

## FROM FIELD AND STUDY



Clark Nutcracker (*Nucifraga columbiana*) incubating at a nest in a mountain mahogany bush on Reserve Peak, 8500 feet, Mono County, California, March 26, 1956. Photograph by Ray Quigley and James B. Dixon.

**Additional Unrecorded Specimens of *Neochloe brevipennis* from Oaxaca, México.**—When Miller and Ray (Condor, 46, 1944:41–51) described *Neochloe brevipennis browni* from Guerrero, they summarized the available information for this species of vireo. At that time six specimens of the nominate form had been recorded. Stresemann (Condor, 49, 1947:210) reported a seventh from Orizaba, and Loetscher (Condor, 54, 1952:204) an eighth from Jalapa, Veracruz. Briggs (Condor, 55, 1953:156–157) extended the range of the nominate form by reporting eleven specimens from Amatepec, Oaxaca. As no additional information has been available for the species, we therefore feel justified in reporting an additional ten specimens from three localities in Oaxaca. Nine of our specimens from two localities, Moctum [= Sta. María] (November 29–December 29, 1941) and Totontepec (April 4–29, 1942), come from areas adjacent to the northeast and southwest, respectively, of Amatepec and are in the same range as Cerro Zempoaltepec. All were collected by Mario del Toro Avilés.

The altitude given by Briggs (*loc. cit.*), namely, 2100 meters, is probably only approximate since the Millionth Map, N.E-14, of the American Geographical Society shows the altitude of Amatepec as 1690 meters. Although our specimens do not have the altitude indicated, we feel rather safe in assuming that it would not differ greatly from that at which the Amatepec specimens were collected. All the specimens from Moctum and most of those from Totontepec seem to be typical *N. b. brevipennis*.

However, one specimen from the latter exhibits an extensive amount of clear olive green on the lower back and was therefore sent to Dr. Alden H. Miller for comparison. In his letter of January 5, 1956, Dr. Miller states: "The specimen . . . is close to the type of *browni* in the amount of green on the lower back. The gray of the breast is, however, considerably darker than *browni* and the white of the belly area is narrower." He then gives bill measurements of the Oaxaca bird (table 1). In conclusion Dr. Miller states: "The culmen is much more curved than in the type of *browni*, a matter of significance, along with bill dimensions, which leads me to state that the Oaxaca bird is *N. b. brevipennis* rather than *browni*."

The tenth specimen from Tamazulapam, collected by Chester Lamb on July 9, 1943, at 6000 feet, tends to fill the gap between the two races and, as might be expected, shows characters somewhat intermediate between the two forms. This bird completely lacks the clear olive green on the lower back, but the feathers are somewhat worn. The gray of the breast is somewhat lighter than in the Moctum-Totontepec series, although this may be due in part to the more advanced state of wear. The gray of the dorsum is similar. The white of the belly area appears to be somewhat wider, but there is a great deal of individual variation in our series in this regard that may be the result of the different methods of the preparators. Although the culmen is quite large (table 1), it has the curve characteristic of *brevipennis*.

Freshly plumaged specimens from Moctum show the anteriormost nasal feathers to be white, a character not heretofore mentioned by previous authors. After careful comparison of our entire series,

Table 1  
Measurements of Males of *Neochloe brevipennis* in Millimeters

	Culmen from base	Bill from anterior edge of nostril	Bill depth, maximum	Bill width at nostril
<i>browni</i> , type				
Mus. Vert. Zool. 112926	11.2	7.0	3.3	3.1
<i>brevipennis</i> , Moore Coll.				
Tamazulapam				
37692	11.3	6.8	3.9	3.4
Moctum				
30927	10.3	6.2	3.3	3.2
30928	10.4	6.2	3.4	3.2
30929	....	....	3.5	....
Totontepec				
33512	10.7	6.4	3.6	3.3
33513	10.6	6.4	3.6	3.2
33514	10.7	6.3	3.9	3.3
33515	10.6	6.4	3.6	3.2
33516	10.5	6.5	3.5	3.2
33517*	10.6	6.3	3.5	3.4

\* Measurements by Dr. Miller confirmed by authors.  
Other conventional measurements are of no significance in distinguishing subspecies and were therefore omitted.

in some instances with the aid of a hand lens, this character was found to be constant. Dr. Pierce Brodkorb was kind enough to check the eight specimens available to him from Amatepec and confirmed our findings. It should be mentioned, however, that as the season progresses these white feathers become yellowed and tend to wear off.

