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Altruism in the Horned Lark?—The ability of a bird to recognize its own eggs and young is usually associated with colonially breeding species, such as seabirds and Bank Swallows (Hoagland and Sherman, *Ecol. Monogr.* 46:33–58, 1976; Beecher et al., *Anim. Behav.* 29:95–101, 1981). Most passerines, however, are territorial, rather than colonial, and locate their nestlings easily because there is no confusion generated by neighboring nests. After the young leave the nest, they usually remain in the parental territory where they are cared for by their parents for a few weeks. The primary mechanism of parent-offspring recognition is often auditory, with young and adults giving begging and location call notes, respectively, until they locate one another (Burt, *Anim. Behav.* 25:231–239, 1977; Stoddard and Beecher, *Auk* 100:795–799, 1983). Some wandering from the parental territory may occur, however; and, by the time nest-leaving occurs, it would be of obvious adaptive value for the parents to be able to recognize their own young and not feed or protect unrelated young. I report here on an observation of care of unrelated young in Horned Larks (*Eremophila alpestris*) near Macomb, McDonough Co., Illinois.

Two color-banded 12-day-old young from one territory [nest 3, territory K (Beason and Franks, *Auk* 91:65–74, 1974)] were fed by the color-banded parents of a second territory [nest 1, territory H (Beason and Franks 1974)] on 2 May 1969. These observations were made while the young were in territory H, which is separated from their natal territory by one intervening territory. The young had left their nest 3 days before, and had been cared for by their own parents prior to this observation. The parents of the young were also color-banded, as were the offspring of the adults involved in these observations. While I observed from a blind, each adult made 8 feeding trips to the young in 2 h of observations, and responded to the distress notes of the young when I captured them. While I weighed and measured the young, one adult stood on nearby fence posts and gave loud alarm call notes. When released, the young fluttered a short distance and landed, followed by the adults. The adults had 3 young of their own which were the same age as the young they were fostering. Their young were located on their own territory the two days prior, but not on the day of these observations. No young from either nest was located again until 2 weeks later, when I recaptured juveniles from both nests. The adults of territory K were present on their own territory the day of these observations and later.

Unlike the experimental studies on altruism by Power (*Science* 189:142–143, 1975) and Weatherhead and Robertson (*Behav. Ecol. Sociobiol.* 6:185–186, 1980), which asked replacement mates to feed and care for foster offspring, this observation involved the natural intrusion into a defended territory by alien young and subsequent fostering by the adults of that territory. Although relationship further removed than one generation cannot be eliminated, it is unlikely that the young birds from nest 3 were related to the adults of nest 1. After becoming independent, juvenile Horned Larks aggregate into flocks and disperse from their natal area during the fall, but the adults remain on the same territory for successive years (Pickwell, *St. Louis Acad. Sci., Trans.* 27:1–153, 1931; Beason, MS thesis, Western Illinois Univ., Macomb, IL, 1970). This behavior would reduce the probability of kin-interaction and inclusive fitness (Hamilton, *J. Theor. Biol.* 7:1–52, 1964) as a possible explanation.

A likely explanation for the observed behavior by the adults (other than true altruism) is reproductive error. The intruding young were the same age as the parent's own young and the parents may have failed to distinguish the alien young. The reproductive process in birds is strongly under hormonal control (Lofts and Murton in Farner and King, eds., *Avian Biology*, Academic Press, New York, 1973:1–107), and the adults were physiologically motivated to feed young. However, because their own young were alive and in the

general area, it is puzzling why the parents expended time and energy towards unrelated juveniles. Because both adults of the pair were involved and the altruistic behavior extended for some time, it is difficult to formulate a plausible explanation for this observation, except mistaken identity. Although I observed other juveniles outside their natal territories, I observed only one other instance of adults caring for the young. In that case a parent accompanied one of its young for a few minutes outside their territory. Young Horned Larks leave the nest at an early age (several days before they can fly well) and are very secretive, probably to reduce the risk of predation (Beason and Franks, *Auk* 90: 359–363, 1973). It also makes them difficult to locate. Because of the life history of this species, selection should favor the ability of individuals to recognize their young and direct their efforts accordingly. Any expenditure in time and energy on unrelated young would be counter to Darwinian fitness. Weatherhead and Robertson (1980) feel that the apparent altruism they observed was the result of an artificial situation which would be rare in nature. The apparent altruism I observed was in response to a natural situation which occurs regularly in nature. However, the frequency of feeding alien young instead of ignoring them is unknown in the Horned Lark. Consequently the question of whether this is an example of mistaken identity by one pair of Horned Larks or an expression of altruistic behavior for the species is unresolved. The first explanation is more appealing. D. Niles and an anonymous reviewer provided helpful comments on the manuscript.—ROBERT C. BEASON, *Biology Department, State University of New York, Geneseo, New York 14454*. Received 3 Apr. 1984; accepted 30 July 1984.

Pileated Woodpecker Nest in Natural Cavity.—On 28 May 1983 we found a Pileated Woodpecker (*Dryocopus pileatus*) nest containing 2 young in a densely wooded area in Claytor Lake State Park, Pulaski County, Virginia. The nest was 9 m above ground in the trunk of a live American beech (*Fagus grandifolia*). After the young had fledged, we examined the cavity. The oval entrance was 23 × 10 cm on the outside and tapered to 14 × 9 cm inside. The entrance surface was smooth, dark, and unaltered by the woodpecker. The cavity was 25 cm deep when measured from the bottom of the entrance and showed some signs of enlargement (although very few chips were found close to the tree). The cavity was probably formed by heart-rotting fungi which entered the tree where a limb had fallen off. There were no signs of previous use by other animals.

Pileated Woodpeckers typically excavate a new nest cavity each year and cavities excavated during previous years are rarely reused (Bent, *U.S. Natl. Mus. Bull.* 174:178, 1939; Bull and Meslow, *J. For.* 75:335–337, 1977). We know of no other record of a Pileated Woodpecker nesting in a natural cavity.

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