

period, he suggested that the swallows recognized the shrike as a predator (either by instinct or experience or a combination of both), and therefore attacked it. If the Barn Swallow recognized the shrike by obvious "sign stimuli" (e.g., dark body, white wing patches, white outer tail feathers, sitting alone on a wire in the open), could it be that the swallows reported above "mistook" the Mockingbird for the similarly-patterned shrike, and therefore attacked it?—JACK P. HAILMAN, 4401 Gladwyne Drive, Bethesda, Maryland, March 17, 1959.

**Common Grackle heavily infested with Mallophaga.**—The number of Mallophaga (chewing lice) harbored by individual birds varies considerably even within the same host species. Of many factors limiting population size of the lice, preening by the host is undoubtedly instrumental in removing many lice and their eggs. A female Common Grackle (*Quiscalus quiscula*) (No. 55-A, KSCP), collected January 18, 1959, in Cherokee County, Kansas, was found to be carrying the unusually high number of 323 lice (*Menacanthus*). The bird appears to be normal except for a markedly malformed bill. The upper portion of the distal half of the lower mandible is lacking; the upper mandible is twisted, with irregular tomia and with an elongate horny growth at the tip. A V-shaped gap, 5mm. wide distally, separates the two mandibles for about half their length. When the bird was collected, a great number of mallophagan eggs still adhered to barbs of the under-wing coverts.

Our search for Mallophaga on 130 birds (representing 7 orders, 20 families, 44 species) collected in southeast Kansas during several winter months has revealed that many individual hosts are louse-free. Of those infested, most harbored less than 20 lice and only three were infested with more than 100 lice. Heavy lice infestation in the instance mentioned herein may be due primarily to the inability of the host to preen itself efficiently.—J. C. JOHNSON, JR. AND CHARLES A. LONG, *Department of Biological Science, Kansas State College, Pittsburg, Kansas, April 25, 1959.*