at the Luce residence almost daily through December 14. Other observers during that time included Mrs. Lynch, Theresa Hoksch, and my sister. Many of our club members tried to take advantage of the rare opportunity, but I do not know how many succeeded.

No one could find the finch when we had our Christmas Count on December 15. However, it appeared the next day at a feeder at the Virgil Thompson home. The location is three blocks west and one block north of the Luce residence. The bird continued to feed there nearly every day until the last of March, 1973, giving Mr. Thompson the opportunity to photograph it at the feeder. We believe it was the same bird that had been at the Luce place earlier.

The finch came to the feeders at my place four blocks north of the Thompsons' on January 8-10 and February 1, 1973, but its visits were brief.—**Margery R. Arbogast, Aberdeen**

(EDITOR'S NOTE: The photo taken by Mr. Thompson confirms the identification of the Gray-crowned Rosy Finch, Hepburn's form. Our thanks go to Mrs. Arbogast for obtaining copies of the picture and donating them to SDOU.)

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PINE GROSBEAK AT BURKE LAKE—A single female Pine Grosbeak was seen at Burke Lake, Gregory County, on January 4, 1974. When I discovered the bird it was feeding on the fruit of one of the many apple trees at the lake site.

The bird was quite tame, and I was able to watch it for five or six minutes with an 8x binocular at a distance of 30 to 40 feet. I noticed the gray color, long tail, stout dark beak and the white wingbars. The olive color on the top of the head and on the rump were also noted.

I had several other sightings during January of single individuals of the same description. They may have been the same bird each time.—**Galen L. Steffen, Burke**

VARIED THRUSH AT HOT SPRINGS—While studying birds in the Hot Springs, Fall River County, South Dakota area on December 15, 1973, my wife, Dorothy, and I were able to study an adult male Varied Thrush (**Ixoreus naevius**) at close range. The bird was associated with a large flock of American Robins that were feeding on juniper berries and crab apples along the edge of Fall River near the Chapel-of-the-Hills and adjacent to the main street of Hot Springs.

We found the bird around 11:00 a.m. and were able to study it for as long as we remained there, which was about 20 minutes. The sky was overcast and light fog prevailed. The bird was observed as it fed on the ground and perched on a bare branch on a tree at a distance of about 50 feet. Optical equipment used included 7x50 binoculars, 7x35 binoculars, and a 20x Bausch and Lomb Balscope, Sr., all of which were in excellent working condition.

Our attention was first attracted to this bird because of its brightly colored underparts, the throat and breast coloration more approaching the orange of a Northern Oriole than the rusty red of many nearby robins. With the Balscope I clearly saw a well-defined orange line that extended backward from the eye, two well-defined orangish wingbars, and some inconspicuous bright markings toward the distal end of the otherwise grayish wing. The breast was crossed by a distinct blackish bar. The abdomen and undertail coverts were whitish, the sides of which appeared scaly from the orange of the breast extending posteriorly. The upperparts were generally grayish-black, the darkest part of the bird being the head. There was a light broken eye ring.

The bird appeared to be about the same size as a robin and very similar in habits and actions, i.e., hopping on the ground while feeding like a robin. The silhouettes of the two species were similar save for the head and bill area. The Varied Thrush possessed much more abrupt forehead than nearby robins. The bill of the thrush appeared to be slightly thinner and somewhat more pointed than that of a robin.—**Richard C. Rosche, P.O. Box 482, Crawford, Nebraska 69339**

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COMMON SNIPE WINTERING NEAR BURKE—On January 4, 1974, while returning from an afternoon of birding at Burke Lake, I was surprised to see a bird resembling a Common Snipe fly across the road in front of my car. The location was near a place where several warm water springs remain ice-free and flowing. I stopped the car and walked back along the road, hoping to get another look at the bird, Luckily, I found the bird sitting on a small patch of ice near the open water. An excellent view was obtained with an 8x binocular at a distance of 75 feet. The long bill and the streaked back and head were noted, and when the bird flushed, I could see the white on the belly. Those markings and the actions of the bird convinced me that I was observing a Common Snipe.

The sighting occurred during a period of extreme cold when the temperatures were falling well below zero at night. Not wishing to disturb the Snipe, and perhaps drive it from the area, I made no attempt to locate the bird again until the weather moderated. I made several visits to the site during the last two weeks of January, but could not locate the bird, and thought it probably had failed to survive the cold weather.

