

in recent years is reviewed and mapped. Evidence for the known extension consists of a collected nestling specimen, a collected adult specimen with eggs ready to be laid, two observations of eggs being incubated and three of nestlings being fed. Suspected extension is based on 26 early-summer sight records and three juvenile specimens collected in July.

We believe that our records and those in the literature are best interpreted as extensions of the breeding range. It is possible, however, that some records could reflect periodic but poorly understood early summer movements of the species southward and eastward from breeding areas. Extensive banding of nestlings could show definitely whether such movements regularly occur.

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GENERAL NOTES

Analysis of Chimney Swift Returns at Kent, Ohio, 1956-1959¹.—The annual study of Chimney Swifts (*Chaetura pelagica*) roosting and nesting on the campus of Kent State University at Kent, Ohio, has been continued for a total of 16 years. This report will summarize the returns over the past four years.

Swifts began returning to the campus on April 26, 1956. That year there were 48 returns from the following banding year-groups: 1947 (2); 1949 (4); 1950 (2); 1951 (4); 1952 (3); 1953 (10); 1954 (10); 1955 (13). Twenty-two were known males; 14 were known females. The remainder have not yet had their sex determined. A total of 36 of these took part in nesting on the campus. Including all birds, newly banded as well as returns, there were 17 pairs and 2 threesomes, each in a separate air shaft of which there were 86 available to the birds. Two air shafts, inconvenient to reach, were not included in the study that year. Twenty birds were first recaptured in 1956 in air shafts where they had formerly nested; three others were taken from shafts in which they had formerly been visitors with a nesting pair. Nine were first recaptured that year from a former roosting shaft. Eight were also first taken from those shafts in which they had originally been banded, but only two of them had been banded as juveniles.

Ten birds returned with their former mates, and these five pairs continued as mates nesting in the same air shafts which each pair occupied in 1955. Six birds on the other hand returned with their former mates, but each obtained a new mate. Two continued to nest in the same shaft with the new mate while four of them nested in a different shaft with the new mate in 1956. Four swifts came back without their previous mates, but they nested again in the same shaft with a new mate, while four others without their former mates acquired a new mate and nested in a new shaft. One bird returned to continue as an all-season visitor with the same pair as in 1955, while another former visitor returned to become a mate in the same shaft it had occupied

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as a visitor. One other former visitor became a mate, but in a different shaft, when it returned in 1956. Two birds became a visitor with a mated pair forming a threesome in each case (one of these two was a yearling). One pair which had been mated in 1950, 1951, and 1952, but had different mates the following three years, was reunited as a mated pair in 1956.

Eight swifts nested for the first time on the campus. Three birds were recaptured for the first time since they were banded—one had been banded in 1948, but had not remained on the campus any year since banding; another had been banded in 1953 and was found dead in 1956 in the City of Kent; and the third had been banded in 1954 and remained to nest in 1956 for the first time. Seven returns did not spend the summer on the campus. Only two of these had previously nested on the campus (one returned with its former mate, and one returned with its former visitor, but neither remained to nest in 1956); another was a former visitor with a pair although it had never nested itself; and a fourth one was a yearling. One female swift (20-188672) which was banded at Kent on July 20, 1952, returned in 1953 and 1954, and was captured by Gordon Hight on September 19, 1954, at Rome, Georgia (*Bird-Banding*, 25(4): 150-151. 1954), continued to return to Kent each year through the season of 1956. Three returns perished in a trapping accident (*Inland Bird-Banding News*, 29(3): 32. 1957). Swifts were last seen on the campus on October 6.

In 1957 the swifts began returning to the campus on April 20. A total of 37 was eventually recorded from the following banding year-groups: 1947 (1); 1949 (3); 1950 (2); 1951 (2); 1952 (1); 1953 (6); 1954 (5); 1955 (9); 1956 (8). Seventeen were known to be males; 14 were known to be females. Thirty-one of the returns took part in nesting on the campus. Including newly banded birds, there were altogether 14 pairs and four threesomes. Seventeen were first recaptured in 1957 in shafts where they had formerly nested. Three were first recaptured that year in shafts where they had formerly been occasional visitors, and one from a shaft where it had formerly roosted. Four were taken as returns from shafts where they had originally been banded, but only two of these were banded as juveniles.

