

Method of Head Scratching in the Wrentit and Other Species.—The Wrentit (*Chamaea fasciata*) has been classified variously by ornithologists and has sometimes been regarded as constituting the only family of birds unique to North America. The species has been placed in such different groups as the "Toxostominae," Troglodytidae, Paridae, and "Timeliidae" by various older authors; it has been treated as a monotypic family standing next to the "Mniotiltidae" or Sylviidae by others (Lucas, Proc. U. S. Nat. Mus., 13, 1890:343). More recent treatments have retained it as a monotypic family or have combined it with the Paradoxornithidae or Timaliidae.

Simmons (Ibis, 99, 1957:178–181) has reviewed the taxonomic importance of head scratching in passerine birds. From observations on 79 species of 25 passerine families, he concluded that only the Timaliidae (11 species observed) scratch their heads "directly" (with the leg under the wing rather than over it). In view of the suggested relationship of the Wrentit with the Timaliidae, it seemed desirable to ascertain the method of head scratching which it uses. Field observation during a summer in the habitat of the Wrentit failed to provide the information because of the reluctance of the species to perch in the open. However, in January, 1958, I had the good fortune to obtain a live Wrentit, for which I wish to thank John Ralph. This bird has been observed to scratch directly 20 times; these observations were made mostly by myself but also by W. J. Hamilton, III, and W. Z. Lidicker. At no time was the bird seen to scratch indirectly. These observations tend to support the claim of some earlier authors that *Chamaea* has close affinities with the Timaliidae.

The reliability of this behavioral character for classification depends upon its consistency in phylogenetically natural groups and upon the number of species for which the method of head scratching has been ascertained. The consistency in natural groups appears to be high, although the Ovenbird (*Seiurus aurocapillus*), because of its direct method of scratching (Nice, Trans. Linn. Soc. N. Y., 6, 1943:45; Ficken and Ficken, Ibis, 100, 1958:277–278), constitutes an exception among passerines not closely related to the Timaliidae. The Northern Waterthrush (*S. noveboracensis*), the Louisiana Waterthrush (*S. motacilla*), the Blue Jay (*Cyanocitta cristata*), and "several European passerines" have been reported to scratch the head directly as nestlings sometimes but not as adults (Ficken and Ficken, *op. cit.*). I detected no such irregularities in nine closely watched, hand-raised Steller's and Scrub jays (*Cyanocitta stelleri* and *Aphelocoma coerulescens*). In addition to the species of passerines reported on by Simmons, Miller (Univ. Calif. Publ. Zool., 38, 1931:220) mentioned one, Nice (*op. cit.*) mentioned three, Haverschmidt (Ibis, 99, 1957:688) added three, Meyerriecks (Bull. Mass. Aud. Soc., 42, 1958:129) added one, Ficken and Ficken (*op. cit.*) added 36, Andrew (Brit. Jour. Anim. Behav., 4, 1956:85) added four, and Hailman (Bird-Banding, 29, 1958:242) added one. In this paper 18 species are added to make a total of 147 species in 29 families of passerines for which the method of head scratching is known to me. There may be records for additional species in the writings of the Heinroths.

I have observed the following species scratching indirectly, with the leg over the wing (number of critical observations in parentheses): *Empidonax difficilis* (*vide* John Davis), *Cyanocitta stelleri* (many), *Aphelocoma coerulescens* (hundreds), *A. ultramarina* (many), *Pica nuttalli* (1), *Corvus brachyrhynchos* (2), *Psaltriparus minimus* (9), *Thryomanes bewickii* (4), *Dendroica townsendi* (1), *Wilsonia pusilla* (2), *Euphagus cyanocephalus* (1), *Carpodacus cassinii*, male (2), *Pheucticus melanocephalus* (1), *Spinus psaltria*, 13- and 15-day old nestlings (many), adult (1), *S. lawrencei* (1), *Geospiza*, sp. (several), *Pipilo fuscus* (3), *Spizella breweri* (1), and *Zonotrichia atricapilla* (1).—JERRAM L. BROWN, *Museum of Vertebrate Zoology, University of California, Berkeley, California, March 22, 1958.*

New Bird Records from Southeastern Oregon.—The birds listed here have been observed in the course of field work, conducted since the fall of 1955, on and near the Malheur National Wildlife Refuge, Harney County, Oregon. Except for the goose observations, all of the records have been made on the Malheur Refuge, the northern end of which lies about 25 miles south of the town of Burns. The refuge, which is about 4100 feet in elevation, extends south for 40 miles to the vicinity of the town of Frenchglen.