There was light snow and a temperature of 15 degrees on February 7 when I searched the place again. The reward was to find not one but two Common Snipe. The birds were flushed about 30 feet apart, along the small creek flowing away from the springs. When the Snipe took flight they uttered the characteristic harsh alarm notes, and I noted the quick zigzag. The orange tails and long bills were clearly visible as the birds were about 20 feet from me when

they took to the air. Both birds appeared healthy, and they apparently were finding enough food in the springs habitat.

A close watch of the area will be carried on this spring and summer with the hope of observing some nesting activity.—**Galen L. Steffen, Burke**

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HOUSE FINCH AT RAPID CITY—On 26 December, 1971, at about noon, during the Rapid City Christmas Bird Census, Gertrude Bachmann, Rollie Larson, and I checked a feeder on First Avenue between Jackson Boulevard and Cottonwood Street. At this feeder were one male and five female Purple Finches (**Carpodacus purpureus**). As I watched through a 20x scope at about 25 feet, an additional finch commanded my attention. It was concealed in the feeder so that only the head and throat were visible. My spontaneous remark was to the effect that if I were back in Idaho, I would say I was seeing a House Finch. Then the bird flew to a tree and perched conspicuously so that we could see the brown back; the paler orange-red head, throat, breast, and rump; and the pale brown streaking on the sides and belly. Clearly, the bird was an adult male House Finch (**Carpodacus mexicanus**).

For several weeks thereafter, the bird remained in the area and visited feeders near Rapid Creek in western Rapid City. Thus, a number of Rapid Citians observed this accidental visitor. The owner of the feeder on First Avenue confirmed having first seen this different finch on 25 December 1971. On 29 December, it began visiting Gertrude Bachmann's feeder on Cottonwood Street, but it was an even more frequent visitor at the feeder of Mr. and Mrs. Joe Gullion on nearby Harmony Lane. On 30 December 1971, Keith Evans photographed the House Finch at Miss Bachmann's residence, and in January, 1972, Mr. Gullion photographed the finch at his feeder. In each instance the colored slides substantiate the identification of the House Finch.

This House Finch at Rapid City apparently represents the first recorded occurrence for the Black Hills area and only the second record for South Dakota. On 30 December 1966, during a Christmas census, Bruce Harris collected the first specimen, a female, at Mitchell, South Dakota (**Bird Notes**, 19:35; 19:63; and **The Condor**, 72:243-244).

Relative to the Rapid City observation, a further curiosity pertains to the appearance of this distinctly western species in association with the eastern Purple Finch—a species that occurs in the Black Hills less commonly than does the western Cassin's Finch.—**L. M. Baylor, SDSM&T, Rapid City**

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NEW BIRD SPECIES DISCOVERED IN HAWAII—A previously unknown species of Honeycreeper has been discovered in a remote Hawaiian rain forest by a group of students studying the ecology of the area.

The new species, as yet unnamed, is a member of the Hawaiian Honeycreeper family, and, according to the National Science Foundation which announced the discovery, is the first new genus and species of bird reported in 10 years.

The bird was first seen on the forested slopes of the Haleakala volcano on the island of Maui, and, according to John Kjargaard, director of the student project which discovered the bird, ornithologists were at first somewhat skeptical. "It seemed incredible that in 1973 a totally unknown species of bird existed," he said.

But exist it does, and, according to the noted field ornithologist Allan Cruickshank, its discovery ranks as a real event for birders. "Most birders assume that everything has already been discovered," he said. "This proves that's just not so."

There's hope for that life list yet.—**New Hampshire Audubon News**

A PARTIALLY WHITE AMERICAN ROBIN AT STURGIS—During late May and June, 1966, a pair of American Robins (**Turdus migratorius**) nested on a downspout that slanted under the eave of my house at Sturgis, South Dakota. The curious factor in this otherwise common occurrence was that the female Robin (the adult that incubated the eggs and hatched four young birds) was partially white. Its throat, neck, breast, belly, and tail were white, while the wings and head were the more typical gray of an ordinary Robin. (Editor's Note: Mr. Stell sent a small colored picture that verifies his description of this Robin.)

Dilwyn J. Rogers, in describing a white-tailed Robin near Nahant (**Bird Notes**, XIX:60-61), suggests that such a color abberation is not true albinism and that the term "partial albino" is not applicable. Rather, Rogers believes that the white variation "could be due to a localized absence or inactivity of pigment cells in the follicles" of the affected feathers.

