and nesting shaft. Eight Swifts were nesting on the campus for the first time so far as known. Fourteen birds which were recaptured before the nesting season began were taken from the air shafts where they later nested, while 11 captured before nest building started later moved into other shafts for nesting. Eight Swifts returned to the campus before nesting began, but did not remain to nest on the campus. Two of these returned to the shafts in which they had nested in 1950, but soon disappeared. Three others appeared again on the campus after nesting was over for the year. Six were not found on the campus until after nesting was completed. One non-breeding bird was a fairly regular visitor with the mated pair in shaft El until it perished during an experiment in a respirometer, while another one was an occasional visitor throughout the nesting season with the mates in shaft S1. One bird (42-188553) banded on August 6, 1948, while roosting in shaft E1 with nine other Swifts, was not seen again for two years. It was recaptured on August 19, 1950, from shaft U1 with 13 other birds. It was never captured again on the campus, but was found dying on the sidewalk across from the campus in the early evening of July 2, 1951, by Paul Koval, a university student. -Ralph W. Dexter, Kent State University, Kent, Ohio.

Unusual Flock Behavior of Tree Swallows .--- On September 20, 1951, at about 2 p.m., in Essex, Massachusetts, at a pond about 150 yards long where I was observing other birds, I suddenly heard and saw from 75 to 150 Tree Swallows, Iridoprocne bicolor (Vieillot), swerve over the middle of the pond. They were calling loudly, and the rush of their wings was louder than I have ever heard it.

They descended as a group to the level of the water, and apparently scooped up water with their bills. One bird in the group was seen to make two passes before the whole group swooped up as a unit. They circled in a tight circle about 100 feet in diameter and repeated the descent and subsequent ascent. This behavior they repeated six or eight times. After the last pass at the water, the birds flew off, presumably resuming migration, and flew out of sight.

The most striking characteristic of this performance was that the birds at all times flew as an integrated flock, all engaged in the same activity. They were all moving in the same direction, much as a shorebird flock does in flight, except when the individual birds were actually making passes at the water to drink. I find no reference to this behavior in either Bent's life history of this species or Forbush's Birds of Massachusetts and other New England States, the only reference books I have at hand.-George G. Loring, Prides Crossing, Mass.

Intermittent Trapping of a Chickadee.—As a species, the Black-capped Chickadee, Penthestes a. atricapillus (Linnaeus), is rather remarkable for the problems it poses for the ornithologist and particularly the bird-bander. It is commonly regarded as sedentary and, in truth, there is but little evidence available for regular or extensive migrations except toward the limits of its range.

One bird in my files gives instructive data on the way the trapping habits of the species may mislead one. This female was banded as an immature 18 July 1948 with band 48-16208 and was color banded 18 May 1950. Its history is tabulated below.

1948-18 July - 2 Nov. Trapped 7 times; longest trapping interval 47 days. Apparent absence 103 days.

1949-13 Feb. 17 Mar. Trapped twice; trapping interval 32 days. Apparent absence 157 days.

11 Aug. - 19 Nov. Trapped 9 times; longest trapping interval 53

days. Apparent absence 132 days. 1950–1 Apr. - 30 May. Trapped 7 times; longest trapping interval 21 days. Seen twice in the next 62 days.

2 Aug. 10 Dec. Trapped 37 times; longest trapping interval 14 days. Seen 14 times in the next 90 days.

1951-10 Mar. 10 June. Trapped 8 times; longest trapping interval 29 days. Seen 4 times in the next 53 days.

2 Aug. 3 Nov. Trapped 43 times; longest trapping interval 13 days. Seen 9 times in the next 97 days.

This bird nested less than 50 yards from my traps in 1951. Without positive proof for 1948 and 1949, the evidence favors the conclusion that this bird has been continuously present since it was banded. Its behavior is consonant with other observations of mine that trapping intervals for chickadees are clearly longer in December, January, May, and June than during the rest of the year.—Charles H. Blake, Massachusetts Institute of Technology, Cambridge, Mass.

Band Sizes for Evening Grosbeaks.—I understand that some controversy has arisen among banders regarding the proper size of band to use on Evening Grosbeaks (*Hesperiphona vespertina vespertina* Cooper). May I offer our experience in this matter for whatever it may be worth?

Prior to the appearance, in the spring of 1950, of the heavier gauge No. 1A bands we had used 2315 bands of the No. 2 size on this species. Overlapped and partially reopened bands were embarrassingly common on our repeats, returns, and recoveries. Mutilation of the old, lightweight No. 1A bands was even worse.

On March 6, 1950, we received our first string of the heavier size 1A. With the cooperation of E. A. Carrier, a local bander, we proceeded to make a study of the comparative success of the two sizes. A composite summary of our observations follows:

Between March 7 and May 21 the No. 2 bands worn by 255 repeating Evening Grosbeaks were examined. Of these, 17 were overlapped, 15 were partly opened, 9 were flattened, and one bird (identified by the plastic bands which were being used concurrently) repeated with its No. 2 aluminum band missing entirely. During the same period the No. 1A bands on 127 repeats were examined. Of these, 1 was slightly overlapped, 1 was slightly opened, and 9 were slightly flattened.

In brief, almost 1 out of every 6 of the No. 2 bands had been mutilated by the bird to whose tarsus it had been attached. Meanwhile, only about 1 out of every 12 No. 1A bands showed any mutilation whatsoever and any mutilation which had occurred was, in every case, less serious than that of the larger No. 2 bands. What is more, almost every one of the No. 2 bands which showed mutilation required readjustment and, sometimes, replacement, whereas the mutilation of the No. 1A bands was so insignificant that in almost no instance was any readjustment required.

To those who fear that the No. 1A bands are too small for the tarsi of this species let me add that we have now used 816 of the heavy 1A bands on Evening Grosbeaks without even one of the bands fitting too snugly. During the present 1951-52 season we have used, to this writing, 332 of the 1A size and not one of our repeats has worn a band which has needed readjustment. On the other hand, the only two recoveries which we have trapped wearing No. 2 bands were compelled to undergo a major readjustment of their bands before they could be released without at least potential tarsal damage.

It has been intimated that some banders who may be willing to use the 1A size on female Evening Grosbeaks hesitate to use them on the males, believing, apparently, that the tarsi of the latter sex are larger. Allow me to report that we have found that the size of the tarsi of both sexes varies very appreciably. It has been our experience that the tarsus upon which the 1A band fits most snugly belongs more often to a female than to a male. But, let me repeat, please, we have yet to find a member of either sex whose tarsus was too large to accept the 1A band with perfect safety.—G. Hapgood Parks, 99 Warrenton Avenue, Hartford, Conn.

RECENT LITERATURE

BANDING

(See also Numbers 12, 13, 14, 15, 16, 17, 18, 19, 23, 28, 31, 41, and 42.)

1. Bird-Banding in Norway 1950. Holger Holgersen. 1951. Stavanger Museum Smaskrifter, Zoologisk Serie, Nr. 3. 35 pp. This paper is a joint report of the banding activities of Statens Viltundersøkelser, Oslo, and the Zoological Department, Stavanger Museum. During 1950, 9434 birds were banded. Species