

- SHEPPARD, R. W., 1933—Notes on the Birds of Jerusalem. *Auk*, **50**: 179-186.
Technology Review. May 1938—Do Flies Shun Blue?
- THOMAS, RUTH H., 1946—A Study of Eastern Bluebird in Arkansas. *The Wilson Bulletin*, **58**: 143-183.
- TRETTAU, W., and MERKEL, F., 1943—Ergebnisse einer Plandberingung des Trauerfliegenfängers (*Musicapa hypoleuca*) in Schlesien. *Der Vogelzug*, **14**: 77-91.
- TRETTAU, W., 1952—Plandberingung des Trauerfliegenschnäppers in Hessen. *Die Vogelwarte*, **16**: 89-95. See review by M. M. Nice 1953, *Bird-Banding*, **24**: 71.
- WEBER, JAY A., 1940—Destruction of Tree Swallows. *Auk*, **57**: 405.
- WEYDEMAYER, WINTON, 1935—Efficiency of Nesting of the Tree Swallow. *Condor*, **37**: 216-217.
- WHARTON, WILLIAM P., 1952—Two Tree Swallows Exchanged between Nesting Colonies. *Bird-Banding*, **23**: 30.
- WILLIAMS, LAIDLAW, 1952—Breeding Behavior of the Brewer Blackbird. *Condor*, **54**: 3-47.
- WINN, H. E., 1949—Nestling Mortality Rate of the Tree Swallow. Ninth Annual Report of Bowdoin Scientific Station, Kent Island.
Wild Acres, Princeton, Mass.

GENERAL NOTES

Fighting and Mortality among Tufted Titmice (*Parus bicolor*) caught in Banding Traps near Leesburg, Virginia.—Early in the winter of 1953-1954, I had six all-purpose traps in operation at my banding station. During this period fourteen Tufted Titmice were banded. In addition, all three Titmice banded the previous winter returned. That Titmice may not get along well together when confined in the same enclosure was indicated by an observation on November 8, 1953. On making my rounds I found in one trap two Tufted Titmice locked in a furious struggle. Fighting took place on the ground, in the air and on the sides of the trap. One of the birds appeared to be getting the worst of it. On my intervention it flew to the side of the trap and remained there in a dazed condition. I noticed that one eye was partially closed. Both birds were unbanded. The unhurt bird was given band number 21-192634. The injured bird was given band number 21-192635.

On November 28, 1953, I found evidence of a very bitter struggle. A Tufted Titmouse flying about a trap was found to be 21-192638, a bird banded on November 14, 1953. After releasing this bird, I noticed a Tufted Titmouse lying prone in a corner of the trap. With its head almost buried in a shallow depression the bird, to all appearances, was dead. But in my hand it made a faint struggle to get away. It was 21-192627, banded on October 30, 1953. One eye was closed and nearly every feather had been plucked from its head. After a few hours in captivity the bird was able to fly away. It was not retaken, and my guess is that it died of its injuries.

During the Christmas season I left my traps open with grain in them. Visiting the traps on January 2nd, 1954, I found in one a dead Tufted Titmouse. This was 21-192640, banded on December 8, 1953. The bird had obviously been killed in a struggle similar to those I had previously witnessed. The entire head was bloody and devoid of feathers. There was a distinct hole through the cranium behind the eye.

On renewing banding activity on January 3rd, I discovered a new instance of Titmouse strife. A trap which had been empty at 1:00 P.M. contained four live Tufted Titmice and one dead one when revisited at 2:00 P.M. The freshly killed bird, 21-192639, had been banded on November 14, 1953, and had repeated frequently since then. Three of the four live birds in the trap escaped before I could examine them. The single bird I examined wore band number 21-192630. It was uninjured and to my knowledge had not been involved in any previous fights. The dead bird, as usual, had had its head plucked of feathers. An autopsy revealed that the bird was a female. The cranium was clotted with blood and had been punctured behind the eye. From the degree of cranial ossification it appeared that the bird was an immature. This was the last case of mortality or injury to come to light during the winter banding season.

Mr. Seth Low, banding near Leytonsville, Maryland, tells me he has found injured Tufted Titmice in his traps. He had been under the impression that the injuries were self-inflicted, but, in the light of my experience, thinks his birds might well have injured themselves through fighting.—John V. Dennis, Rt. 1, Box 376, Leesburg, Va.

The Life History of an Ohio Chimney Swift Recovered in Tennessee.—On September 19, 1954, Clive E. Smith captured a chimney swift from the Purse Building in Chattanooga which bore band number 42-188588. This bird was a male which was at least six years old and had been banded in Ohio where he lived and nested each summer since he was first trapped. Following is an account of his life history.

No. -88 was first captured on May 28, 1949, from air shaft E1 on the roof of Kent Hall on the campus of Kent State University. He was with the mates of that shaft (42-196909 and 42-196921), whose nest was about three-fourths made on that date, and another bird (42-188573) which was a return. These two visitors did not remain there. However, in the night of July 1 four birds were again observed in E1. Trapping obtained the parents and one of the former visitors, but the other one escaped. It might have been no. -88. In any case only three adults were together there the next evening and no. -88 was found with an unbanded swift in shaft L1. However, four birds were together in E1 the next night, and on July 27 no. -88 was trapped again from shaft E1 with the parents and the other seasonal visitor of that shaft. With them were two non-breeding birds of the colony and two juveniles. (The life history of the parents has been published in the *Ohio Journal of Science*, 51: 42-46. 1951.)

No. -88 returned to the campus the following year and was retrapped on May 3, 1950. Again he was in shaft E1, but with a newcomer to this shaft (42-188595) who was to take the place of the former female who died at the end of the previous summer. Soon the former male returned and nested with no. -95 while no. -88 remained as a visitor. On May 26 all three were trapped together. The nest was completed and one egg laid, but on June 5 it fell from the wall. It was then replaced immediately with another. On June 10 the same trio was again retrapped. The new nest was completed but no eggs were yet laid. Soon the trio dissolved as no. -88 left this shaft with its mates and entered shaft G3 to mate with the female (42-188592) whose former mate was found dead in the bottom of the shaft. After remaining alone for four days, she was joined by no. -88 on June 11. Together they built a nest 12.5 feet down on the west wall, and raised three juveniles from four eggs. Late in the season, after nesting was completed, no. -88 went back to shaft E1 on September 15 to roost for the night with the male which had nested there over the past seven years and a juvenile which may have been one of his 1950 offspring.

When no. -88 was first retrapped in 1951 on April 27, he was again in shaft E1 but this time he was with female no. 42-196904 (part of the life history of this bird was published in *Bird-Banding*, 21: 99-104. 1950). This pairing did not last and on May 4 no. -88 was found in shaft G4 with a return (42-196907) which had nested there for the past two years but whose former mate did not return. These two mated and built their nest 13.5 feet down on the west wall where four eggs were laid. At the end of the nesting season the parents were trapped there with a return, the female mate from A5, two swifts which did not nest on the campus, and three unbanded juveniles. Twelve days later families were scattering and flocks were forming. No. -88 was found in shaft U1 with 42 other swifts including his mate.

In 1952 no. -88 was found as a return with his former mate no. -07 in shaft G4 on April 26. (The life history of this bird will be published in *The Auk*.) On May 10 these two had a visitor (48-166259) which may have been one of their own offspring. This bird did not remain, but occasionally a visitor was present. The mates made their nest on the same spot as the year before, in which were laid five eggs. After nesting was over they were joined by visitors. On July 20 they had roosting with them for the night the male from A5, a seasonal visitor from E1, a non-breeding adult, and seven new birds (apparently all juveniles). No. -88 spent the evening of August 6 roosting in shaft V1 with a flock of 37 other swifts, but this time he was not with his mate at the end of the season.