A number of both wild and captive young were banded using the elastic tape method and to date we are not aware of a lost band. The birds used in the experiment ranged from three to nine days of age. The nestling birds were checked in the wild every two days until they left the nest. Captive birds were checked several weeks longer (about 25 days) for verification of the retaining properties of the adhesive. The adhesive works loose from the leg in about nine to 12 days without any ill effects upon the bird. The tape clings to the band for about 25 days.

There are several brands of elastic tape on the market, the most satisfactory tried was Dalzoflex.

On June 9, 1951, a nestling mourning dove 4-5 days old was banded in Barrington, Illinois, using the above method. This bird was shot in early October, 1951, near Pompano, Florida. A returned questionnaire, sent to the reporter of the recovery, stated that no trace of the tape, or any ill effects from its application, were observed on the leg banded.

Experiments will be carried on as to the possibilities of using this method on newly hatched waterfowl and will be reported on at a later date.—Charles W. Kossack, 715 S. Division Street, Barrington, Illinois.

**Three-brooded American Robins.**—Various writers state that the Robin (*Turdus migratorius* Linnaeus) sometimes raises three broods in a season, but I know of only two pieces of evidence derived from banding. Howell (1942. *Am. Midl. Nat.*, 28: 590) at Ithaca, N. Y., found two certain instances—and two other possible ones—in an area where there had been 27 first broods, and Nice (1941. *Bird-Banding*, 12: 33-34) reported an isolated case at Columbus, Ohio. To those instances I can add one.

A color-banded pair of Robins that I watched in Baltimore in 1951 raised three broods. An unknown number of young left an inaccessible first nest May 28, a single bird left the second nest a bit prematurely when banded June 29 (there were no unhatched eggs in the somewhat tilted nest), and a single bird left an inaccessible third nest August 1. The adults were both returns, the male first seen April 6 and the female April 7; the first nest was built April 22-27.

In 1950, differently paired, this female—banded April 23—had been two-brooded with clutches of four and four laid May 8-11 and June 23-26; she completed her first nest May 3. The male—banded April 15—had been lost track of in 1950 after his first nesting. April of 1950 had an average temperature of 51.9° F., 1.7° below normal, and rainfall of 1.37 inches, 1.97 inches below normal; April of 1951 had an average temperature of 55.5° F., 1.9° above normal, and rainfall of 3.63 inches, .29 inch above normal.

In the years 1942-1951 I have followed through their entire breeding season eleven pairs of Robins of which one or both members were color-banded. The 1951 pair was the only one to raise three broods, and only one other pair attempted a third brood after raising two families. The latter pair had, in 1948, clutches of 4 (laid May 5-8), an unknown number, and 3 (laid before July 5), and deserted the last clutch on July 10 when it was molested. A pair in 1945 hatched clutches of three, four and three laid April 19-21, before June 1, and June 23-25, but both the second and third broods of young were destroyed when only a few days old.

Seven pairs of birds had simple two-brood seasons. Another pair renested only once after its initial nest was destroyed late in incubation.—Hervey Brackbill, 4608 Springdale Avenue, Baltimore 7, Maryland.

An Additional Age Record of a Pileated Woodpecker.—The July 1951 issue of *Bird-Banding* contained a note written by my husband (p. 125), giving age records of two Pileated Woodpeckers. Too late for inclusion in that note, I received information which resulted in a third and comparable age record for this species. Mr. James Emerson of Sherwood, N. Y., near Aurora, found a male Pileated lying dead in the road in front of the Sherwood Central School on June 20, 1951. The bird was too badly decomposed to determine the cause of death, but presumably had been struck by a car. Mrs. Emerson fortunately sent the band, with an explanatory note, to Prof. E. L. Palmer of Cornell University, and it came into my hands. The Pileated was one that my husband and I had banded and photographed in Sapsucker Woods, near the Cornell campus, on June 4, 1942, the day it left the nest. The point of recovery is approximately 20 air miles from the place of banding. Thus another age record of nine years is added to the two previous records of nine and ten years, and a little more light is thrown on the question of how far the young birds travel after leaving the area in which they are hatched.—Sally F. Hoyt, "Aviana," Etna, N. Y.

Two Tree Swallow Exchanges between Nesting Colonies.—On May 27, 1951, Tree Swallow 42.95835, which had been banded by me as an adult female on June 17, 1947, and trapped subsequently by me in 1948, 1949, and 1950, was trapped by Prof. Lawrence B. Chapman in his colony at Princeton, Mass. On June 19, 1951, I captured Tree Swallow 46.8727, which had been banded by Prof. Chapman in Princeton on May 27, 1951, as an adult female. Apparently its nesting effort at Princeton was a failure, as Professor Chapman reports he found "the nest deserted with one dead nestling, one broken egg, and three unhatched eggs" on June 16. Why this nesting failure should have driven the bird to seek a new site at a distance of about twenty miles is hard to understand.—William P. Wharton, Groton, Massachusetts.

## **RECENT LITERATURE**

## BANDING

## (See also Numbers 6, 58, 63, and 75.)

1. Notes on Banding Records and Plumages of the Black-headed Grosbeak. Josephine R. Michener and Harold Michener. 1951. The Condor, 53(2): 93-96. From 1921 to 1945 the authors made notes on the plumages and molts of 700 Black-headed Grosbeaks, Pheucticus melanocephalus (Swainson), banded in Pasadena, California, during the warmer months of the year. Of 675 banded during the first 14 years, there were 208 adult males, 206 adult females, and 261 juvenals. It was found that trapping data for individual years did not reflect the true sex and age composition of the summer-resident population for that locality, for the individual years. Of 39 recoveries after at least one migration from the last capture, 29 were males and ten were females. There was a far greater tendency for grosbeaks banded as adults to return than those banded as juvenals. As indicated by banding data, the oldest grosbeak was a male banded as an adult which returned last five years after banding. In the post-juvenal molt, the remiges and rectrices are not all lost and frequently none are lost. This fact usually makes it possible to distinguish one-year birds from grosbeaks more than oneyear-old. Several descriptions of variations in this post-juvenal molt are presented. -L. R. Mewaldt.

2. Survival in Birds Banded at the Hastings Reservation. Jean M. Linsdale. 1949. The Condor, 51(2): 88-96. During the winter months of the years from 1937 to 1948 a total of 5,726 birds of 36 species were banded on the Hastings Reservation in the northern part of the Santa Lucia Mountains in Mon-terey County, California. The most commonly handled species were the Whitecrowned Sparrow, Zonotrichia leucophrys (Forster), with a total of 1,258 banded, and the Golden-crowned Sparrow, Zonotrichia coronata (Pallas) with 2,749 banded. These two species were handled more than 20,000 times including recaptures. Several tables are presented to show survival patterns and population composition. It is unfortunate that numerous inconsistencies between tables, and between tables and the text appear. For example, if data for White-crowned Sparrows from Table 4 (p. 94) are used instead of those from Table 2 (p. 91), one finds in part that 299 rather than 763 birds "survived" one year; that 143 rather than 179 "survived" two years; 65 rather than 82, three years; and 35 rather than 37, four years. On page 93 one reads that two Wren-tits *Chamaea fasciata* (Gambel) "survived" five years, but Table 2 indicates that five Wren-tils survived five years. A compari-son of "returns" of White-crowned Sparrows by capture years in Table 3 (pp. 92-93) and Table 4 reveal *no* agreement except for the 1947-48 season. Table 5 (p. 95) shows 345 Golden-crowned Sparrows banded in 1941-42, whereas Table 3