SKUTCH, A. F. 1976. Parent birds and their young. Univ. Texas Press, Austin, Texas.

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**Parent Loggerhead Shrikes induce nestlings to fledge.**—Passerines that lure young from the nest earlier than they otherwise would leave may prevent the loss of whole broods to nest predators (Nice, Trans. Linn. Soc. 6:1–328, 1943). Skutch (Parent birds and their young; Austin, Texas, Univ. Texas Press; 1976; p. 298) suggested that adult-induced fledging can occur in passerines when nests are disturbed in the latter stages of nestling growth. However, rather than representing luring behavior, Skutch maintained that disturbance could excite the adults to the point that "... their calls of alarm ... may prompt the young to jump out and scramble to safety ..." While studying Loggerhead Shrikes (*Lanius ludovicianus*) breeding in the sagebrush (*Artemisia tridentata*) dominated cold desert of Owyhee Co., Idaho, I observed an instance of apparent luring behavior, which I report here.

At 17:30 MST on 3 July 1992, I approached a shrike nest 1.1 m above the ground in a 2 m tall bitterbrush (*Pursia tridentata*) on one ridge of a slope broken by frequent low ridges and ravines. I had visited this nest several times previously to measure nestling mass and feather growth and to color-band the five nestlings. Since the young were now within the range of fledging ages I had observed at other nests, I remained 25 m from the nest, on an adjacent ridge, and counted the nestlings with the aid of a spotting scope. All five were in the nest, and after looking briefly in my direction they appeared to disregard me.

During this time one adult made a few defensive calls (as was typical of earlier visits); then both adults perched about 0.5 m apart, 20 m upslope from the nest, on a prominent and frequently used bitterbrush. Following this, the female initiated a distinct call, with which I was familiar but had never heard used in this context. The call sounds like a low "waa" which rises slightly to a definite if not abrupt end, and frequently is used during food-begging or pre-copulatory behaviors. Previously, I had heard this call used only between paired adults, and primarily in earlier stages of the breeding cycle. Although the male was near the female as she now called, she was facing the nest, and the call was louder than I had heard in the past.

The female clearly attracted the attention of the nestlings, which began shifting about actively in the nest. After 90 sec of calling, all the nestlings suddenly stood up, looking in the direction of both adults. Moments later (<10 sec) three nestlings left the nest, quickly hopping one after another onto lower branches, and finally stopping together on a branch 75 cm above the ground. Less than 15 sec later, the first of the three jumped/fluttered to the ground, landing nearly 1 m away. Upon landing, it began hopping through the grass in the direction of the adults. The other two on the lower branch followed in rapid succession. As this happened, both adults moved to an adjacent ridge, 45 m from the nest, but on the opposite side of the nest from me. In addition, the male joined the female in calling as they moved to the new ridge. As both parents called, the fledglings, which had been moving upslope, changed direction, again hopping toward the adults.

These three fledglings had left the shrub in the first min after the nestlings initially stood up. In the second min the fourth nestling, alone, moved to the same lower branch, jumped off, and began making its way toward the still-calling adults. Three min later the last nestling, which cried frequently as it slowly moved to the same branch, fledged also, hopping off in 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.