

but he did not study crop contents of the Rock Doves. While we found wild seeds in a substantial proportion of crops, they contributed little in terms of total volume of food consumed by the Rock Doves.

It is interesting to note that the doves studied apparently did not frequent bird feeders, for only 1 crop contained seed that apparently came from such a source. We report crop contents of Rock Doves in a semi-rural environment; it would be valuable to compare data from a truly urban population with ours. Goodwin (1970, Pigeons and Doves of the World, The British Museum, London) states that in both urban and rural areas Rock Doves depend directly or indirectly on man for food sources. Our observations tend to support this conclusion.—THOMAS A. PIERSON, ROBERT G. COBB, AND PATRICK F. SCANLON. *Dept. of Fisheries and Wildlife Sciences, Virginia Polytechnic Institute and State Univ., Blacksburg 24061. Accepted 19 Jan. 1976. Page costs paid.*

A probable Mourning × MacGillivray's Warbler hybrid.—Cox (Auk, 90:190–191, 1973) first reported and qualitatively described probable hybrid individuals between the Mourning Warbler, *Oporornis philadelphia*, and MacGillivray's Warbler, *O. tolmiei*. Cox's study was made in SW Alberta, Canada, in an area in which the species' breeding ranges contact each other at occasional points (Cox 1973). No measurements were presented.

On 22 May 1975, a male *Oporornis* was mist-netted in Johnson County, (eastern) Kansas. The bird was photographed (Fig. 1), carefully measured, banded, and released. Both the plumage characteristics and the measurements of this individual strongly suggest that the bird was a hybrid.

Phillips (Auk, 64:296–300, 1947) first stressed the importance of the wing minus tail ratio in MacGillivray's. Lanyon and Bull (Bird-Banding, 38:187–194, 1967) stressed this same characteristic in separating the Mourning from MacGillivray's.

In their study of *Oporornis*, Lanyon and Bull presented the following pertinent data (mm): For 65 male Mournings, the mean wing (flat) measurement was 62.3 ± 0.22 ; the mean tail measurement was 48.8 ± 0.19 . For 87 male MacGillivray's, the mean wing (flat) measurement was 60.8 ± 0.19 ; the mean tail measurement was 54.3 ± 0.30 . A wing minus tail ratio of 9 to 11 mm was considered to be within the "region of possible overlap" between the species (Lanyon and Bull 1967).

The individual which we netted had a wing (flat) measuring 62 mm and a tail measuring 52 mm, yielding a wing minus tail ratio of 10 mm. This measurement falls squarely between the species.

The adult spring male MacGillivray's is characterized by conspicuous white eyelid spots, blackened lores, and the absence of a black apron on the breast. Conversely, adult spring male Mourning lacks the white eyelid spots and blackened lores of MacGillivray's, and has a black apron on the upper breast (see generally Griscom and Sprunt, *The warblers of America*, Devin-Adair, New York, 1957).

The individual which we netted had only moderate, but quite noticeable, development of the white eyelid markings, heavily blackened lores, and less extensive black on the upper breast than in most typical spring male Mournings. Moreover, the black lores and the measurements show that this bird was not merely an unusual Mourning Warbler, a common migrant species in eastern Kansas (Allan R. Phillips, pers. comm.).

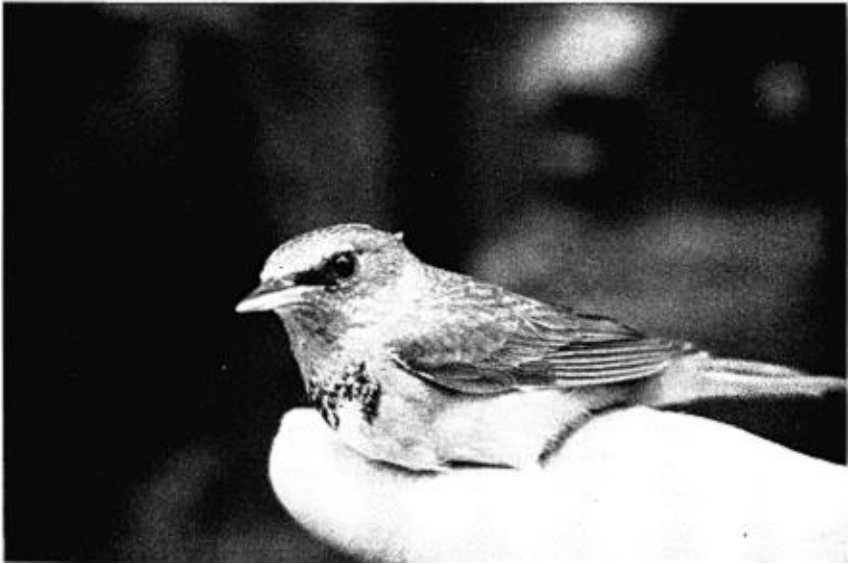


FIG. 1. A probable Mourning \times MacGillivray's Warbler Hybrid.

Many authors have commented on the obvious similarity of these species. See, for example, Phillips (1947) and Lanyon and Bull (1967). Yet surprisingly little research has been done in a comparative sense. While this is apparently only the second report of probable hybrids of these species, more intermediates may be found with careful museum searches. Clearly, more field work in contiguous breeding areas is needed to better define the relationship of these species.

We wish to thank Dr. Allan R. Phillips for his most helpful correspondence, and Drs. Wesley E. Lanyon and George A. Hall for their helpful comments.—SEBASTIAN T. PATTI AND MARY LOUISE MYERS, 6528 *Wenonga Terrace, Shawnee Mission, KS 66208*. Accepted 21 Apr. 1976. Page costs paid.

Change in status of Red-cockaded Woodpecker colonies.—A survey of Red-cockaded woodpecker (*Dendrocopos borealis*) colonies in 10 southeastern states was made in 1969–70 (Thompson and Baker, pp. 170–186 in *The Ecology and Management of the Red-cockaded Woodpecker*, R. L. Thompson, ed., Bureau of Sport Fisheries and Wildlife, U. S. Department of the Interior, and Tall Timbers Research Station, 1971, Tallahassee, Florida). During the fall and winter of 1973–74, 312 of these colonies were resurveyed by various observers and evaluated as to status by the presence of birds or by the amount and freshness of pine gum around cavities or resin wells on cavity trees. For those colonies judged inactive, the probable causative factor (timber management, land development, road construction, etc.) was noted whenever possible. The regional