

GENERAL NOTES

A Modified Fair Isle Apparatus for Collecting Bird Ecto-Parasites.¹

One of the problems confronting the "would-be" collector of bird ecto-parasites is an efficient means of collecting specimens. Williamson (1954) described a collecting apparatus as follows: ". . . there is a strong plastic cylinder, open at both ends, its base resting on a white porcelain tile on the laboratory bench. Attached to the cylinder by spring clips on the opposite sides are narrow glass bottles in which the chloroform is contained. Air is supplied by compressing a rubber bulb which is connected to the bottles by short lengths of rubber tubing terminating in glass inlet tubes . . . whose ends are of sintered glass and reach below the surface of the liquid. The resulting vapour is forced into the cylinder via the small outlet tubes. . . . As formerly a cape of oiled silk is used to close the top of the cylinder and protect the bird's head. Treatment should last for a minute or so, but it may have to be prolonged slightly if the bird cannot be induced to flutter."

Such an apparatus, with minor modifications, was constructed in 1956. A plastic cylinder, 10 inches long and 8 inches in diameter, with $\frac{1}{4}$ inch walls was used. On opposite sides, about 3 inches from the top, $\frac{1}{4}$ inch holes were drilled. The arm of a $\frac{3}{4}$ inch side-arm test-tube, which was held to the side of the cylinder by spring clips, was pushed through each hole. A one-hole rubber stopper, fitted with a glass tube reaching almost to the bottom of the test-tube, was placed in the top of each test-tube. An "airstone," similar to those used in an aquarium, made of pumice stone was fitted on the bottom of these tubes. The tubes were connected by rubber tubing, and a Y connector, to a Politzer bag and a rubber bulb. The lid consists of 2 circles of $\frac{1}{4}$ inch plastic, 8 and $7\frac{1}{2}$ inches in diameter. A 4 inch circle was cut in the centre of each. A piece of sheet rubber, about 5 inches square, was placed between these. The 2 pieces of the lid are bolted together with five 1 inch by $\frac{1}{8}$ inch bolts. A small slit, about $1\frac{1}{2}$ inches long, is made in the rubber. The bird's head is pushed through this, supported by the first and second fingers of the operator's left hand.

To use the apparatus the test-tubes are partially filled with chloroform and the rubber bulb is squeezed a few times, inflating the Politzer bag. The air in the Politzer bag slowly bubbles through the chloroform, evaporating some of it. This vapour soon fills the cylinder. Usually it is necessary to keep the air bubbling through for 1 or 2 minutes. The bird is encouraged to flutter and usually the parasites may be seen dropping onto the white plastic below. If a number of birds are to be treated, 8 inch filter paper has been used on the bottom of the cylinder. This may be examined by another operator while the cylinder is moved down the bench to treat another bird.

The apparatus was used in the spring and fall of 1956 with encouraging results. However, the chloroform fumes were unpleasant to the operator and were sometimes hard on the bird. Also the chloroform sometimes spilled, and damaged the plastic cylinder and connectors. After some tests the most practical substitute seemed to be carbon dioxide gas under pressure. The apparatus had to be modified accordingly. The test-tubes, "air-stones," Politzer bag and rubber bulb were no longer needed. Instead a piece of $\frac{1}{4}$ inch plastic tubing was inserted in each of the holes in the cylinder. Rubber tubing and a Y connected these with a cylinder of carbon dioxide gas. Now it is simply a matter of turning a valve to fill the plastic cylinder with gas. Treatment takes a little longer by this method—2 to 4 minutes—but it is much more convenient.

Parasites, except bird-flies (Hippoboscidae), may be preserved in 80% alcohol. Specimens from each bird should be kept separate and have a label containing the name of the bird, date, place and collector associated with them. Bird-flies should be kept dry and mounted on insect pins. A squat pint jar containing vials, $\frac{1}{4}$ by 2 inches, and filled with 80% alcohol is a convenient field storage method. As each vial is used some absorbent cotton may be shoved in the mouth of the vial to seal it. Some people use a hand lens to spot the parasites and the white plastic or the filter paper. It is advisable to put each bird to be examined for ecto-parasites in a bag as soon as it is taken from the net or trap, as the bird-flies may fly off the bird when it is being handled.

