Cedar Waxwing recovery.—A Cedar Waxwing (Bombycilla cedrorum) was banded here on October 28, 1966 as an immature, band number 104-112128. It repeated the next day, but was not recorded here thereafter. It was reported recovered at Columbia, S. C. on January 28, 1970, by Mrs. C. M. McCall, who writes that it "was picked up sick, and did not survive that night". The area is full of fruit-bearing shrubs and trees "much frequented by waxwings . . . several waxwings were observed in other parts of town flopping around sick on the lawns". It would seem that insecticides are used a good deal in that region, and are a serious problem.—William P. Wharton, Groton, Mass. 01450.

Shift of mates during nesting of chimney swifts.—Usually pairs of Chimney Swifts remain mated to each other as long as both partners return each year to the nesting locality. Occasionally both birds return but each one gets a new mate. Such a change, however, takes place early in the season before nesting begins (Dexter, 1969). In the season of 1969 an unusual shift of female mates occurred after nest building was completed. In air shaft N9 on the roof of Kent Hall on the campus of Kent State University (see *Ibid.* for illustration), two swifts (band nos. 28-141884 and 28-141889) took up residence on 18 May 1969. (No. -84, a female, had been banded the previous year from shaft A5, and No. -89, a male, from shaft V, but neither one nested there.)

On 26 May 1969 they began nest building in shaft N9, completing it five days later. The first egg appeared 4 June. Upon my return to the campus following an absence of six weeks, I found No. -84 had been replaced by female No. 28-141880 which had been a visitor in shaft E1 both in 1968 and the early part of 1969 (see Dexter, 1952 for study of visitors). No. -84 had moved into shaft A5 and replaced female No. 28-141808 which had been mated there to No. 28-141869, after two years of successful nesting in shaft D4 with another male. (No. -69 had been banded in shaft A5 in 1967 as a juvenile.) The new mates in A5 (-69 and -84) had three eggs on the nest 20 July, two of which hatched the following day, a very late date for hatching.

Oddly enough, on 21 September 1969, in a roosting flock of 19 swifts in shaft A5, there were included Nos. -69 and -84, which were the second set of mates in shaft A5, No. -08 which had been replaced there by No. -84, and No. -89 the first mate of No. -84 in shaft N9. Nine days later No. -89 was found back in shaft N9 with his second mate, No. -80, after visiting with his first mate in shaft A5. In a roosting flock of 17 swifts found in shaft E1 on 3 October 1969, there were included Nos. -69 and -84, the second mates of shaft A5, but none of the others involved in the "musical chairs" described above.

In the season of 1970, Nos. -08 and -69 nested in shaft A5 and Nos. -84 and -89 nested in shaft N9 as they had started to do the year before. No. -80 did not return to the campus for nesting in 1970.

LITERATURE CITED

Dexter, R. W. 1952. Extra-parental cooperation in the nesting of Chimney Swifts. Wilson Bull. 64: 133-139.

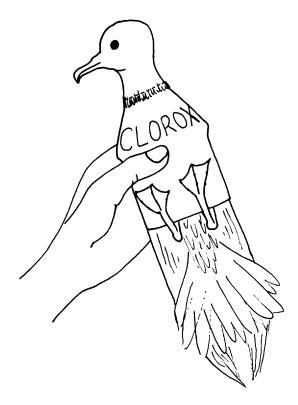
—— 1969. Banding and nesting studies of the Chimney Swift, 1944-1968. Ohio Jour. Sci. 69: 193-213.

Ralph W. Dexter, Dept. of Biological Sciences, Kent State University, Kent, Ohio. 44240.

A device for handling shearwaters.—Investigators who have worked with shearwaters very often have scars to prove it. Both the bill and feet can cause painful injury if the bird is handled improperly. The suggested device is designed to alleviate this problem.

Working with Wedge-tailed shearwaters (Puffinus pacificus) in Hawaii, I quickly learned that light gloves alone would be insufficient to prevent injury while measuring and banding birds, and heavy gloves are too cumbersome. The birds become very disturbed and often regurgitate during such prolonged handling. In addition, for an investigator working alone, it is very difficult to capture both members of pairs in the open and still be able to carry out all measurements and banding operations without harsh treatment of the birds.

A modified plastic Clorox bottle (1 quart) serves as the holder for shear-



waters. The top is cut off at a point at which the diameter allows full penetration of the head and neck, but not the body. This permits easy access to the legs and feet for measurement and banding. However, if cut too high, the bird will be able to extricate itself. The birds normally become quite passive in the container immediately after insertion, and often remain quiet if placed on the ground on their backs. The bird is ensheathed in the container, unable to use its wings and unable to reach back far enough with its beak to bite the investigator. Head and bill measurements, as well as cloacal examination for sexing purposes, can be carried out while resting the bird-in-container on the investigator's lap. Even brood patch investigation can easily be made by pulling the bird part way out of the container. A small hole near the base of the container is useful for inserting a hook for weighing the birds with spring scales. The bird-in-container may also be placed on the pan of a spring balance. If the small end of the container is closed off temporarily, it can also be used for weighing small chicks. One drawback is the necessity of removing the bird for wing examination, although I have been able to do this rapidly before release without undue difficulty.