Miller and Ray (*loc. cit.*) give a good account of the area in which *browni* was discovered. Chapman (Bull. Amer. Mus. Nat. Hist., 10, 1898:26) and Loetscher (*loc. cit.*) also give us a good idea of the habitat requirements and song of *brevipennis* at Jalapa. Loetscher further states that his male taken on May 4 was in breeding condition. Our male from Tamazulapam taken on July 9 has the tag notation: "testes full size." From this information we can assume that the breeding season extends at

least from early May to mid-July. Virtually nothing else is known of the life history of the species.

It is interesting to note that of the thirty reported specimens of the species, twenty were collected by Mario del Toro Avilés within a few miles of Cerro Zempoaltepec. It might also be mentioned parenthetically that Miguel Alvarez del Toro, a resident ornithologist of Tuxtla Gutiérrez, informed us that he is quite certain that he has seen this species in the liquidambar region of the mountains of Chiapas.

We wish to express our thanks to Dr. Alden H. Miller and Dr. Pierce Brodkorb for courtesies extended us.—ROBERT T. MOORE and DON R. MEDINA, *Laboratory of Zoology, Occidental College, Los Angeles, California, March 15, 1956.*

**Nesting of Trumpeter Swan in the Lower Copper River Basin, Alaska.**—In the summers of 1954 and 1955 field observations were made on nesting Trumpeter Swans (*Cygnus buccinator*) in the lower Copper River Basin, Alaska. Measurement of three abandoned eggs obtained in 1954 afford proof of species identification and establish the existence of hitherto unknown breeding grounds of the species. The nearest proven nesting area is in the vicinity of Grand Prairie in western Alberta.

The Copper River lies in south-central Alaska and is the largest stream discharging into the Gulf of Alaska. The lower portion of this watershed passes through the precipitous glaciated Chugach Mountains. There it is confined to a comparatively restricted valley which broadens as it merges with the flats of the delta. The observations on swans were made in this lower portion between longitude 145°30' and longitude 144°00' W at latitude 61°00' N, where the Bremner and Tasnuna river valleys converge with the Copper River.

An early record of the Trumpeter Swan and its eggs collected in Alaska is that by Mr. Lockhart at Fort Yukon (Dall and Bannister, *Trans. Chicago Acad. Sci.*, 1, 1869:294), but this record is now considered doubtful. Gabrielson (*Auk*, 63, 1946:103) reported one dead bird positively identified as a Trumpeter Swan from Ward's Lake in southeastern Alaska found on April 4, 1945. On September 30, 1949, two swans mistaken for Snow Geese were shot by a hunter in the Chickaloon Flats on the Kenai Peninsula. Both birds were positively identified as Trumpeters. On September 15, 1952, F. Glaser (personal communication) reported seeing two Trumpeter Swans with several cygnets on a small lake in the Gulkana River drainage in the upper Copper River Basin. Mr. Glaser identified these birds as Trumpeters by their call.

On June 9, 1954, a swan's nest containing one egg was observed by me from the air in the lower Bremner River Basin. It was built in a clump of grass in the center of a relatively small, shallow marsh lake. This is the earliest date a nest containing eggs was recorded. No adult swans were seen in the immediate vicinity at that time. That evening, however, a pair of large swans passed about 100 feet over camp. Both birds, perhaps alarmed by our presence, uttered a resonant blaring cry. This incident was repeated on several occasions. Because of their large size and unique cry these birds were believed to be Trumpeters.

On the evening of June 12, two pairs of swans were sighted on a sand bar along the river. Both pairs were performing what was believed to be a courtship dance. The nearer pair, about 150 yards away, stood facing each other. With wings arched but not spread to full length, they proceeded to rotate in a circle while their heads bobbed up and down in rhythmic motion. This dance continued for approximately five minutes before it was interrupted by our attempt to move closer.

On July 28, while conducting aerial salmon surveys on the Bremner River, I sighted six pairs of swans in widely dispersed lakes. Three of the six had young, one pair with six cygnets, and two pair with three each. Although cygnets were not observed with the remaining three pairs, their young could very easily have been hidden in the tall grass along the lake shore.

At 4:00 a.m. on June 15, 1954, a pair of swans was sighted from a base camp on Bell Lake near the mouth of the Tasnuna River. Their behavior seemed to indicate that they were mating. This pair departed and flew toward the west end of the lake where later in the day I discovered a swan's nest. The nest lay on top of what appeared to be an abandoned muskrat house, which was situated in a willow thicket bordering a shallow, marshy slough. It was constructed primarily of grass and down and had an estimated inside diameter of eighteen inches and a height of about three feet. It contained three large, creamy white eggs, which were partly stained and concealed by down. Care was taken not to disturb the nest. No swans were seen in the vicinity at this time.