Except where otherwise noted, these records supplement Gabrielson and Jewett's Birds of Oregon (1940).

Podiceps auritus. Horned Grebe. On June 24, 1958, Willis Keithley, Dale Hein, and the writer

observed three of this species along Rockford Lane in the Blitzen Valley. Later the same day Keithley found the nest and eggs of this species in the same area. Keithley, Richard Pfeifer, and the writer obtained excellent photographs of the female on the nest. Some of these pictures are in the refuge files. No attempt was made to collect specimens, as it is hoped that this bird may become a permanent breeding species on the Malheur Refuge. As far as can be determined, these are the first summer and breeding records for this species in Oregon.

Leucophoyx thula. Snowy Egret. Gabrielson and Jewett state that this species formerly bred in Oregon on the Lower Sylvies River near Malheur Lake. Snowy Egrets have been nesting in recent years on Malheur Lake. In 1957 it was estimated that there were 100 nests in a single colony on the lake. Similar numbers have been recorded for the past 10 years.

Chen caerulescens. Blue Goose. On March 22, 1956, Dr. Charles G. Hansen and the writer spotted an adult Blue Goose in a flock made up of about 5000 Snow Geese (*Chen hyperborea*) and 200 Ross' Geese (*Chen rossii*) resting on a flooded meadow about one mile east of Hines, a town which adjoins Burns. The Blue Goose was observed for a considerable length of time through a 16 power telescope at a distance estimated at 400 feet. Its pinkish legs, brownish gray body, and contrasting white head and neck showed up distinctly. Harney County serves as a major stopping-off place for Snow and Ross' geese returning from their California wintering grounds to Arctic nesting areas. There are several published records of the Blue Goose in California (Grinnell and Miller, Pac. Coast Avif. No. 27, 1944) and additional unpublished instances of its occurrence which came to the writer's attention during two years spent on waterfowl refuges in California. The Blue Geese usually accompany the similar appearing Snow Geese and breed in some of the same areas. It is thus not surprising that this species should be recorded in Oregon.

Chen rossii. Ross' Goose. Gabrielson and Jewett list this bird as a rare straggler in Oregon and for Harney County they list a specimen taken by Bendire. As elsewhere in the Pacific Flyway, the Ross' Goose is more abundant than was previously supposed. On the basis of observations made during the springs of 1956 and 1957, the area in the vicinity of Burns is a concentration point for this species on its spring migration. In addition to the observation listed under the Blue Goose, flocks of Ross' Geese numbering from 50 to 200 were seen on March 20 and March 28, 1956, in this area. Only a very small segment of the total population of white geese in the area was checked. In this same period various sightings were made of some of the 53 Ross' Geese which had been dyed yellow the previous fall in the Klamath Basin to trace migration routes. Ross' Goose flocks were also seen in the spring of 1957. One or more Ross' Geese are confiscated almost every fall from hunters on the Malheur Refuge public hunting area.

Spatula clypeata. Shoveler. Gabrielson and Jewett list this species as a summer resident in eastern Oregon. It was seen a number of times in the winter of 1957-58. As late as December 18, it was estimated that there were from 10,000 to 25,000 present on Harney Lake. In addition six were observed at the Double-O Unit on January 10 and one individual was noted at Boca Lake on January 17.

Bucephala albeola. Bufflehead. Four to five individuals were seen on May 28, and July 31, 1957, on Boca Lake. It is noted that Evenden (Condor, 49, 1947:169) found this species with young in Linn County. These are the only summer records of the Bufflehead in Oregon that have come to my attention.

Clangula hyemalis. Oldsquaw. An immature male of this species was collected at refuge headquarters on November 17, 1956, and subsequently deposited in the United States Fish and Wildlife Service collection at the National Museum. The bird was seen several days prior to the collecting date. An immature specimen collected on Malheur Lake about November 9, 1958, was received through Lloyd Smith of the Oregon State Game Commission. A third specimen was found dead near refuge headquarters on December 8, 1958. A sight record for the Oldsquaw was made on the Malheur Refuge on January 28, 1954, by Dr. Ray C. Erickson. Although the literature contains inland records of this species in surrounding areas, I have been unable to locate any published occurrences of this bird in eastern Oregon.

