

swarm, and the 3 species attending the swarm were silent for the entire time. The ant species was not identified.

In conjunction with Hilty's observations (op. cit.) it appears that the paucity of reports of ant-attending birds at high altitudes may reflect the relative scarcity there of Doryline ants, and that where such ants occur, one may anticipate that some bird species will attend them. It is unlikely that professional ant-followers (in the sense of Willis, *Ecology* 47:667-672, 1966c; Oniki and Willis, *Acta Amazonica* 2:127-151, 1972), could maintain themselves more than marginally at such altitudes. Willis (pers. comm.) notes that *Myrmeciza immaculata* is probably such a professional, but its altitudinal range is mainly below 1700 m. In view of the scarcity of raiding ants, ant-attending birds of subtropical forests should be mainly non-professional opportunistic species, offering an interesting chance to study their behavioral interactions in the absence of professionals. Very often the most interesting insights into complex ecologic situations come from observing phenomena at the extremes of a range where atypical events are likely to occur. Further investigation of birds at high altitude swarms will provide opportunities to extend observations made at low elevations.

Our field work in Colombia benefited in many ways from the kind assistance of the late Dr. F. Carlos Lehmann whose death has meant a severe loss to neotropical ornithology. Field work at Rancho Grande was made possible by Dr. Gonzalo Medina, and we very much appreciate the advice and assistance of Paul Schwartz. Robert Gochfeld and Michael Kleinbaum participated in both trips. We thank Steven Hilty, Edwin O. Willis, and Yoshika Oniki for comments on the manuscript.—MICHAEL GOCHFELD, *Field Research Center, Rockefeller Univ., Millbrook, NY 12545*, and GUY TUDOR, *380 Riverside Drive, NY 10025*. Accepted 17 Dec. 1976.

Fishing behavior of Black and Turkey vultures.—Black and Turkey vultures (*Coragyps atratus* and *Cathartes aura*) are usually characterized as carrion feeders, though both species have occasionally been observed taking live prey (e.g., Bent, U.S. Natl. Mus. Bull. 167, 1937; Mueller and Berger, *Auk* 84:430, 1967; Gladding and Gladding, *Condor* 72:244-245, 1970; Bang, *J. Morph.* 115:153-164, 1968). While both species are known to include fish in their diet, it has usually been assumed that the fish were obtained as carrion. Bendire (U.S. Natl. Mus. Spec. Bull. 1, 1892) however collected a Turkey Vulture which had a crop gorged with "fresh" small minnows, at least suggesting the possibility that the fish were taken alive. While discussing these species, we discovered that each of us had observed vultures fishing and decided to collaborate in the presentation of our observations. Our observations include apparent fishing by Black Vultures in Virginia and Mississippi and by a Turkey Vulture in Florida.

Virginia.—Just before dusk on 2 January 1975, in the Radford Army Ammunition Plant, 14 km west of Blacksburg, Virginia, Prather and Conner observed Black Vultures engaged in a behavior which looked like fishing. Beneath a large roost (Prather et al., *Wilson Bull.* 88:667-668, 1976) on the banks of the New River, 5 vultures stood along the bank and peered into the water. Three others on fallen limbs jutting out over the river assumed positions much like that of the Green Heron (*Butorides virescens*; Bent, U.S. Natl. Mus. Bull. 191, 1950) when fishing from a perch. A continuous rain of excrement from the roosting birds above peppered the river. This may have attracted fish. From a distance of 0.5 m above the water, one of the Black Vultures suddenly pushed with its legs and dove into the river. The bird's head and body were completely sub-

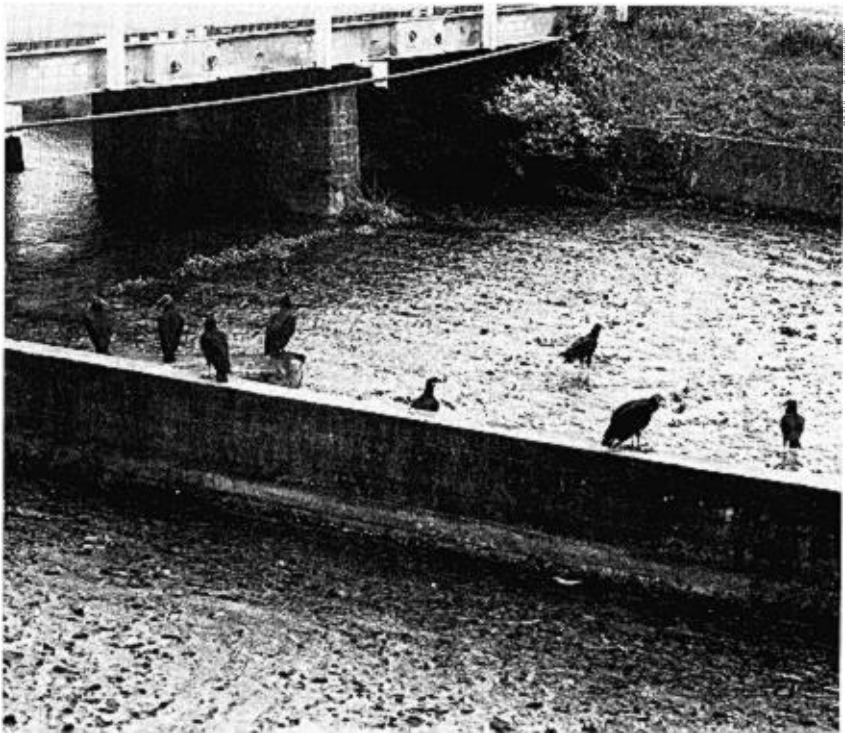


FIG. 1. Black Vultures "fishing" at a spillway, Bluff Lake, Noxubee National Wildlife Refuge, Mississippi.

merged, though it held its wings out of the water. The vulture immediately surfaced and made its way to shore. The success of the vulture's efforts could not be determined.

