Only 4 of the returns taken before nesting was completed did not nest on the campus. Four others were captured as returns after the nesting season was over. One of these was taken as a return for the first time since 1959, having been banded in 1958. Another one was taken as a return for the first time since it was banded in 1960. Possibly these were migrant birds. The last day swifts were observed on the campus was 6 October 1962.

(II)-1963. Swifts returned 18 April 1963, which was the earliest return date for resident birds recorded over a period of 20 years. On the previous day, a warm front passed through the area from the lower Mississippi Valley. Possibly this hastened the return flight of Chimney Swifts. In the season of 1963, a total of 43 returns was recorded. These were banded in the following year-groups: 1954-1; 1955-1; 1956-1; 1957-6; 1958-5; 1959-9; 1960-3; 1961-5; 1962-12. The oldest return was at least 10 years of age. As far as sex has been determined, there were 10 males and 11 females. Twenty-two nested again in the same shaft in which they nested the previous year, and 5 pairs remained mated as they had been and in the same air shaft as in 1962. Three former pairs were joined by a visitor forming three sets of threesomes, which remained together throughout the nesting season and in the same air shaft in which the original pair had nested the previous year.

In two of the threesomes, the visitor in each case was the same bird. It joined the pair in shaft S1 and remained with this pair during the construction of its first nest. For some unexplained reason, the two eggs which had been laid in this nest disappeared, and the nest was deserted on May 29. The visitor then left the group. The nest fell from the wall during a heavy rain on June 3. When a replacement nest was constructed, a different visitor moved in with the pair. The former visitor then moved into shaft U1, where the first nest had also fallen from the wall, and here it became a visitor with the pair during the time of its second nesting in this shaft.

In shaft V1, the threesome of the previous year was re-united and was joined by another visitor forming a foursome for the season of 1963. In shaft C3, the male which had nested there in 1960 and 1961, returned to nest again after having spent the season of 1962 in shaft E1. The male nesting in shaft E1 for 1963 had not previously been taken as a return since it was banded in 1959. One return, which did not nest, was not taken as a return in 1960 and 1962, but was recorded during other years since banding in 1957. The last record of a Chimney Swift on the campus was made 4 October 1963.

The nesting season of 1963 proved to be one of the most unsuccessful over a period of 20 years. One threesome failed to build a nest, and one pair failed to complete its nest. One nest fell from the wall before the eggs were laid. In shaft S1, the first nest which was made fell from the wall after the eggs were laid. This was replaced by a second nest, but after three eggs were deposited they were abandoned. In shaft U1, the first nest also fell with the eggs, and the replacement nest later fell while containing four nestlings. Only two of these survived. Also, following a heavy rain storm, the nest containing nestlings fell in four different shafts. In two cases, there were no survivors. In one case, two nestlings survived, and in the fourth, survival was not certain. In another shaft the nestlings disappeared from the nest from unknown causes. In still another case the nest with four nestlings fell from the wall, but all four nestlings survived. During this nesting season, 19 nests were started (including two replacement nests), and 14 of these produced nestlings. However, of the 17 nesting groups, six failed to produce juvenile birds, and two others produced only half the normal set of fledged birds. Only six nests remained attached to the wall by the end of the summer. Other records of accidents and failure to complete nesting have been published in the following references: *Auk*, **69**: 289-293, 1952; and **77**: 352-354, 1960; *Cleveland Bird Calendar*, **57**: 21, 1961. The last report in this series of annual returns was published in *Bird-Banding*, **33**: 153, 1962.

Acknowledgment is made to the Environmental Sciences Branch of the Atomic Energy Commission for assistance in this study under contract No. AT (11-1)-411.—Ralph W. Dexter, Dept. of Biological Sciences, Kent State University, Kent, Ohio.

Nesting of three species in one tree.—On rare occasions more than one species of birds, including antagonistic species, have been found nesting in the same tree. Stamm (*Kentucky Warbler*, **27**: 23-24, 1951) reported an incident of

four species nesting together. A recent case involving three species was published in *The Auk* by Watson (**80**: 377-378, 1963). In the summer of 1963, a similar case came to my attention.

