

the direction of the others. Notably, nestling growth measurements indicated that the last nestling to leave, which I identified by its color-band as it fledged, had been the least developed, and was probably 24–48 h younger than its siblings. Twelve min after the first group left the nest shrub, I began hearing food-begging cries from the fledglings which were by then perched in brush on or near the far ridge; 90 sec later the adults began delivering food to the fledglings, and I left the area shortly thereafter.

The behavior of these adults contrasts with Skutch's (1976) disturbance-causing-fledging description, as I did not excite them into "calls of alarm" per se, but rather induced them to initiate what appeared to be specific behaviors intended to lure the young off the nest. Predation accounted for 54% of all shrike nest failures in Idaho (Woods, in press, Proc. Intl. Shrike Symp. 1993), and nestling transfer following disturbance has been reported in the Northern Shrike (*Lanius excubitor*; Yosef and Pinshow, Auk 105:580–581, 1988). These observations suggest luring behavior could be more widespread than has been reported in shrikes, and possibly other passerines, breeding in areas where the risk of nest predation is high.

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Hatching year Kirtland's Warbler captured in unusual habitat.—Recent research indicates that factors on the breeding grounds in Michigan limit populations of the endangered Kirtland's Warbler (*Dendroica kirtlandii*) (C. Kepler and P. Sykes, pers. comm.). The breeding habitat of the Kirtland's Warbler has been described as young jack pine (*Pinus banksiana*) stands on Grayling sand soils in north central lower peninsula of Michigan (Mayfield, H. 1960. The Kirtland's Warbler. Cranbrook Instit. Sci., Bloomfield Hills, Michigan). The habitat description is based on distribution and abundance of adult birds. Little is known about dispersal patterns and habitat use by hatching-year (HY) Kirtland's Warblers, because HY birds are not easily found on the breeding grounds after independence. Observations of HY birds in the post-independence stage, therefore, are important.

An immature Kirtland's Warbler was mistnetted on 5 August 1986 in the northwest corner of Ogemaw County, Michigan (44°30'N, 84°13'W). The nearest occupied breeding habitat was approximately 4.8 km to the southwest at the Damon Burn (Weinrich, Jack Pine Warbler 66:154–158, 1988). The bird was photographed for verification. Its age was determined by presence of fully grown and fresh primaries and rectrices. The sex of the bird was not determined. The bird was captured in mixed coniferous-deciduous secondary growth surrounded by mature coniferous forest. Historically, the site was a 23 ha seed-tree burn in 1976. The overstory was dominated by black cherry (*Prunus serotina*), quaking aspen (*Populus tremuloides*), northern pin oak (*Quercus ellipsoidalis*), and jack pine. Percent canopy cover for all vegetation in this stratum was 70%, and the openings were distributed patchily. The average tree height was about 4.5 m (range 2–6 m). The 100% ground cover was dominated by little bluestem grass (*Andropogon scoparius*) and sweetfern (*Comptonia peregrina*), with some ground blueberry (*Vaccinium angustifolium*), snowberry (*Symphoricarpos albus*), and sedge (*Carex pensylvanica*) present.

Other observations of HY Kirtland's Warblers have been made. In 1991, C. Kepler and P. Sykes (unpubl. data) showed that a HY Kirtland's Warbler had moved from one stand of typical breeding habitat to a disjunct second stand. Both stands were used as nesting habitat that year. A HY Kirtland's Warbler was seen 21 August 1985 in young but typical breeding habitat that was not used for nesting that year (Weinrich, Jack Pine Warbler 66: 113–116, 1988). The presently reported capture is the first record of a HY Kirtland's Warbler prior to fall migration found outside of typical breeding habitat. Observations of HY Kirtland's Warblers in habitats discontinuous from natal sites will provide the descriptive groundwork for hypotheses regarding dispersal patterns of the Kirtland's Warbler.

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Migrant Hooded Warblers as prey of Neotropical Frogs.—Birds are often frog predators, but rarely occur in the diet of frogs. Cook (Smithsonian Herpetological Inform Ser. No. 73, 1987) reported 93 references to 78 species of birds consuming 31 species of anurans, while only 14 references referring to nine species of anurans consuming nine identified species of birds, with the addition of “ducklings” and “small birds” listed for four of these species. A study of the diet of the neotropical green frog (*Rana vaillanti*) identified this species as a predator on Hooded Warblers (*Wilsonia citrina*). The frogs were hand-captured at night in Laguna Escondida, Municipio of San Andres Tuxtla, Veracruz, Mexico, and stomach flushed (Legler and Sullivan, *Herpetologica* 35:107–110, 1979) the next morning in the laboratory at Estacion de Biologia Tropical Los Tuxtlas. Stomach contents were flushed from all individuals captured in five days of sampling each month for a year ($N = 1554$). Hooded Warblers occurred in two of 33 stomach contents examined in December 1984. The warblers appeared to have been swallowed fresh, suggesting that they had been captured alive and not consumed as carrion. Also *Rana vaillanti* is not known to consume carrion. The warblers were probably ingested in shallow water where they have been observed bathing. The frogs, 93.5 and 92.5 mm in snout-vent length, were both females. The wet volume of the warblers represented 10% of the volume of 33 stomach contents.

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