

Warbler, 43:39-42, 1956). Charles F. Walker saw the bird at West End on 28 December 1969. He detected it first on the lawn of the hotel, watched it pursue a moth to the concrete floor of the porch, fly to the top of a small shrub in the lawn, and finally vanish at low level in a dense row of broad-leaved shrubs. Although he searched the area carefully for the next several days, he did not find the bird again (30 December 1971). However, the "usual place" for finding the Kirtland's Warbler on Grand Bahama has been an open stand of large ". . . Caribbean pine (*Pinus caribaeae*) with an understory of poisonwood (*Metopium toxiferum*) and palmetto (*Serenoa repens*)." (Hundley, op. cit.). Here the Kirtland's Warblers gleaned food from the trunks and branches like Black-and-white Warblers (*Mniotilta varia*). In April, 1969, Paul Fluck mist-netted and banded a Kirtland's Warbler "in fairly open, young Caribbean pine about 25 feet high, with a shrubby understory" (John T. Emlen, in litt., 14 December 1971).

From all of these reports, old and modern, I conclude that the Kirtland's Warbler usually inhabits low broad-leaved scrub in the Bahamas. Areas that have been cleared and then allowed to grow back but have not yet reached their maximum height and density may hold particular promise. I think it is significant that no one has reported them in the high scrub or coppice, trees 15 feet or more in height, that abounds in these islands. The presence of pines where the warblers have occurred repeatedly on Grand Bahama I think may be incidental or of secondary importance. By shading and by encouraging ground fires the pine may hold back the brushy understory to the desired state of sparseness and low height. All of the large pines I have examined show fire scars at the base. Only the northernmost islands of the Bahamas have pines, and even on these the Kirtland's Warbler has occurred frequently on portions that have no pines. The several mentions of Australian pine I think is a consequence of the widespread planting of this exotic in resort areas visited by tourists; that is, the tree happens to be where the visitors are.

Unfortunately for the searcher, low broad-leaved scrub is abundant on all the islands of the Bahamas.—HAROLD F. MAYFIELD, 9235 River Road, Waterville, Ohio 43566, 14 January 1972.

Stability of a population of male Red-winged Blackbirds.—An important aspect in the survival of a species is its ability to recover rapidly from a low population resulting from some catastrophe. The history of a population of Red-winged Blackbirds (*Agelaius phoeniceus*) for 8 years illustrates a method of rapid increase after a decline occasioned by a series of drought years. During the drought the number of nesting females declined drastically but the number of males holding territories remained essentially constant. This arrangement permitted rapid increase once conditions became more favorable because the males were ready each year on their territories for the available females.

The Redwings of Millbrook Marsh near State College, Pennsylvania were studied by several persons beginning in 1960. The details of the vegetation changes resulting from a drought are recorded by Brenner (Amer. Midl. Naturalist, 76:201-210, 1966). His data show that monthly precipitation in 1960, 1962, and 1963 was about 20 per cent below normal. During these years a rainfall deficit of 26 inches occurred, mostly during the growing season. During this drought the marsh changed from vegetation, measured in biomass, composed of cattails (48.3 per cent) and sedges (39.3 per cent) to few cattails (4.6 per cent) and many sedges (89.5 per cent). For five years the territories of the breeding males were mapped in considerable detail (Brenner, op. cit.). For 1965-67 Peek mapped the territories. In these latter years, due to some changes in drainage of

the stream, an adjacent area became available for Redwings and the total population of the marsh increased. However, the figures cited here refer only to the area inhabited originally in 1960.

The number of territorial males beginning in 1960 are: 21, 17, 19, 17, 18, 21, 20, and 19. Data for the number of females for all years except 1965 are: 42, 35, 19, 7, 17, ?, 28, and 30. It will be noted that although the number of males remained stable the number of females dropped as low as seven at the time of maximum drought and then returned to a normal level. Thus, while the total population changed rather drastically and the production of young decreased during the drought, nevertheless, the number of males remained constant. These males were ready for maximum breeding as soon as the drought ended and the marsh again became suitable for nesting. It would appear that the system of stability of males allows a population to recover rapidly from a low level.

Brown (*Wilson Bull.*, 81:293-329, 1969) commented on the report by Brenner (op. cit.) from a somewhat different viewpoint. He noted that the territorial behavior stabilized the male population and buffered the breeding density.—DAVID E. DAVIS, *North Carolina State University, Raleigh, North Carolina 27607* AND FRANK PEEK, *University of Minnesota, St. Paul, Minnesota, 10 January 1972.*

NEW LIFE MEMBER



Dr. M. Philip Kahl of Naples, Florida is a new Life Member of the Wilson Ornithological Society. Dr. Kahl, who holds degrees from Butler University and the Uni-

versity of Georgia, is currently engaged in research on the flamingos of the world under grants from the National Geographical Society, the New York Zoological Society, and the International Council for Bird Protection. He is a recognized authority on the large wading birds and has published some 18 papers as a result of his studies. His interests extend to wildlife photography, and persons who attended the banquet at the Williamsburg Annual Meeting will remember his excellent film on the storks of the world that was shown on that program, although Dr. Kahl was not present. Dr. Kahl is married and has one son, and is a member of the AOU, the BOU, and the Deutsch Ornithologen-Gesellschaft.