In the front yard of my next door neighbor, Robert S. Barnes, at 1226 Fairview Dr. in Kent, Ohio, three species of birds nested together in the same tree during the summer of 1963. The tree is an English Hawthorn, close to the house, and not over 30 ft. tall. Near the top nested a pair of Rose-breasted Grosbeaks (*Pheucticus ludovicianus*). Some 10 feet lower was a nest of the Blue Jay (*Cyanocitta cristata*). Some 9 feet toward the north and somewhat lower in elevation from the grosbeak nest, a pair of House Sparrows (*Passer domesticus*) nested. The Rose-breasted Grosbeaks soon established dominance over the others, but nesting was completed successfully by all three species with reasonable harmony in spite of their close proximity and the dominance of one species over two others that usually are aggressive themselves.—Ralph W. Dexter, Department of Biological Science, Kent State University, Kent, Ohio.

Some Mammal Predators in a Colony of Common Terns.—On 7 June 1955 while banding several hundred downy Common Terns (*Sterna hirundo*) at Metropolitan Beach, Lake St. Clair, Macomb County, Michigan, I discovered several dead, partially devoured adults and downy young. At about the same time Mr. William B. Stapp brought to me an extremely large Norway Rat, (*Rattus norvegicus*). This rat was still alive but nearly every portion of its body was covered with wounds, its eyes were missing and the skin from behind the shoulders to the end of the nose had been removed. The condition of the animal was obviously the result of pecking and scalping by the adult terns. Experimentally, the rat was released in the thickest portion of the tern colony. Immediately it was viciously attacked by no less than twenty-five adult terns.

It was apparent that this was the creature responsible for at least some of the predation of young and adult terns and its condition obviously was due to attacks by these birds. The adult terns, incubating and brooding at night, would have been largely as helpless as the young before the attacks of this mammal.

During the next breeding season of 1956, dead young and adults were again discovered in the same colony and a predator, a three-quarter grown opossum (*Didelphis virginiana*), was discovered in a hollow willow at the edge of the colony. This animal showed no signs of wounds, probably because its depredations were accomplished only at night while those of the common rat were both nocturnal and diurnal.

As those who band them know, common terns are able to inflict painful wounds on even a human being. My practice is to wear a hard-topped helmet when working in tern colonies to avoid the plummet-like diving impact of these birds.

Other mammal predators on mainland and sometimes island common tern colonies are minks, weasels, foxes, skunks and raccoons. Fortunately, most tern colonies are located on sandspits or island areas which are comparatively free from most animal predation. Apparently the concerted attacks of these birds on an animal even the size of a fox or skunk can be very effective during daylight hours.—Walter P. Nickell, Cranbrook Institute of Science, Bloomfield Hills, Michigan.

Rough-winged Swallow Recovered in Bank Swallow Colony.—On 24 June 1959 I banded a brood of seven Rough-Winged Swallows (*Stelgidopteryx ruficollis*) in a drain tile at Cranbrook, Bloomfield Hills, Oakland County, Michigan (latitude 42°30′ longitude 83°10′). This drain tile was in a stone wall five feet above the ground level. The band numbers of these seven birds were 61-45592 through 61-45598. On 16 June 1961 one of these birds, band number 61-45593, was netted at a colony of Bank Swallows (*Riparia riparia*) at Calcite, Rogers City, Presque Isle County, Michigan (latitude 45°30′ longitude 83°50′) about 250 miles to the north of the point of banding. The bank swallow colony was in the perpendicular face of a pile of finely-crushed limestone where I had been netting and banding bank swallows for four years. I believe that this bird was nesting in an old bank swallow tunnel as this colony had been occupied by bank swallows for several years. This is the second time I have netted rough-winged swallows in bank swallow colonies. On 13 July 1961 two adults and two flying immature