

**Mortality of nestling Mississippi Kites by ants.**—While studying aspects of the breeding and population biology of the Mississippi Kite (*Ictinia mississippiensis*) in the Great Plains (Parker, Ph.D. thesis, Univ. Kansas, Lawrence, 1974), I encountered mortality of nestlings due to the action of ants of the genus *Monomorium*, either *M. minimum*, the little brown ant, or *M. pharaonis*, the pharaoh ant. The former is a well-established exotic, the latter is native to North America. Both are omnivorous, common, and found in association with man (Swan and Papp, *The Common Insects of North America*, Harper and Row, N. Y., 1972). One affected kite nest was part of a colony of 5 in a large shelter-belt in Greer County, Oklahoma. It was 3 m up in one tree of a row of osage orange (*Maclura pomifera*) and originally contained 2 eggs. On 23 June 1970 I found 1 pipped egg and a very small nestling (1 day old or less). The latter was covered with scores of the small, biting ants, had blood on its legs, was weak, and died within 30 min. The ants were moving to and from the nest in columns extending up the trunk and had been present on my previous visits, but were not then numerous in the nest. Although an adult kite was on the nest the next day, the second egg was gone 4 days later.

Ants also were abundant at a second unsuccessful nest in an osage orange and attacked 2 nestlings in a third nest in a small oak (*Quercus* sp.) in one of the many small groves of trees in the "shinnery" prairie near Roll, Roger Mills Co., Oklahoma. The heads or entire bodies of scores of ants covered the nestlings (about 11 and 13 days old) on 9 July 1973. Both had patches of bare, irritated skin, were swollen around the eyes and mouth and on the feet and wings, and were listless. The older was normal in weight, but the younger was extremely underweight. Ten days later only the older nestling remained; it is likely that the ants at least contributed to the death of the younger.

Because only the heads of some ants remained attached to the bodies of the latter nestlings, I assume they were preening themselves or each other, or were preened by the adults. The newly-hatched nestling was unable to preen itself and was very recently damp from hatching. Thus it was less able to withstand the stresses imposed by the ants and probably was more attractive to them because of its damp condition. Newly-hatched young of any bird species would succumb more quickly to ants than older nestlings, but species normally eating small, ground insects might eat ants in the nest, thus protecting their young. However, ants are too small to be eaten as normal fare by Mississippi Kites and were probably not viewed as food by the adults.

Only 3 nests of the more than 400 I examined were affected by ants, so the total impact of the ants on reproductive success was minor. However, the activity of the ants is unusual, and this sort of mortality has rarely been reported, except when attributed to the imported fire ant (*Solenopsis saevissima*) (Coon and Fleet, *Environment* 12:28-39, 1970). However, Kroll et al. (*Wilson Bull.* 85:478-479, 1973) observed predation by native fire ants (*Solenopsis geminata*) on nestling Barn Swallows (*Hirundo rustica*).

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