General Notes

## **GENERAL NOTES**

Reapplying bands.—The last sentence in Professor Shaub's article on removing overlapped bands (Bird-Banding 24: 12, 1953) seems to call for a comment. The aluminum used for bands does not stand up under cold work, that is, it breaks when repeatedly bent at the same place without annealing. When the band is opened to place on the bird most of the bending is along a narrow zone opposite the free ends. This zone is bent a second time in closing the band. If the band is removed, reformed, opened and reapplied, at least two more bends are given the same narrow zone. By this time comparatively little wear or corrosion may cause the band to fall into two pieces. The band should not be reformed in the open position because when again closed the free ends will be directed slightly inward.

An actual test was made on a 1A band of the 50-series. Each opening and closing may be called a cycle. At the third cycle the lessened resistance to opening and closing could be felt but there was no visible change. After the sixth cycle notching of the edges of the band at the ends of the bending zone could be seen. The first visible cracking occurred in the eleventh cycle and at the end of the next cycle a crack extended more than half the height of the band. I would not recommend reusing a removed band.—Charles H. Blake, Massachusetts Institute of Technology, Cambridge, Mass.

Notes on the Rough-winged Swallow.—Working well toward the northern edge of the range of the Rough-winged Swallow, Stelgidopteryx ruficollis serripennis, I have not been able to band many. My experience may be worth describing because the species is not apparently entirely amenable to the methods of the Bank Swallow banders.

My pairs of Rough-wings use partly dug, abandoned holes of the Belted Kingfisher in a bank of fine sand. This bank contains enough sizable stones and roots so that the Kingfishers can rarely dig straight holes deep enough to suit them. The latter species has actually bred there but once in some ten years.

In 1947 the swallows used a hole about 20 inches deep but since then have used a hole a few feet further north which is about 28 inches deep. I have never been able to take a male but have taken the female each year from 1947 to 1952 except 1950. Each time she has been a new, unbanded bird. Some peculiarities of behavior led me to believe that the same male was present from 1947 to 1949.

The nest material, which seems to be used year after year, is a slightly concave pad of straw, rootlets, and plant fibres.

The methods which I have used to secure females and young are simple, almost primitive, but seem generally satisfactory. The females have been caught by holding a wire mesh gathering cage about 12 inches long against the mouth of the burrow and then disturbing the bird with a flashlight beam. Only once have I had to stir her up by reaching a hand into the burrow, but she may refuse to emerge for some few minutes. The female is less likely to fly out when the burrow is approached if the attempt is made in the evening about an hour before dark. The bander must be prepared for a surprise when his first female comes out. She comes with a rush that carries her clear to the end of the gathering cage since she leaves the mouth of the burrow on the dead run.

The young should be left undisturbed until they are well feathered out and able to walk. They may then be brought out one at a time by inserting the hand palm down and caging the nestling between the fingers. If the hand is withdrawn slowly the young one will walk to the mouth of the burrow where it is readily secured. All are removed before banding is begun. As each is banded it is placed just inside the burrow mouth and prodded gently. It will walk to the nest on its own or even run if old enough.

I have not succeeded yet in capturing any adult males. Observations after dark suggest that the male does not roost in the burrow even after the eggs have hatched and that his visits to feed the young are very brief. My nest holes are badly sited for a quick jump to plug them.

What observations I have been able to make indicate that the fledglings do not return to the burrow after they have once flown from it.

In spite of the small number of nestings observed, it may be well to give my statistics on success. Five nestings have been observed and four of these to fledging. The probabilities, following Davis (1952), are: for hatching 0.75, for fledging from eggs 0.68 and for fledging from nestlings 1.00. The other probabilities seem to have little significance for so small a sample. There is another point to be made. Davis follows the usually accepted custom for computing such probabilities. The custom ignores the possibility that clutch size may be a factor in survival. The results may be weighted for the frequency of clutch sizes and the consequences of varying size by computing the probabilities for each clutch and then averaging. If this is done we find: for hatching 0.73, for fledging from eggs 0.66 and for fledging from nestlings 1.00.

It is not strange that the two methods should, in this case, yield almost the same results. The number of eggs laid is 5 or 6 with an average of 5.6 per clutch. The average number of nestlings is 4.2, or taking only the nests in which some eggs hatched, is 5.2. The difference in the last two figures comes from the desertion, in 1948, of 5 eggs before hatching.

I have elsewhere, as cited below, discussed the notes of young and adults and

the flight of this species.

The general level of nesting success would seem to point to the conclusion that the scarcity of Rough-winged Swallows north of extreme southern New England is a phenomenon of the adults and does not stem from any difficulty of raising the young. This matter would repay examination elsewhere in the northeast.

## REFERENCES

BLAKE, C. H.

1947 Swallow notes. Bull. Mass. Aud. Soc. 31: 239.

1948 The flight of swallows. Auk, 65: 54-62.

Davis, D. E.

1952 Definitions for the analysis of survival of nestlings. Auk, 69: 316-320. Charles H. Blake, Massachusetts Institute of Technology, Cambridge, Massachusetts

The Rough-winged Swallow at South Windsor, Conn.—Dr. Blake's note (above) has prompted me to set down brief comments on the nesting of this species at the edge of the Connecticut River in South Windsor, Conn. My only definite record was in 1948, in the middle of the large Bank Swallow colony (see Bird-Banding, 22: 54-63, April, 1951), though no intensive search has been made for this species. The hole was apparently excavated by the birds themselves, being somewhat larger than the Bank Swallow holes, but much smaller than the Belted Kingfisher holes. At South Windsor at least two pairs of Kingfishers nest annually in the Bank Swallow colony, but make no incomplete burrows (as there are no stones in the soil) and the river generally washes away each season's holes in the course of the following winter. Like the Bank Swallows, the Roughwings dug a hole too deep for the nest to be reached without enlarging the hole. Adult 47-19563 was banded on June 6, 1948 and retaken on June 26 in the same burrow; in neither case was the other adult present, contrary to general expectation in the Bank Swallows. In each case the bird was taken with a cardboard tube and cellophane bag; one fledgling of flying age (47-19846) was taken in the same way in the burrow on July 10, at which time there were three more young in the nest, feathered but not quite ready to fly out, while two adults flew about nearby. The fledgling resembled the fledgling Bank Swallows in having conspicuous cinnamon feather edgings, but these were noticeably more prominent, particularly on the shoulders.-E. Alexander Bergstrom, 37 Old Brook Road, West Hartford 7, Conn.

Evening Grosbeak Banded in Connecticut, Recovered in Manitoba.—In March and April, 1950, we banded 110 Evening Grosbeaks (Hesperiphona vespertina) at our previous station at 233 Ridgewood Road, West Hartford, Conn. This number was trifling compared to the totals at some other stations in the northeast, such as that of Mr. G. H. Parks in Hartford, where 1286 were banded that winter (Bird-Banding, 23: 145). However, from that group of 110 grosbeaks we have by chance obtained a recovery which represents, as nearly as can be