This behavior, minus the culminating immersion, was again witnessed on 4 subsequent occasions in the month that followed. The river bank beneath the roost was searched for fish remains or other sign, but none were found. However, all perches which jutted low (.5 to 1.0 m) over the water and were greater than 8 cm in diameter were worn smooth on the top surface, presumably by perching vultures.

Mississippi.—At 09:00, on 11 May 1976, Jackson observed 19 Black Vultures standing in the water or on concrete next to the water at the spillway of Bluff Lake on Noxubee National Wildlife Refuge, Oktibbeha County, Mississippi. One of the vultures in the water was feeding on the head of a large dead fish that had apparently washed over the spillway. Others stood motionless facing upstream or across the current (Fig. 1). Occasionally one would grab at something with its beak and one foot. One vulture captured a 6-8 cm live fish in this manner. Humans frequently fish near the spillway and undesirable fish—often injured or dead—are tossed out on the bank or back into the water. Vultures previously had been seen feeding on dead fish on the bank. Injured or dead fish in the water would be a little more difficult for the vultures to obtain but might be relatively easy to catch as they washed over the spillway.

Florida.—At about 17:20, on 20 May 1976, in the East Wilderness area of Fish-eating Creek Campground, Glades County, Florida, Gaby watched a Turkey Vulture from about 10 m as it landed on the sloping bank of Fish-eating Creek. The vulture walked down the bank to the creek and into the water to a depth at which the water was almost in contact with its belly feathers. Then the bird began, apparently, to search for something in the water. It made several stabs at the surface with its bill and, at the same time, spread its wings as if for balance. When it raised its head it had a wiggling fish, approximately 10 cm long, in its bill. The vulture walked back to shore where it consumed its catch. After eating the fish, the vulture reentered the water and made additional attempts at “fishing” which were not successful.

These instances, while probably not representative of typical vulture behavior, indicate a potential for using different foraging tactics. At a time when “traditional” vulture food may be becoming less available, perhaps more aggressive and more opportunistic foraging tactics will be selected for.

We wish to thank Oscar Owte and Ren Lohofener for helpful comments on various parts of this note.—JEROME A. JACKSON, *Department of Zoology, Mississippi State University, Mississippi State 39762*; IRVINE D. PRATHER AND RICHARD N. CONNER, *Department of Biology, Virginia Polytechnic Institute and State University, Blacksburg 24061*; AND SHEILA PARNES GABY, *Department of Biology, University of Miami, Coral Gables, FL 33124. Accepted 18 Dec. 1976.*

A new hybrid warbler combination.—An unusual warbler captured in a mist net on 12 October 1967 at Nantucket, Nantucket Co., Massachusetts, was preserved as a specimen by Baird who suspected that it was a hybrid. It was a female with an incompletely ossified skull and weighed 12.0 g. On comparison with other preserved material, the bird was tentatively identified as a hybrid Yellow-rumped (Myrtle), *Dendroica coronata*, × Bay-breasted, *D. castanea*, Warbler. It was similarly and independently identified by Banks after comparison with material in the National Museum of Natural History. This hybrid combination was not mentioned by Gray (Bird Hybrids, Commonwealth Agric. Bur., Farnham Royal, Bucks, England, 1958) and has not, to our knowledge, been reported in subsequent literature. The following comparative description is based on immature (first fall) females of the presumed parental species.

The hybrid Myrtle × Bay-breasted Warbler (USNM 567882) is very similar dorsally to a Blackpoll Warbler (*D. striata*) and might easily be mistaken for that species at a glance. It is, however, slightly darker and somewhat grayer. The back and nape color is intermediate between the rather bright yellowish-green of the Bay-breast and the brownish of the Myrtle. The crown of the hybrid is lighter than the back, approaching the color of the Bay-breast. Feathers of the crown have, distal to the basal gray area, a small spot of white along the rachis and a suffusion of yellow extending onto the vanes; the tips of these feathers are green. Neither the white nor the yellow is as extensive as in the Myrtle Warbler. There is a yellowish cast on the rump feathers of the hybrid, but none of these feathers has the bright yellow tip characteristic of the Myrtle. The upper tail coverts are edged with silvery gray, as are those of the Myrtle, in contrast to the green-tipped gray coverts of the Bay-breast.

The ventral body surface is essentially plain, with a faint band of dark spots across the breast. Some of the flank feathers, particularly the more posterior ones, have dark