Squatarola squatarola. Black-bellied Plover. Fifteen were seen on October 2, 1957, on the east side of Malheur Lake and six were seen on October 18, 1957, at the Double-O Unit. On September 21, 1957, on the east side of Malheur Lake one was picked up sick, presumably with botulism. This bird later died. On May 14, 1958, four were seen on Harvey Lake. This species has been on the refuge

bird-list for some time, but it is noted Gabrielson and Jewett do not list any eastern Oregon records for it nor can I find any records for this part of Oregon in other ornithological literature.

Limosa fedoa. Marbled Godwit. Although Gabrielson and Jewett indicate this bird as a "very rare transient" in Oregon, the occurrences below tend to indicate otherwise. On September 23, 1957, a sick individual was picked up on the east side of Malheur Lake, held for several days, and then released at the same location after recovery. Since I had observed godwits many times in the course of several years spent on the Stillwater Marsh in western Nevada, several hundred miles to the south, little thought was given to the matter of this species being considered a rarity in Oregon until the literature was checked. Recent sight records for this bird include one at the Double-O Unit on June 7 and September 13, 1956; 10 on August 7, 1957; 50 on August 31, 1957, on the east side of Malheur Lake and about 10 at the same location on October 2, 1957. United States Fish and Wildlife Service records list August and September occurrences of this species at Malheur since 1935. Two were banded in August of 1941.

Iridoprocne bicolor. Tree Swallow. On January 9, 1958, while at the Sod House Spring at refuge headquarters, I caught a glimpse of what appeared to be a swallow darting behind an obstruction. Thinking the bird must surely have been something else, the matter was disregarded. The following morning a Tree Swallow was collected at this spring, which forms a pond nearly an acre in extent that remains free of ice the year round. The bird proved to be a male in very poor condition. It was put up as a study skin which has been sent to the United States Fish and Wildlife Service collection at the National Museum. It scarcely seems possible that this bird could have subsisted in this area through the winter. One would surmise that it moved in. Many days the temperature did not go above freezing and insect activity was certainly negligible. The minimum temperature the day this bird was first seen was 9°F., and the maximum 45°F. Even for western Oregon, which has a mild climate compared to eastern Oregon, I have found no published records for this species in January. Gabrielson and Jewett list their earliest arrival date for Oregon as February 22 and latest date for departure as September 24. The Tree Swallow normally arrives at the Malheur Refuge in late March.

Sitta pygmaea. Pigmy Nuthatch. One of this species was found dead at refuge headquarters by Dr. Charles G. Hansen on September 5, 1955, and was mounted for use in the refuge museum. So far as I can determine, this species has not been previously listed for Harney County, although it has previously been listed for timbered areas located in surrounding counties.

Toxostoma rufum. Brown Thrasher. An individual of this species was taken at refuge headquarters on March 7, 1954, by Mr. J. C. Scharff in a quail trap used for transplanting purposes. This specimen is presently located in the refuge museum. A sight record for the Brown Thrasher at Upper Klamath Lake was made by Aaron C. Bagg on August 20, 1940 (Auk, 58, 1941:99-100). No other records of the Brown Thrasher for the state have come to our attention.

Phainopepla nitens. Phainopepla. On May 17, 1957, Dr. J. Milford Anholm, a Corvallis dentist, informed me that he and his wife saw a male Phainopepla at the Witzel Patrol Station located about 10 miles north of Frenchglen. Dr. Anholm suggested the bird might remain and on the following morning he and the writer sighted the bird nervously moving through the trees at the aforementioned sight. Upon collection, the bird proved to be in excellent plumage and had been eating the berries of Russian olive (*Elaeagnus angustifolia*). The skin has been sent to the United States Fish and Wildlife Service collection at the National Museum. As far as I can determine, this species has not been recorded previously in Oregon.

Dendroica caerulescens. Black-throated Blue Warbler. On October 9, 1957, a male of this species in breeding plumage was collected at refuge headquarters. The bird was with a flock of Audubon's Warblers (*Dendroica auduboni*) which was working the trees and shrubs about the refuge buildings. The specimen was sent to the National Museum. The only other west coast records of this species appear to be three occurrences in California (Abbot, Condor, 51, 1949:98-99; Kensey, Condor, 56, 1954:311; and Grinnell and Miller, Pac. Coast Avif., No. 27, 1944:401).