Whatever the reason for the partially white Robin that nested at Sturgis, its strikingly different marking commanded our interest. We watched it daily and guarded the nest and birds to the best of our ability. Despite our efforts, cats got two of the fledglings, but the other two apparently escaped this predatory threat.—**Kermit Stell, Sturgis, S. Dak.**

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PINE SISKINS AND RED CROSSBILLS AT STURGIS—My position as curator of the Fort Meade Military Museum for the past five years has given me the opportunity to enjoy the numerous spruce trees that I helped to plant in 1934 when I was a cavalryman, and to observe the birds that are attracted to the tree and cones. The spruce normally bear some cones every year, but their production in 1973 was heavier than usual; a forester told me that they yield a bumper crop every seventh year.

Last summer, unusual numbers of Pine Siskins and Red Crossbills visited our trees daily from July 15 to late August. It was not difficult at any one time to count 50 to 200 birds, and the numbers appeared to be divided equally between the two species. I have seen the crossbills at the fort every year for the past 20 years, but only when there is a bounteous crop of cones do they show by the hundreds as we saw them in 1973. My 1966 notes about the crossbills contain the comment "Hundreds of them."

The siskins would almost touch my feet as I sat on the museum steps to watch them. They were so dainty and small, perhaps four or five inches, and seemed most trusting in their feeding and visiting habits. They fed on the ground among the grass and weeds and searched for the conifer seeds that were dropped by the crossbills.

For no reason that I could detect, all the siskins would leave the ground at the same time, fly to the nearest tree, socialize and sing, then return to the ground to resume feeding. Though their singing was almost constant, it was barely audible unless one was near the birds. They sometimes sounded like a swarm of bees.

The Red Crossbills did not distribute their numbers among several trees. Rather, as a reaper goes from field to field, most of the birds would work on one spruce or pine and then move on to another tree. Occasionally I would see a cone fall with a crossbill attached to it. The bird would abandon the cone just in time to miss hitting the ground.

Crossbills are remarkably active when they are feeding. While hanging onto the cones, they are busy with their crossed mandibles, their feet are in motion and their wings are fluttering. Their songs accompany all of their commotion.

The brick-red color of the plumage of some of the male crossbills was more intense than the orange-red of the younger males. The females were not so colorful, but they showed up well with their streaked olive-gray heads and backs and their yellow underparts. Many

of the birds were immatures with streaked markings on their buff colored backs and light gray underparts. Their appearance was similar to that of the Pine Siskins, and it was sometimes necessary to look for the crossed mandibles when the birds were not near the smaller and slimmer siskins.—**Arthur W. Piehl, Box 461, Sturgis**

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GRAY-HEADED JUNCO AGAIN AT RAPID CITY—On 12 May 1973, at 7:45 a.m., a Gray-headed Junco (**Junco caniceps**) appeared at my residence in western Rapid City and fed at a feeder supplied with finely ground corn. The species returned on three subsequent occasions throughout that day, once in the morning and twice in the afternoon, and only on 12 May did I see this accidental vagrant during the 1973 migration. The Gray-headed Junco, however, has been reported at Rapid City on three previous occasions. Whitney recorded the only winter observation in December 1953; Behrens observed the species in April 1959, and I reported it within 50 yards of my home on 8 April 1966 (**Bird Notes**, 18:53 and 62).

A curiosity related to the May 1973 observation of the Gray-headed Junco at Rapid City is that the species also appeared at the Lacreek National Wildlife Refuge in the same month. During the Spring SDOU Meeting, Conrad Fjetland and other participants observed a Gray-headed Junco on 26 May 1973 (**Bird Notes**, 25:28-29, June 1973; and 25:60-61, Dec. 1973).

Relative to the comments on the current species name for the Gray-headed Junco (**Bird Notes**, 25:61), the following clarification seems appropriate. In creating the new species designation for the Dark-eyed Junco (**Junco hyemalis**), the A.O.U. Committee on Classification and Nomenclature included only the Slate-colored, White-winged, Oregon, and Guadalupe (**hyemalis, aikeni, oreganus**, and **insularis**) forms. Parenthetically, the Committee remarks: "**J. caniceps**, currently under study, is maintained as a separate species." (**The Auk**, 90:418, April 1973) Thus, for the present we may refer to the Gray-headed Junco as a separate species.—**L. M. Baylor, SD-SM&T, Rapid City**

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SNOW BUNTINGS IN HYDE AND HAND COUNTIES—Driving from Highmore to Miller on New Year's Day, 1974, I saw at least three flocks of Snow Buntings in alternation with several large flocks of Horned Larks. Unfortunately I did not have the leisure to attempt an accurate count but I know I saw more Snow Buntings than I had ever seen before. I recall seeing comparable numbers of Horned Larks in past winters.