Five pairs returned and remained as mates in the same shaft where each pair had nested in 1956. It was the fourth season for one pair to remain mated. Two other pairs also continued mated to each other, but each in a different shaft in 1957. Five birds returned without their former mates, acquired a new mate, and nested in the same shaft as previously. It was the eighth nesting season in the same shaft for one of these and the fifth season for another. One returned with its former mate which soon disappeared, and subsequently a new mate was acquired for nesting in the same shaft. Four others that returned without their former mates, mated anew in a different shaft in 1957. Two former all-season visitors returned to become parent birds, but each in a different shaft than formerly occupied. Two birds became all-season visitors with mated pairs. One was a yearling and possibly an offspring of the pair with which it stayed. The other was newly banded. Eight birds nested for the first time on the campus, but six of these had not been banded previous to 1957. Six returns did not remain on the cam-

pus to nest, but only one of these had previously nested on the campus, and three others were probably yearlings. Three returns had not been recaptured the year before, but without much doubt, they had nested in the two shafts not studied that year. They were found nesting in those shafts in 1957. Two of the three had also nested in those shafts in 1954 and 1955. The last swift seen on campus was one released from a trap on October 1.

In 1958 the returns totaled 51. Distribution by year of banding was as follows: 1947 (1); 1949 (2); 1950 (3); 1951 (4); 1952 (2); 1953 (6); 1954 (4); 1955 (7); 1956 (6); 1957 (16). To date 18 are known to be males, with an equal number of known females. Forty of the returns nested on the campus. In trapping returns, 23 were first recovered in 1958 from the shaft in which they had previously nested. Nine others were first taken that year in a shaft in which they had formerly roosted, while 10 were taken from the shaft in which they had originally been banded. Two visitors with mated pairs of the previous year returned to nest themselves in 1958. Three swifts which returned from the 1957 nesting group did not nest on the campus in 1958, and a visitor of the previous year did not remain on the campus in 1958. One bird was recaptured for the first time since it was banded in 1951; another one for the first time since it was banded in 1952. Three swifts were retaken for the first time since banded in 1955. The last swifts remaining on the campus were seen in the evening of October 9.

In 1959 the returns totaled 55, as follows: 1947 and 1949 (1 each); 1950, 1951, and 1952 (2 each); 1953 (4); 1954 (3); 1955 (6); 1956 (5); 1957 (13); 1958 (16). The oldest bird recovered is at least 13 years of age, which is the oldest known Chimney Swift with a continuous life history record. Known males numbered 16, while known females numbered 17. Forty of the returns nested on the campus. Twenty-seven were first retaken that year in a shaft in which they had nested in 1958. Eight others were first retaken in a shaft where they had formerly roosted, and eight were first taken from the shaft in which they had originally been banded.

Four swifts, three mated birds and one visitor, returned from the 1958 nesting colony but failed to nest on the campus in 1959. One bird was recaptured for the first time since it was banded in 1952; one was taken for the first time since 1956; and another was taken for the third time since it was banded in 1950 (returns in 1955, 1958, 1959). The last two remaining birds on the campus were present in the evening of October 14. These were the swifts with the 13-year-old record (42-188523) and his mate for the past three seasons. These two were the last birds remaining on the campus during the preceding year as well.

Similar analyses for the preceding five years will be found in the following references: *Bird-Banding*, **23**(2): 73-74. 1952; **24**(1): 17-18. 1953; **25**(2): 60-61. 1954; **27**(2): 83-84. 1956.—Ralph W. Dexter, Department of Biology, Kent State University, Kent, Ohio.

Use of Decoys in Netting Shorebirds—Following several months of near fruitless attempts at catching shorebirds for banding purposes, the authors hit upon the idea of placing decoys near a suspended mist