

FROM FIELD AND STUDY

Movements of Trumpeter Swans Shown by Band Returns and Observations.—Trumpeter Swans (*Olor buccinator*) have been caught and banded in the Peace River District near Grande Prairie, Alberta, during field operations over the past three summers. Each bird was banded with the standard aluminum band issued by the United States Fish and Wildlife Service and in addition was banded for individual field recognition with variously colored plexiglas leg bands.

In 1954, sixteen cygnets were banded and three were recovered subsequently. Two of the recovered swans were shot about a month after they were banded, on the lake where they were hatched. The third recovery was made on June 5, 1955, when the remains of a swan banded at Saskatoon Lake, near Wembley, Alberta, on August 22, 1954, were found on the Buffalo Fork of the Snake River in Idaho by Jay R. Fisher of Ontario, Oregon.

Twenty-nine cygnets and one adult swan were banded in 1955. Three of these, wearing yellow bands, were observed in flight by Winston E. Banko, United States Fish and Wildlife Service, on January 26, 1956, near the Railroad Ranch along the Henry's Fork of the Snake River in Idaho. An employee of Ponds' Lodge on the Buffalo Fork of the Snake River reported seeing a yellow band on a large cygnet on the upper waters of the Fork a few weeks earlier than Banko's observation. At least one, and possibly two more yellow-banded swans were seen by J. Hartshorne of the United States Fish and Wildlife Service at the Culver Pond feeding grounds, Red Rock Lakes Refuge, Montana, on March 15, 1956, according to a report from Mr. Banko.

An adult male, caught and banded while flightless at Hughes Lake near Grande Prairie, Alberta, on August 28, 1955, was seen with his mate and cygnets on the same lake during the summer of 1956. Four other cygnets banded in 1955 were seen on Saskatoon Lake on May 16, 1956. Two of these belonging to the same family were banded at Lowes Lake near La Glace, Alberta, on August 27, 1955. A third was banded on Saskatoon Lake on August 29, 1955.

Evidence that the cygnets of a family remain together for at least the first year after hatching was obtained when three of the cygnets banded at Lowes Lake on August 27, 1955, were shot in Nebraska in 1956. One was shot and killed at Shoup Lake near Valentine, on October 27, 1956. Another was shot and killed at Schoolhouse Lake in the Valentine area on the same day. The third was picked up severely wounded on the Loup River near Fullerton on November 2, 1956.

During the summer of 1956, eight adults and fourteen cygnets were banded. Two of the cygnets banded on Lowe Lake on August 22 and 23, 1956, were recovered, probably shot, near Cody, Wyoming, on or before October 27, 1956.

From the foregoing information it is apparent that Trumpeter Swans raised in the Peace River District of Alberta migrate to the northern United States and mingle with swans from the Red Rock Lakes Refuge in Montana during the winter months. The breeding range of swans that winter along the coastal and western interior portions of British Columbia has yet to be delineated.—R. H. MACKAY, *Canadian Wildlife Service, University of British Columbia, Vancouver, Canada, June 6, 1957.*

Observations of Pair Relations of White-headed Woodpeckers in Winter.—On January 25, 1957, I watched a male and a female White-headed Woodpecker (*Dendrocopos albolarvatus*) foraging in a forest of white fir, ponderosa pine, and incense cedar situated about one-half mile south of Wawona in Yosemite National Park, California. These observations were made over a period of one hour and fifteen minutes. During this time the birds stayed within an area about 30 yards in diameter.

Three times the female flew to the dead top of a 70-foot ponderosa pine. Each time she began to call very loudly and rapidly. The first two notes of the call resembled the normal sharp call of the White-head. The notes following were a series of two to four somewhat longer notes reminiscent of the mewing call of a sapsucker. At first she called about once every three seconds. As the calling continued, the frequency of the calls fell to about once every fifteen seconds. After about five minutes of calling, she stopped and sat quietly in the top of the tree, looking from side to side for from 30 seconds to nine minutes.

Each period of silent resting ended abruptly when the male flew into a small tree near the base of the ponderosa pine in which the female was sitting. When the male thus approached the area, the