Incidentally, I was called upon to identify a small flock of Snow Buntings here in Connecticut. It was the first time I had observed them in New England, although I have heard from time to time that others have seen them.—**Robert Hawkins, Lakeville, Conn. 06039**

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OLDSQUAWS AND SNOWY OWL AT LAKE POINSETT—On the afternoon of 24 November 1973, while we were hunting ducks on the west side of Lake Poinsett, Hamlin County, we observed two Oldsquaws (**Clangula hyemalis**). Both birds were examined through 8x binoculars at ranges of 80-150 yards and they proved to be males in full winter plumage. The birds first alighted on the edge of a large spread of decoys, but seemed exceedingly nervous and remained well out of gunshot range for a period of 15-20 minutes before finally swimming out of sight toward the center of the lake. Once while in flight before dropping into the decoys, and twice while on the water, one or both of the individuals uttered the unmistakable call of the species.

On 30 November 1973, a South Dakota State University student, Michael

Larscheid, brought a pair of ducks to the Department of Wildlife and Fisheries Sciences. They had been shot earlier that day at Lake Poinsett, and he was unable to identify them. It was established that the birds were Oldsquaws, an immature male and an immature female. A photograph of Mr. Larscheid with the two birds was published by the Brookings Daily Register on 5 December 1973.

In Roberts' "Birds of Minnesota" (1932:272), the Oldsquaw is listed as a common winter visitant on Lake Superior and as a rare straggler elsewhere throughout the state as far south as the Iowa line. For South Dakota, Over and Thoms (**Birds of South Dakota**, 1946:81) report two specimens of the Oldsquaw, both in the W. H. Over Museum, University of South Dakota, Vermillion. Bruce Harris (personal communication) reports that, in recent years, Oldsquaws have been collected or sighted in the state as regularly as one year out of three.

Also on 24 November, at the same location described above, we were visited by a Snowy Owl (Nyctea scandiaca) which perched about 30 feet overhead in a small cottonwood tree. The time was approximately 30 minutes before sunset. The bird may have been attracted to our decoys since it remained on its perch at least 10 minutes before flying out over the lake.

The owl was a particularly dark individual, probably representing an immature bird in its first winter plumage. The record was especially interesting for us since it is the earliest that we have personally encountered Snowy Owls at comparable latitudes during the fall and winter season.—**John M. and Robert J. Gates, Brookings**

EDITOR'S NOTE—Word has come to us about the death of John M. Gates in February. We expect to have more information about Mr. Gates in a later issue of "Bird Notes."

CORRECTION

The Gray-headed Junco (25:61) should not have been listed among the races of the Dark-eyed Junco. It is a separate species.

COLOR-MARKED COWBIRDS—Over 2,800 Cowbirds were banded and color-marked in west-central Kansas during 1973 as an aid in studying their movements and an attempt to determine their place of origin. Birds were marked with dark blue or yellow plastic leg streamers. Banding and color-marking will be continued in 1974 with red, yellow, or dark green leg streamers. Observers should report location and date of sighting, sex of bird, and color of leg streamer.—**Richard A. Hill, Department of Biology, Fort Hays Kansas State College, Hays, Kansas 67601**

REQUEST FOR SNOW BUNTING RECORDS—The reports we received for Snow Buntings, winter of 1973-74, contained numbers that led us to infer that a major irruption of the birds might have occurred in South Dakota. Some deductions can be made if we have evidence from additional sources. Readers may help by sending dates, numbers and locations of any Snow Buntings they saw. Please send data to: SOUTH DAKOTA BIRD NOTES, Editor, June Harter, Highmore, S. Dak. 57345.

Review of Wood Thrush

(Continued from Page 14)

County (Harris). **Bird Notes** contains items about Wood Thrushes that were viewed by Mrs. Dahling at Webster and Lake Kampeska (10:15), by Herman Chilson at Pickerel Lake (20:40), and by Mrs. Wheeler at Sioux Falls (11:33). The dates cover a period from 1932 to 1959. A more recent date was August 1973, when Carol Peterson saw a Wood Thrush at her home in Brookings.—**Highmore**

Book Review

J. W. Johnson

INFECTIOUS AND Parasitic Diseases of Wild Birds, edited by John W. Davis, Roy C. Anderson, Lars Karstad, and Daniel C. Trainer. Iowa State University Press, 1971. ix + 344 pages, including Index. Well illustrated with numerous photographs, photomicrographs, and drawings.

