A device for removing birds from nest boxes.—Numerous studies of birds that use nesting boxes have been conducted, and several techniques for trapping adults inside of boxes have been described (Fischer, 1944; Lincoln, 1947; Lockley and Russell, 1953; Grice and Rogers, 1965; Kibler, 1968, 1969; DeHaven and Guarino, 1969; and Dhondt and Van Outryve, 1971). Removal of trapped brids from boxes has seldom been mentioned. Fischer (1944: 152) frightened captured small birds into a milk bottle or jar placed over the entrance hole. Grice and Rogers (1965: 7) removed hen Wood Ducks (*Aix sponsa*) from boxes by opening the top of the box enough to "reach in with one hand while the other hand and arm covered as much of the opening as possible." Lockley and Russell (1953: 46-47) stated that the best way to remove birds from nest boxes is to use a gathering box or small hand net over the hole: "If the bird does not emerge at once when the trap door is swung open it will usually do so if the box is tapped gently, or a torch flashed at the hole." We suspect that the most common methods of bird removal from nest boxes are by hand and/or net.

We devised a more efficient technique during a study of the effects of a potential reproductive inhibitor on a population of Starlings (*Sturnus vulgaris*) in Denver. A device made of rigid 2- x 4-inch mesh wire, hog rings, and tire inner tube was constructed to slide into the front-opening door of Ithaca type nest boxes (Fig. 1). Trapped starlings generally flew up into the box when the door was opened, then dropped down and stood quietly on the box floor until captured by hand through the rubber opening. Previously marked birds could be readily observed through the large mesh and released without handling. Untangling birds from nets was elminated and considerable time (and probably bird trauma) was saved. After one initial escape, 84 birds were successfully handled. The device is inexpensive, easily constructed, and can be readily carried on a clip board in the field. It should be adaptable to top-opening boxes, and for several species of hole-nesting birds.
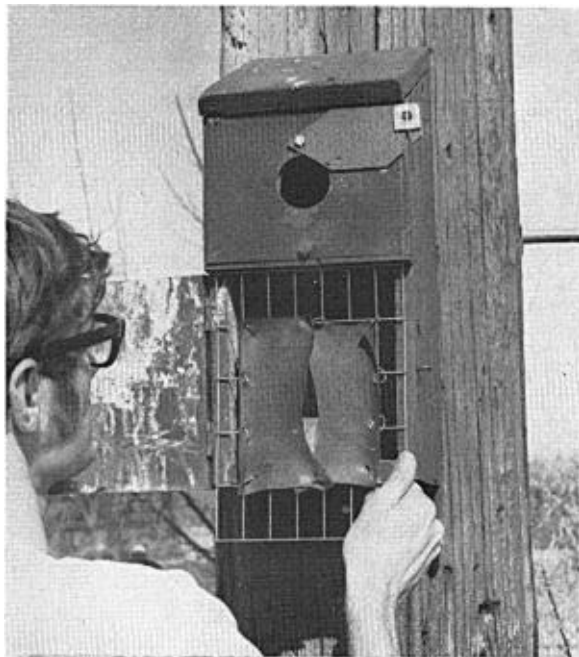

FIGURE 1. Device for removing birds from nest boxes.

LITERATURE CITED

DE HAVEN, R. W., and J. L. GUARINO. 1969. A nest-box trap for starlings. *Bird-Banding*, **40**: 49-50.

DHONDT, A. A., and E. J. VAN OUTRYVE. 1971. A simple method for trapping breeding adults in nesting boxes. *Bird-Banding*, **42**: 119-121.

FISCHER, R. B. 1944. Suggestions for capturing hole-nesting birds. *Bird-Banding*, **15**: 151-156.

GRICE, D., and J. P. ROGERS. 1965. The wood duck in Massachusetts. Massachusetts Div. Fish and Game, Final Rep., Fed. Aid Proj. W-19-R, 96 p.

KIBLER, L. F. 1968. A radio-controlled trap for bluebirds and other hole-nesting birds. *EBBA News*, **31**: 167-173.

———. 1969. The establishment and maintenance of a bluebird nest-box project. *Bird-Banding*, **40**: 114-129.

LINCOLN, F. C. 1947. Manual for bird banders U. S. Fish and Wildl. Serv. Washington, D. C., 116p.

LOCKLEY, R. M., and R. RUSSELL. 1953. Bird-ringing: the art of bird study by individual marking. London, Crosby Lockwood and Son, Ltd., 119p.

NORMAN F. LOCKYER, CHARLES P. STONE, AND JOSEPH L. GUARINO, *Bureau of Sport Fisheries and Wildlife: Building 16, Denver Federal Center, Denver, Colorado 80225.* Received 30 October 1972, accepted 5 November 1972.

Longevity surprise: the Bobolink.—Little is known concerning natural longevity of the few transequatorial migrant passerines that breed in the United States and Canada. Here I report data on longevity of the Bobolink (*Dolichonyx oryzivorus*), a songbird which annually migrates approximately 19,000 km round trip between nesting habitats in the northern United States and southern Canada and its wintering grounds in southern Brazil, Uruguay, Paraguay, and northern Argentina. The distance of these flights is unsurpassed by any other North American passerine species, and the rigors of its migration, including a non-stop traverse of the Caribbean Sea from Jamaica to South America, would presumably inflict heavy casualties and hence limit the life span of this bird. Moreover, as a consequence of a conspicuous plumage pattern and a strongly polygynous social structure (see Martin. Polygny in the Bobolink: habitat quality and the adaptive complex. Ph.D. dissertation, Oregon State University, 1970) which demands substantial display exposure for territoriality and sexual advertisement, male Bobolinks should be more vulnerable to predation than less active, more cryptic passerines. Morphological and behavioral characteristics combined with the stress of lengthy migrations, therefore, should pose important constraints on longevity.

From 1966 through 1972 the behavioral ecology of a population of Bobolinks nesting in southcentral Wisconsin was studied. Results of the investigation shed light on longevity of individually marked birds of this population. Only nestlings were banded in 1966, but in subsequent years, adults as well as nestlings were distinctively color banded. Adults of this species exhibit remarkable site tenacity, and mature males, especially, return each spring to the same breeding meadow. A few individuals that were hatched and raised in this field also return yearly. Site tenacity of these "native" birds permits chronological assessment of recruitment of known-aged birds to the breeding population, and thereafter, longevity accounts for these individuals. Based on long-term trends of adult male returns, the analysis that follows assumes that individuals failing to return to the study-field any spring have died since the end of the previous breeding season. For females, which are known occasionally to shift nesting locations to different fields, this assumption is not valid and individuals might still be living despite their absence at the nesting meadow under investigation.

Complete accounts covering periods sufficient to provide maximum longevity data are available for birds banded during the first two years of the study. They come from four Bobolinks banded as nestlings and five birds banded as adults, as tabulated here: