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Courtship Feeding Behavior in the Mangrove Cuckoo (*Coccyzus minor*)

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Near 11:00 of 4 May 1989 on the West Lake Mangrove Trail in Everglades National Park, Dade County, Florida, I observed courtship feeding behavior between two Mangrove Cuckoos (*Coccyzus minor*). The birds were in red mangroves (*Rhizophora mangle*) about 6 m away. On my left I heard and saw a male Mangrove Cuckoo emit a single, guttural note four or five times, and on my right the female answered six or seven times with a low guttural different note that verbalized as "squirt". Then the male, with a spider in his bill, flew to the perched female. He landed on her back and fed her. While the male offered the spider from above, the female twisted her neck and tilted her head so that her bill pointed skyward and accepted the spider with neither begging involved nor copulation occurring.

In describing the courtship feeding behavior of the Yellow-billed Cuckoo (*C. americanus*), J. H. Bowles (*in Bent* 1940) wrote, ". . . I saw the male suddenly fly past with a large green worm in his bill. He flew directly to the female, who was perched in a tree a few yards distant, and for a moment or two they sat motionless a few inches apart looking at each other. The male then hovered lightly over his mate and, settling gently upon her shoulders, gracefully bent over and placed the worm in her bill." Potter (1980) also describes feeding during copulation by Yellow-billed Cuckoos.

Spencer (1941) reported that although the male Black-billed Cuckoo (*C. enthroptalmus*) had food in his bill during several attempts to copulate, no courtship feeding was observed despite 94 hours of observation. Potter (1980) wrote that ". . . a search of the literature has revealed no other description of insect passing . . ." for both Yellow-billed and Black-billed cuckoos. However, Ehrlich (1988) mentioned courtship feeding for the Black-billed Cuckoo, but provided no details. Since then, Nero (1988) watched an exchange of food during copulation of Black-billed Cuckoos.

To my knowledge, courtship feeding has not previously been described for the Mangrove Cuckoo, for which details of courtship behavior are known (Ehrlich 1988). The behavior appears, however, to be quite similar to that of Yellow-billed and Black-billed cuckoos.

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St. Augustine Christmas Bird Count 1988

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Due to circumstances beyond the control of most of the participants, the St. Augustine, Florida, Christmas Bird Count for 1988 was not submitted on time and failed to be published in *American Birds*. One of the values of the annual Christmas bird counts is they can provide a sample of winter bird populations in a given area on a long-term basis. Therefore, a hiatus in the data for an entire year lessens the value of the entire mass of data by an appreciable amount. For this reason it is desirable to make these data available to investigators. The results of the 1988 St. Augustine count were as follows:

Date: 17 December, 1988; 05:00-19:45 hrs. Temperature 30 to 52 F. (-1 to 11.1 C.), wind N-NW, 10-23 mph (16-37 kph). Twenty-two observers in 8 parties: owling 5.5 miles (8.8 km), non-owling 31.3 miles (50 km). Total party hours: 76.5; total party miles 370.5 (592.8 km); 18 hours and 315.5 miles by car (507.2 km); 50 hours and 19 miles (30.4 km) on foot; 34 miles (54.4 km) and 8.5 hours by boat.

Red-throated Loon 1; Common Loon 8; Pied-billed Grebe 24; Northern Gannet 19; American White Pelican 26; Brown Pelican 596; Double-crested Cormorant 391; Great Blue Heron 125; Great Egret 137; Snowy Egret 104; Little Blue Heron 70; Tricolored Heron 53; Cattle Egret 2; Green-backed Heron 8; Black-crowned Night-Heron 152; White Ibis 245; Wood Stork 37; Wood Duck 11; Green-winged Teal 7; Am. Black Duck 2; Mallard 50; Ring-necked Duck 3; Lesser Scaup 10; Hooded Merganser 72; **Common Merganser** 1 (careful study, Loftin party); Red-breasted Merganser 128; Ruddy Duck 1; duck sp. 7; Black Vulture 17; Turkey Vulture 129; Osprey 19; Bald Eagle 3 (2 adult, 1 immature); Northern Harrier 24; Sharp-shinned Hawk 3; Cooper's Hawk 2; accipiter sp. 1; Red-shouldered Hawk 6; Red-tailed Hawk 32; American Kestrel 29; Merlin 1; Northern Bobwhite 1; Clapper Rail 48; Sora 4; Common Moorhen 33; American Coot 8; Black-bellied Plover 99; Wilson's Plover