Zonotrichia querula and *Zonotrichia albicollis*. Harris' Sparrow and White-throated Sparrow. Single individuals of these two species appeared on October 30 and 31, 1955, before the photographic blind of Mr. John Cowles, who had baited an area to attract White-crowned Sparrows (*Zonotrichia leucophrys*) for photographic purposes at refuge headquarters. Excellent photographs were obtained of both of these unusual birds, copies of which are in both the refuge's and writer's slide files. The

Harris' Sparrow apparently has not been previously recorded in eastern Oregon and the White-throated Sparrow is, according to Gabrielson and Jewett, considered a rare straggler in Oregon for which there are no previous records for Harney County.—DAVID B. MARSHALL, *United States Fish and Wildlife Service, Burns, Oregon, December 10, 1958.*

Unusual Nesting Observations in Colorado.—Some unusual nestings observed in the San Luis Valley of south-central Colorado seem worthy of note.

On May 5, 1954, slightly southwest of the village of Mosca, Alamosa County, Colorado, a nest of a Swainson's Hawk (*Buteo swainsoni*) was observed about 12 feet up in a lone cottonwood tree (*Populus* sp.). The tree containing the nest stood exposed in the middle of an open field of sagebrush. One of the hawks flushed upon our approach and in doing so one egg fell from the nest. The egg was fresh and it was found that the nest contained one other egg. While I was preparing to climb to the nest for closer observation, a Black-billed Magpie (*Pica pica*) flew from the bottom of the debris assumed to be the hawk's nest. Investigation revealed that the magpie was incubating six eggs and that the hawk had deposited its eggs in a slight depression, lined with grass, on top of the domed roof of the magpie nest. This was the first and only time that such an association was observed between these two species.

On the same date, May 5, 1954, a few miles north of the location just described, another Swainson's Hawk nest was examined in a grove of cottonwoods at the edge of an irrigated hay field. The nest contained two eggs in a crotch about 20 feet from the ground. The nest was large and bulky and three pairs of House Sparrows (*Passer domesticus*) had built nests in the lower part of the hawk nest. Two sparrow nests contained full clutches of five and six eggs, respectively, and the third had two eggs. An harmonious relationship seemed to exist between the hawks and the House Sparrows which seemed rather surprising in view of the normal pugnacity of the latter.

This same nest was used by a pair of Swainson's Hawks in May, 1957; no House Sparrow nests were noted at that time. Also a nest of Long-eared Owls (*Asio otus*) was found in an adjacent tree less than 40 feet away. These unusual nestings, in such close proximity to one another, may have resulted from lack of suitable nesting sites for the birds since the San Luis Valley is devoid of wooded areas other than some trees around ranch houses and in river bottom groves. These areas are not chosen by Swainson's Hawks if a more exposed location is available. Similar nestings in adjoining trees have been observed in the Red-tailed Hawk (*Buteo jamaicensis*) and the Great Horned Owl (*Bubo virginianus*). In neither instance was any territoriality displayed. At the site of the Swainson's Hawk and Long-eared Owl nests, no apparent antagonism was evident in birds of either species since the owls often roosted in the tree containing the brooding hawk and the hawks in turn regularly perched on a main fork of the tree some 10 feet above the owl nest when approaching their own nest site.

On May 13, 1954, at Adam's Lake, Alamosa County, Colorado, a female Marsh Hawk (*Circus cyaneus*) was flushed from a nest of six eggs located among heavy tule at the lake edge. Upon approaching the hawk nest, a female Mallard (*Anas platyrhynchos*) flushed from a nest containing seven eggs located only 12 feet from the hawk nest. At first appearance it seemed as if both birds had flown from the same nest. Both the hawk and the Mallard circled overhead while the nests were examined. Marsh Hawks and Mallards are both common breeders at the lake but no nests so close together have been observed before.

On April 25, 1954, near the village of San Acacio, Costilla County, Colorado, a Great Horned Owl was flushed from a rocky prominence. A nest containing four eggs was found in a small eroded pocket of the gently sloping rock less than six feet from the ground. Thirteen nests of this same species observed that season in the same general area were all located in cottonwood trees (one exception was a nest placed on the ceiling rafters of a barn) and none was so close to the ground or on rocky cliffs. The number of eggs exceeded the usual clutch size which is normally two and more rarely three. The eggs were removed and all were found to contain large embryos which had died sometime during the second and third week of development. The shells were very glossy and polished from long incubation and were less granular than normal shells of this bird. Most owls of this species begin laying about the third week in February in south-central Colorado. Thus the eggs taken may have been incubated for over two months. Strong parental attachment is indicated since the normal term of incubation is 28 days. Two of the eggs each had small holes in them. The cause of these holes could not be determined.