Being quite unqualified to review this book, I tried to find someone both willing and able to undertake the chore. That did not work out and I must describe it as best I can.

The book is well made, printed on coated paper, designed to withstand hard usage. In the Preface it is described as an "... experimental effort at summarizing and correlating available knowledge."

Twenty-eight authors are listed, eleven of them with Ph.D.'s, one M.D., six D.V.M.'s, two Sc.D.'s, the rest having M.S., M.A., or B.S. degrees. Among their institutions are: University of Texas, University of Wisconsin, Virginia Polytechnic, University of Michigan, Utah State University, University of Guelph, Cornell University, University of Maine, Michigan State University, National Institute of Allergy and Infectious Diseases, Los Angeles Zoo, Patuxent Wildlife Research Center, California Department of Fish and Game, National Communicable Disease Center, American Cyanamid Co., and National Animal Disease Laboratory.

This is both a text and reference book. It is neither a crash course in veterinary medicine nor a convenient how-to book for treating the occasional ailing bird one encounters. It is divided into five parts in the subject matter covered.

1. Viral Diseases (6 chapters).
2. Bacterial, Ricksettsial, and Mycotic Diseases (12 chapters).
3. Parasitic Infections (8 chapters).
4. Neoplastic Diseases (1 chapter).
5. Toxins (1 chapter).

Each chapter is followed by an extensive list of references for further reading.

The Index is designed for quick reference, by disease name, synonyms, and species affected. Under each disease entry the number of items indexed is a measure of available information: diagnosis, distribution, etiology, history, immunity, pathogenesis, pathology, species reported, synonyms for the disease name, transmission, treatment, and control. Corresponding subheads in boldface through each chapter aid reference. There are entries by species for specific diseases, insects, and other vectors.

Much of the information on parasites affecting wild birds comes from work on domestic species also affected, making detailed studies practical and providing funds for research. Life histories of the causative organisms and their descriptions are given such detail as has been developed.—**Huron**

Spring Meeting at Vermillion

University of South Dakota

Friday-Monday, May 24-27, 1974

FRIDAY, MAY24

Registration—7:00-10:00 p.m. Center for Continuing Education.

Open House—7:00-10:00 p.m.—A social evening for members and guests at the home of Dr. and Mrs. Byron Harrell, 1215 Valley View Circle.

SATURDAY, MAY25

Registration—All day at Center for Continuing Education.

Field Trips—Morning and afternoon. One will be at the sand dunes along the last wild stretch of the Missouri River. Maps of several sites will be available.

Banquet—7:00 p.m. at The Prairie, two blocks from the registration headquarters. The program will feature a speaker, and special recognition of charter members.

SUNDAY, MAY26

Morning Field Trips.

12:00 Noon—Lunch at The Prairie, followed by call-off of species.

MONDAY, MAY 27

Field Trips for those who plan to stay over.

—CAMPING ACCOMMODATIONS—

The City of Vermillion provides an attractive facility for free overnight parking on West Highway 50. A stay of two or three nights might be permitted. If the campground becomes crowded, other space can be found.

—MOTELS—

Green Acres Motel, East Highway 50—One person, $8.00; two persons, one bed, $10.00; two persons, two beds, $13.00; four persons, two beds, $15.00. Possibly a few trailer houses for rent.

Coyote Motel, West Highway 50—One person, $9.00; two persons, one bed, $12.50; two persons, two beds, $15.00; three persons, two beds, $16.00; four persons, two beds, $17.00.

Lamplighter Motel, West Highway 50—One person, $10.00; two persons, one bed, $15.00; two persons, two beds, $17.00; three persons, two beds, $19.00; four persons, two beds, $20.00. Indoor heated pool.

Tomahawk Motel, West Highway 50—One person, $10.50; two persons, one bed, $14.50; two persons, two beds, $16.50; three persons, two beds, $18.50; four persons, two beds, $21.50.

Other motels are located at Beresford and Yankton.

—RESTAURANTS—

Along Highway 50—The Prairie, The Cavalier Cafe, The Karousel Kitchen and George's Townhouse.

Downtown Vermillion—The Charcoal Lounge, The Chimes Cafe and Leo's Lounge.