¹Contribution no. 5 of the Point Pelee Bird Banding Station of the Ontario Bird Banding Association.

The Federation of Ontario Naturalists provided financial support for this project.

REFERENCE

- WILLIAMSON, K. 1954. The Fair Isle apparatus for collecting bird ecto-parasites. *British Birds*, 47: 234-5.—James Woodford, and Frank T. Lovesy, Royal Ontario Museum, Toronto 5, Ontario and 220 Gowan Ave., Toronto 7, Ontario.

Whip-poor-will (*Caprimulgus carolinensis*) Netted; Band Size—Three of these birds have been taken in mist nets so far this spring (1960). Two were netted between 8:30 and 9:00 p.m. on April 5 and 9 which at this season and latitude is after dusk has fallen but prior to full darkness. The third was in a net at first inspection just after dawn (5:30 p.m., May 11). Size 3 bands, as recommended by the Fish and Wildlife Service, are too large, sliding off over the toes. A size 2 band is satisfactory. The tarsal diameter of all three birds was 4 mm.—R. O. Bender, Cobbis Mill Road, Bridgeton, N. J.

Deformed bills—Catbird (*Dumetella carolinensis*)—On Sept. 12, 1959, a Catbird taken in a mist net was observed to have a very abnormal upper mandible which extended 5 mm beyond the end of the lower mandible. The terminal 5 mm was bent downward in a decided hook, the top of which was 4 mm below the under surface of the lower mandible. This bird, 56-127996, weighed 34.3 gms, which may be a trifle low for a fall bird, yet it appeared to be in good condition. It was seen in the vicinity three times in the succeeding four days. A careful examination did not disclose any indication of an injury, hence it seems possible that the deformed bill was the result of a mutation.

Catbird 59-174207 appeared to have suffered a broken upper mandible at some previous time. The apparent break, about 8 mm from the feathers, had healed, but had left a raised area across the bill about 2 mm in height. When this bird took my finger in its bill, the upper mandible bent very noticeably at the point of the presumed break. The bird weighed a normal 36.7 gms.

Blue Jay (*Cyanocitta cristata*) 553-27368, taken in a clover-leaf trap on March 5, 1960, had an upper mandible 4 mm shorter than the lower which was very thin right out to the tip where there was a bulge which did not resemble a normal tip. No evidence of recent injury could be observed, but the irregular surface of the thin section suggested a previous injury. The bird was rather light, 81.0 gms, but occasionally other individuals with normal bills have been weighed at as low as 76.2 gms.—R. O. Bender, Cobb's Mill Road, Bridgeton, N. J.

RECENT LITERATURE

BANDING

1. **Recoveries of Ringed Birds. Mediterranean Islands.** Wladyslaw Rydzewski. 1960. *Rivista Italiana di Ornitologia*, 30 (Series 2): 1-77. In publishing this carefully and laboriously assembled compilation of banding data, the editor and founder of the *Ring* has performed another great service to banding and to ornithology. Here are listed with available data the Mediterranean island recoveries reported to date from the some 36 ringing schemes in Europe. With the exception of a few annual lists of "recoveries of foreign bandings" published by several European countries, and a few analyses of waterfowl recoveries by states and by "flyways" published in this country, practically all recovery data have been published according to place of banding. I hope that the value of this pilot assemblage from the recovery locality standpoint will encourage the publication of similar compilations for other well defined geographical regions. Students of faunistics and distribution have heretofore largely neglected these valuable data because of the difficulty of finding and assembling them from the widely scattered literature. A similar breakdown of recoveries from various parts of Africa would be most useful, and in this country a compilation by islands of the rapidly mounting recoveries from the West Indies, now reposing quietly in the Patuxent files, would well repay someone's efforts to dig them out, sort them, and publish them.—O. L. Austin, Jr.