

Relation of the Tail Length of Cock Ring-necked Pheasants to Harem Size.—During the winter of 1953–1954, Donald Reid, a graduate student in the Department of Fisheries and Wildlife, Michigan State College, trapped 29 cock pheasants and marked them by cutting off their tails and placing a colored plastic band around the neck of each. This was done on the Michigan State College Farm, East Lansing, as part of a study of winter movements away from concentration points. The following spring between April 12 and May 21, it was noted that a marked difference existed between the numbers of hens seen with marked and unmarked cocks. During this period, individual marked cocks were observed 41 times. Three times a hen was with the cock; the other times the cock was alone. Individual unmarked cocks were observed 241 times. On 130 of these occasions, the cock was alone, 36 times one hen was present, 28 times there were two hens, 18 times three, 16 times four, 5 times five, 3 times six, once eight, and once nine hens were present. The differences between individual marked and unmarked cocks both with respect to the number seen alone and to harem size are highly significant statistically ($P < 0.001$). Observations of two or more cocks together were not included in these tabulations.

At the time the spring observations were made, in only 17 of the 41 observations of marked cocks was a colored neck band seen. Sixteen of the 17 with both neck band and bobbed tail and 22 of the 24 with only the bobbed tail were without hens. This difference was not significant and suggests that presence of a neck band probably had no effect on the ability of cocks to attract hens.

Following the logic of Tinbergen (Wilson Bull., 60: 6–51, 1948) the long tail of the male may be a sign stimulus which acts as a visual releaser to evoke the attentiveness of hens. This seems plausible when it is realized that the courtship display of the cock pheasant involves the spreading of the tail while moving before the hen. This may be similar to the situation described by Tinbergen in sticklebacks (*Gasterosteus aculeatus*). He observed that females of this fish were attracted to models of males with red abdomens but showed no interest in identical models in which the abdomens were not red.

There are two factors operating on the study area which may have tended to accentuate the disadvantage at which tailless cocks were placed. First, in this un hunted population, the sex ratio was about even. There was 1 cock per 1.05 hens in April and May based on 651 observations. Second, judging from roadside counts and counts of crowing cocks made in connection with other studies, the population density was high compared with most Michigan areas. Under the highly competitive conditions of an equal sex ratio and high populations, it seems possible that the lack of a tail might result in a more pronounced courtship disadvantage than under the more common circumstances of distorted sex ratios and lower population densities.—**ALFRED D. GEIS and LUCIEN H. ELBERT**, *Zoology Department, Michigan State University, East Lansing, Michigan.*

Eastern Meadowlark (*Sturnella magna*) Eating a Traffic-killed Bird.—The note by Paul A. Stewart (Auk, 72: 83–84, 1955), about a captive Tufted Titmouse (*Parus bicolor*) feeding on the carcass of one of its own species, recalled to me a similar observation I made on a wild meadowlark near Bath, New York, on July 5, 1939.

A freshly-killed meadowlark, partly smashed by automobile traffic, lay near the edge of a well-traveled concrete highway. As I neared the spot in my car, I saw a bird tugging at the carcass. It was an Eastern Meadowlark, and as I stopped to watch, I clearly saw this bird pull off and eat bits of flesh from the dead bird.

Common Grackles (*Quiscalus quiscula*) have several times killed and eaten the brains and flesh of English Sparrows (*Passer domesticus*) that came too near the grackles at the birdbaths and feeders in my backyard bird sanctuary on Long Island. Other observers have reported this same phenomenon (i.e. Poor, Proc. Linn. Soc. N. Y., 54-57: 54-55, 1946, and Mayfield, Wilson Bull., 66: 271, 1954).

R. M. Lockley in his book, "I Know an Island," p. 182, 1939, told an unusual food-habits story of a Water Rail (*Rallus aquaticus*), a European bird that resembles our North American Virginia Rail (*Rallus limicola*). A bird-bander trapped, "ringed," and then released the Water Rail in a garden aviary on Shetland Island, north of Scotland, in Great Britain. The Water Rail, which was thought to be wholly insectivorous, devoured a quail in the enclosure the first night, and on the next day ate a Snow Bunting and a Green Finch "picking out the meat and leaving the skins and bones clean."

The Water Rail and our Common Grackle are examples of insect-eating birds that may at times be predatory on other birds. The Chuck-will's-widow (*Caprimulgus carolinensis*) is another highly insectivorous species that food-habits research has shown to be a seasonal if not regular eater of small birds. However, the behavior of the Meadowlark, in eating the flesh of one of its own kind, was scavenger-feeding, not predatory.

These records suggest that birds which we little suspect of meat-eating tendencies may be easily induced to eat meat, if it is available to them. I have fed and cared for (both adult and young) swallows, nuthatches, robins, catbirds, bluebirds, warblers, and other ill or injured songbirds until they were able to shift for themselves. All of them ate raw ground hamburger and canned dogfood. Red meat is rich in protein, and, at least temporarily, is a strengthening and satisfying substitute for the natural foods of insectivorous species. Zoo keepers use ground meat, preferably raw beef, in the diets of practically all insectivorous birds. I see no reason why almost any wild songbird might not be inclined to eat meat if it had the opportunity. —JOHN K. TERRES, *National Audubon Society, 1130 Fifth Avenue, New York 28, New York.*

Mourning Dove and Dickcissel on the Atlantic Ocean.—I crossed the Atlantic Ocean on the "African Dawn," which sailed from New York for the Azores on November 1, 1954. Shortly after sailing, a low pressure area moved up the coast, reaching New York about November 3 and continuing on towards Nova Scotia. During the day and night of November 3, winds reached gale force. At 3:00 P.M. on November 4, a Mourning Dove (*Zenaidura macroura*) alighted on the ship. At that time, our position was 39° 45' N., 57° 47' W. During the remainder of the afternoon, it made short flights over the water but always returned, and stayed most of the time on deck. It spent the night on board and took off from the ship at 8:00 the following morning.

An hour later (November 5, at 9:00 A.M.) a Dickcissel (*Spiza americana*) flew on board. It appeared much more exhausted than the Mourning Dove had been and spent most of the morning hiding about the rigging, although it made occasional short flights. At 12:30 P.M., while flying close to the ship, it fell into the waves. The noon position of the vessel was 39° 33' N., 49° 58' W. This point is approximately 1,116 nautical miles from New York.

It seems probable that both of these birds were caught by the storm during migration. The Mourning Dove has been recorded on several occasions from the Bermudas.—DONALD W. LAMM, *American Consulate General, Accra, Gold Coast.*