

Dead fish as a source of food for various birds.—Late in the third week of March, 1954, leakage of an ammonia compound from a nearby industrial plant seemingly was responsible for the death of most, if not all, of the plant and animal life in Arbor Lake, a 15 acre reservoir within the city limits of Grinnell, Poweshiek County, Iowa. The shallow water and banks of the lake were littered with the bodies of six species of fish including carp (*Cyprinus carpio*), golden shiner (*Notemigonus crysoleucas*), bluntnose minnow (*Pimephales notatus*), black bullhead (*Ictalurus melas*), smallmouth bass (*Micropterus dolomieu*), and green sunfish (*Lepomis cyanellus*), as well as other types of animals including crayfish (sp.?), leopard frogs (*Rana pipiens*) and painted turtles (*Chrysemys picta*).

Late in the afternoon of 26 March, a Robin (*Turdus migratorius*) was observed swallowing whole fish, either small golden shiners or bluntnose minnows, or both. In the following two days, four inches of snow accumulated on the ground, making the normal food of many of the early spring bird migrants inaccessible. At the same time the daily temperatures dropped below freezing.

TABLE 1
BIRDS SEEN FEEDING ON DEAD FISH AT ARBOR LAKE, GRINNELL, IOWA, 30 MARCH 1954

<i>Species</i>	<i>Number observed</i>	<i>Remarks</i>
Pied-billed Grebe, <i>Podilymbus podiceps</i>	1	Eating whole minnows.
Killdeer, <i>Charadrius vociferus</i>	2	" " "
Common Snipe, <i>Capella gallinago</i>	1	" " "
Greater Yellowlegs, <i>Totanus melanoleucus</i>	2	" " "
Ring-billed Gull, <i>Larus delawarensis</i>	2	" " "
Common Crow, <i>Corvus brachyrhynchos</i>	4	Eating whole minnows and pieces of other fishes.
Robin, <i>Turdus migratorius</i>	2	Eating whole minnows.
Starling, <i>Sturnus vulgaris</i>	6	Eating pieces of various fishes.
Red-winged Blackbird, <i>Agelaius phoeniceus</i>	12	Eating whole minnows.
Brewer's Blackbird, <i>Euphagus cyanocephalus</i>	6	" " "
Common Grackle, <i>Quiscalus quiscula</i>	75	Eating whole minnows and pieces of other fishes.

On the morning of 30 March, 11 species of birds were observed feeding on dead fish in the ice and snow at the edge of the lake (see Table 1). Observations were made with the aid of 8× binoculars. The only other species of birds seen near Arbor Lake in this four-day period were Mourning Doves (*Zenaidura macroura*), Yellow-shafted Flickers (*Colaptes auratus*), Downy Woodpeckers (*Dendrocopos pubescens*), White-breasted Nuthatches (*Sitta carolinensis*), and Tree Sparrows (*Spizella arborea*). None of these was seen feeding on any of the fish.

While some of the birds listed in Table 1 do occasionally feed on fish, the others are usually not thought of as fish-eaters. Perhaps, therefore, the latter were utilizing dead fish as emergency food.—HENRY G. WESTON, JR., *Department of Biological Sciences, San Jose State College, San Jose 14, California.*

Notes on the nesting burrow and the young of the Puerto Rican Tody (*Todus mexicanus*).—The Puerto Rican Tody, as do the other four species of Greater Antillean todies, deposits its eggs in an unlined burrow that it excavates in the ground. For this reason the young are not often noted. The following account appears to be the only published reference to the young of the Puerto Rican species.

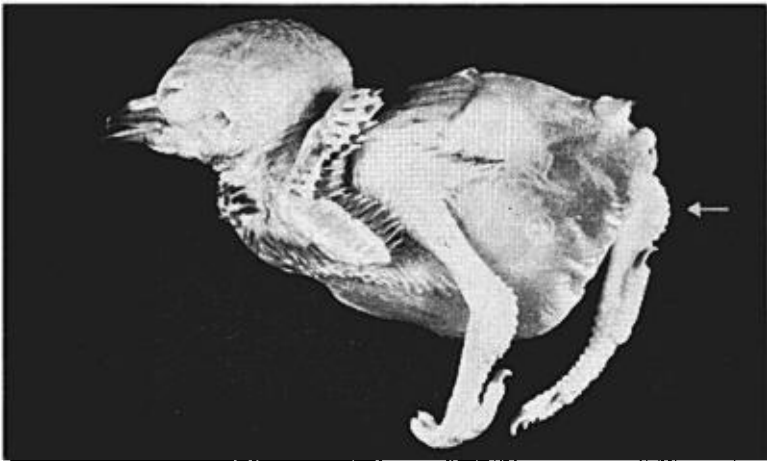


Figure 1. Nestling of the Puerto Rican Tody (*Todus mexicanus*). Arrow indicates fleshy protuberance mentioned in text. $\times 2.4$ diameters.

On 20 June 1961, a burrow was located at Las Mesas, Mayagüez, Puerto Rico, 14 inches (35.6 cm) above a road-bed in the side of a small cliff. The entrance to the burrow was one and one-quarter inches (32 mm) in diameter and the burrow extended for 11 inches in a straight line into the side of the cliff. Two nestlings, of an estimated age of from three to five days, were in the terminal chamber of the burrow. Pieces of eggshell were also noted.

The following data were taken from one nestling: weight, 3.6 g; total length, 37 mm; greatest width of skull, 10.9 mm; length of manus, 9.1 mm; length of forearm, 10.0 mm; and length of tarsus, 8.0 mm. All feather tracts were visible as faint dots beneath the skin except the alar, humeral, femoral, and ventral. These tracts had feathers already broken through the skin for a maximum length of 2 mm. The specimen in question exhibited fleshy-scaly protuberances at the joint between the tibiotarsus and tarsometatarsus (Figure 1). At the time of preservation, the nestling was a bright pink in hue.—FRANCIS J. ROLLE, *Biology Department, University of Puerto Rico, Mayagüez, Puerto Rico.*