

Variations in plumage of male and female *Pipra aureola*.—Snow (*Zoologica*, 47: 195, 1962) states that female Golden-headed Manakins (*Pipra erythrocephala*) on Trinidad, West Indies, regularly have a few feathers characteristic of the male in the plumage of the head and body, and that, in birds trapped more than once, the number and distribution of these feathers remained much the same from year to year. Immature males may also have a few adult male feathers on the head and body; thus, immature males cannot be separated from adult females on the basis of plumage.

I found this to apply also to Crimson-hooded Manakins (*Pipra aureola*) that I collected in Surinam. The adult male of this species is black, except for the head, breast, and abdomen, which are bright red shading to orange anteriorly; the female is olive green above and yellowish green below.

I collected six females having red male-type feathers in their plumage:

December 25, 1958.—Two birds, each having a single red feather in the crown; ovary in both specimens undeveloped.

March 27, 1960.—One bird with numerous red feathers on the lower part of the crown and on the breast; ovary slightly enlarged. The plumage of this female is the most extreme that I have encountered. The bird was collected at the moment it alighted near two males which were sitting together on a branch.

August 28, 1960.—One bird with a single red feather in the crown; ovary undeveloped.

March 15, 1962.—Two birds, each having a single red feather in the crown; ovary in both specimens slightly enlarged.

I have previously noted the occurrence of an adult male *Manacus manacus* in the green plumage of the immature, an adult male *Pipra erythrocephala* in the green plumage of the immature (with a single orange feather in the crown), and an adult male *Pipra pipra* with remnants of the green plumage of the immature. All of these had greatly enlarged testes indicative of sexual maturity (F. Haverschmidt, *Ibis*, 100: 626, 1958). This occurs also in *Pipra aureola*, since on 6 August 1961 I took a male in green plumage (with several red feathers on the lower neck and on the crown). This bird had greatly enlarged testes.

All specimens mentioned in this note are now in the Leiden Museum.—F. HAVER-SCHMIDT, *Paramaribo, Surinam*.

Predation on birds by the Cattle Egret.—On 6 May 1962 I watched a Cattle Egret (*Bubulcus ibis*) swallow an adult male Blackpoll Warbler (*Dendroica striata*) at Garden Key, Fort Jefferson National Monument, Dry Tortugas, Florida. The capture of the warbler was observed, shortly before my arrival, by some of my companions. Immediately after the swallowing of the warbler the egret began stalking another male Blackpoll Warbler resting on the beach nearby. When the egret was about four feet away, the warbler escaped by flying weakly to a nearby bush.

On 5 January 1963 I saw a Cattle Egret eating a Myrtle Warbler (*Dendroica coronata*) in a mowed field in front of the Flamingo Visitors' Center, Everglades National Park, Florida. Swallowing was hindered by eight other Cattle Egrets, which constantly pursued the egret which had the warbler. The feet and tail of the warbler protruded from the bill of the egret. When the warbler was disgorged and dropped to the ground, the other Cattle Egrets rushed toward it. The first egret then picked up the warbler to resume swallowing it. The other egrets then dispersed and resumed insect hunting.

Approximately 300 Myrtle Warblers were feeding on the ground among the Cattle Egrets.

The only other instance of avian predation by the Cattle Egret of which I am aware was that observed by Alexander Sprunt IV (R. S. Palmer [ed.], *Handbook of North American birds*, vol. 1, New Haven, Connecticut, Yale Univ. Press, 1962; see p. 448), who saw a Myrtle Warbler swallowed by a Cattle Egret at Clewiston, Florida, 3 February 1958. Palmer (*op. cit.*) gives no records of predation by Cattle Egrets on birds in the old world. Apparently this seldom or never occurs, as investigation of such appropriate general and regional sources as Baker, Bannerman, Mackworth-Praed and Grant on Africa, and Witherby *et al.* (*Handbook of British birds*, London, Witherby, 1938-1941), fail to reveal any records of predation on birds by the Cattle Egret. McLachlan and Liversidge (*in* A. Roberts, *The birds of South Africa*, Cape Town, Cape Times Ltd., 1957; see p. 61) list "young birds" as food items for the Cattle Egret, but do not indicate species or frequency of consumption.

Predation by the Cattle Egret on birds may occur elsewhere, perhaps more frequently than presently known, but it seems highly possible to me that Cattle Egrets may have been conditioned to this habit in the Dry Tortugas due to the scarcity of insect food there. At these remote islands I have found four dead and three dying Cattle Egrets, plus dead passerine birds of several species, presumably the results of exhaustion or starvation or both. The Tortugas are much used as a resting area for migrant birds, including Cattle Egrets. The small numbers of insects present are gleaned by the many passing migrants. Many small passerine birds are found on the ground, exhausted, and afford easy prey. Killing of healthy birds could even result from experience gained by feeding upon dead or dying birds lying on the ground. Other ornithologists who visited the Dry Tortugas in May and June, 1962, also observed small birds being eaten by Cattle Egrets. Dr. William B. Robertson, Jr. (pers. comm.), observed Cattle Egrets soaking warblers in fresh water before swallowing them.—RICHARD L. CUNNINGHAM, *Everglades National Park, Flamingo, Florida.*

Wing-stretching of Red-bellied Woodpeckers.—Kilham (*Auk*, 76: 527-528, 1959) first called attention to the probability that the typical synchronized leg-wing stretch movement of many members of the class Aves (Eibl-Eibesfeldt and Kramer, *Quart. Rev. Biol.*, 33: 181-211, 1958) was not found in woodpeckers. Members of the family Picidae stretch one wing down while keeping both feet firmly planted. I have found in my studies of the Red-bellied Woodpecker (*Centurus carolinus*) a somewhat different behavior pattern than that reported by Kilham.

In approximately 900 hours of observations of this woodpecker in 1962 near Carbondale, Illinois, I observed wing-stretching on many occasions. Typically, it was divided into two phases. First, a bird would extend both wings backward and downward, below the longitudinal axis of the body; the primaries at the culmination of the phase would be spread and would extend beyond the tip of the tail. The bird would then return its wings to a normal position along the back. The second phase, which would follow without any appreciable break, involved raising the wings so that they were perpendicular to the back, although the plane of the manus was still parallel to the longitudinal plane of the body (the "double wing-neck stretch" movement of Eibl-Eibesfeldt and Kramer, *op. cit.*: 183). On only one occasion did I see a bird omit phase two when stretching its wings.—DAVID W. STICKEL, *Department of Zoology, The University of Texas, Austin, Texas.*