A similar method has been used successfully with rats in the laboratory. (Michael, J., 1963, Laboratory Studies in Operant Behavior, McGraw Hill). Warham (1966, Animal Kingdom, 69: 14-21) describes a method he uses with giant petrels, employing a U-shaped wire to pin the birds to the ground. However, my experience with shearwaters indicates that this disturbs the birds greatly and results in an unnecessary amount of dirt and debris being caught in the eyes

A large variety of plastic containers are available on the market at this time, making it possible to modify a holder for almost any bird desired. I have also successfully used a larger container with Red footed boobies (Sula sularubripes) to avoid the necessity of holding the bill during banding.

Dr. Thomas R. Howell kindly made comments on this manuscript. My shearwater work is being supported in part by a Frank M. Chapman grant from the American Museum of Natural History. This is Oceanic Institute Contribution No. 75.—Robert Shallenberger, c/o Oceanic Institute, Waimanalo, Oahu, Hawaii 96795.

Ectoparasites from the Genus Aegolius.—During the past three years I have used banding as a method for the study of Saw-Whet and Boreal Owls (Aegolius acadicus and Aegolius funereus respectively). When time permitted, ca. five minutes was spent searching the plumages for ectoparasites. Two species (Strigiphilus ?pallidus and Orchopeas leucopus) were found on the Boreal Owl, one of which (O. leucopus) was probably accidental. Also, for the Saw-Whet Owl two species of ectoparasites were recorded (Strigiphilus sp. and Lynchia americana fusca), one of which is not yet described (Strigiphilus sp.). This information is given in greater detail in the following paragraphs. All of the ectoparasites reported here were collected in southern Ontario, and are preserved in the Dept. of Entomology at the Royal Ontario Museum in Toronto, Ontario.

Aegolius funereus

Chewing Lice: Order Mallophaga: — Strigiphilus sp. cursitans group. Probably referrable to S. pallidus (because A. funereus is the type host of this species, and members of Strigiphilus are usually host specific). Of some five owls examined carefully, only two carried this ectoparasite, which was found in the plumage of the facial disc and crown. Collections were made in Peel and York counties during the months of February and March 1969. Specimens were determined by Dr. R. C. Dalgleish of the Huyck Preserve, Rensselaerville, New York.

Fleas: Order Siphonaptera: — Orchopeas leucopus male. A common flea of Deermice (Peromyscus spp.), and probably indicating that the owl had been feeding on a Deermouse (A. H. Benton, personal communication). Collected on 16 Feb. 1969 in Peel county, the specimen was identified by Dr. A. H. Benton of New York State College for Teachers, Albany, New York.

Aegolius acadicus

Chewing Lice: Order Mallophaga: — Strigiphilus sp. cursitans group. Similar to those from A. funereus, but probably represents a new species which cannot be described until the entire genus is revised (R. C. Dalgleish, personal communication). These parasites were found on approximately 50% of the owls searched (ca. 100), usually in the plumage of the crown and nape; less often on facial disc and wings. Often, if this parasite was carried by the owl, at least five could be found easily. Collections were made from October to April inclusive. Specimens were determined by Dr. R. C. Dalgleish of the Huyck Preserve, Rensselaerville, New York.

Louse Flies: Family Hippoboscidae: — Lynchia americana fusca. A female came out on the tail of a Saw-Whet banded on Long Point, Norfolk county, 19 April 1969. A male was found on the wing of another Saw-Whet Owl banded in east Toronto, York county, 15 April 1969. These specimens were determined by Dr. K. W. MacArthur, curator of Entomology, Milwaukee Public Museum. Another specimen referrable to this species was determined by J. C. E. Riotte of the Royal Ontario Museum using the keys provided by MacArthur (The Louse Flies of Wisconsin, Bull. Milwaukee Public Museum, 8 (4): 367-440). It carries the following data: From Saw-Whet Owl banded 26 March 1968 in east Toronto. It is interesting to note that, although more owls were banded in winter and in autumn, this parasite was noticed only in March and April.—Paul M. Catling, 104 Victoria Park Ave., Toronto 13, Ontario, Canada.

Misleading glaucous-winged gull recovery from Iowa.—In North America the Glaucous-winged Gull (Larus glaucescens) breeds along the Pacific Coast from western Alaska to Washington and winters to the south along the coast to southern California (A. O. U., 1957). Banding returns from British Columbia colonies indicate that some non-breeding birds remain in California in summer. Rarely, however, is the gull found more than 100 miles inland from the