*Minnus gilvus*, Mockingbird. When Belcher & Smooker wrote, the Mockingbird had reached ten or twelve miles along the main road east from Port-of-Spain. It now occurs on Waller Field, as far east as Valencia, and has penetrated four miles up the Arima Valley, though there are few spots in the valley that are suitable for it.

Dendroica striata, Blackpoll Warbler. Dr. Beebe has several records of this migrant warbler round Simla in the winter and early spring months. I have not yet seen it in the Arima Valley, but saw a male near Sangre Grande on April 2nd. Apparently it winters in some numbers in Trinidad but has not been recorded before.

Dendroica castanea, Bay-breasted Warbler. I saw a male nearly in full breeding plumage at Simla on March 8th 1957. This migrant warbler, whose winter range includes Panama and Colombia, has not been recorded before from Trinidad.

Habia rubra, Cardinal Ant-tanager. One of the characteristic birds of forest at 500-1800ft., nesting along the banks of streams. It keeps low down and is not always easy to see, but one rarely walks far along a forest trail without hearing its harsh ratchet-like call.

*Piranga rubra*, Summer Tanager. A striking all-red tanager, with a pale yellow-brown beak, was seen on July 30th by myself and two other observers at the pass at the head of the Arima Valley, 1800 ft. It can only have been a male Summer Tanager, a species previously recorded only as a rare migrant from the north. Further observations of this species are needed.

# NOTES ON THREE HUMMINGBIRDS\*

#### By G. A. C. Herklots

Florisuga mellivora mellivora (Linnaeus). Florisuga mellivora tobagensis Ridgway. Jacobin. (Leotaud No. 72 as Topasa mellivora Linnaeus. Jacobine.) Length  $4\frac{1}{2}$  to  $4\frac{3}{4}$  inches. Bill 0.75 inch, straight, black. Male. The tail is pure white save for narrow black tips to the feathers; the terminal pair of upper tail-coverts are elongated and hide the white of the centre of the tail. There is a white half-collar on the back of the neck and the lower plumage is white. The rest of the plumage is glossy dark blue and metallic green. Female. The bréast is conspicuously scalloped, the feathers with grey centres glossed with green and broad white margins. The upper parts, including most of the tail, are bronze-green.

I have no information about its nesting habits. The species is widely distributed in Trinidad though nowhere is it common. I have seen it in the Northern Range in several places, e.g. the Ortinola valley and near Cumaca road gap and also in the Arena forest, Tamana hill, etc. It prefers to perch high up on exposed, bare twigs of trees near open paths in forest at all levels. The male appears to take a delight in displaying his white tail and underparts as he performs aerial manoeuvres high up. The Tobago form is slightly larger, slightly more common and occurs in the same type of habitat.

\*This article was contributed on the editors' request as a complement to the brief note on the same species which appears in Dr. Snow's article.

22

(Leotaud No. 75 as Anthoscenus longirostris (Vieill.). Star-throat. Mellisuga longirostris Vieil. Gorge Carmin.) Length 41/2 to 43/4 inches. Bill 1.4 inch, black, nearly straight. Male. Upper plumage bronze-green with a brilliant peacock-blue crown and a ruby-red throat. There is an elongated white patch or streak on the centre of the rump, not always visible, also a large and conspicuous tuft of silky white feathers on either side between flanks and rump, visible when wings are spread. The two outer pairs of tail-feathers have broad white tips; the next pair have only a white dot at the tip; the central pair bronze-green, darker at margins, the four other pairs with basal half bronze-green, blackish terminally. There is a small white spot behind the eye and a white moustache. Underparts brownish-grey with a central white stripe which broadens on abdomen and vent. Female. Like the male but crown dull metallic green, the black throat patch larger and with only an occasional feather reflecting ruby-red; the grey of underparts paler, the white central stripe more conspicuous and the white moustache broader.

Breeding, but no data. Believed to be very rare but I know it from Waller fiield, Edinburgh field, the Platenal and near the Aripo cave. On 29th April 1956 I watched a female feeding a young bird ; the male was nearby but was not seen to feed the young. The species was seen again in the same vicinity on Waller field in May and August. A bird of bush savannah and the margins of woodland. Not Pobago.

Lophornis ornatus (Bodd.). Tufted Coquette. (Leotaud No. 76 as Mellisuga ornata Bodd. Huppe-col.) Length  $2\frac{1}{2}$  to  $2\frac{3}{4}$  inches. Bill o.4 inch, black, slightly curved. Male. A high, pale chestnut, occipital crest which is elevated transversely; a tuft of feathers on each side of neck white or chestnut tipped with green. Upper plumage bronze-green; a narrow white band across lower back; upper tail-coverts dusky-brown; tail rounded, deep chestnut, the feathers edged with dark brown. Abdomen duller bronze-green; under tail-coverts edged dark chestnut. Female. Differs from male in absence of crest and tufts and in the entire under surface cinnamon; the upper parts are of a more sombre green; the rump patch is conspicuous.

Breeding in February. The nest is small, built of plant-down saddled on the branch of a shrubby plant such as a pigeon-pea. A rare and local species showing a preference for cultivated gardens especially where pigeon-peas are grown. The birds appear to move from one locality to another during the year and females appear to be much more common than males. I have records from Waller field, near the Caura dam, on the old Tucuche road, high up on the Chaguaramal trace, at the top of Mount Tabor and high up the La Laja trace. It is said to be common near Tacarigua. Not Tobago.

### PESTIFEROUS TRINIDADIAN SANDFLIES<sup>(1)</sup>

# BY THOMAS H. G. AITKEN

### (The Trinidad Regional Virus Laboratory, Port-of-Spain)

A<sup>T</sup> certain times of the year and in varying situations, man is plagued by the painful attacks of minute flies known as sandflies. These insects are variously known as "punkies", "no-see-ums", biting midges, Kaboura flies, on

23

<sup>(1)</sup> The studies and observations upon which this paper is based were conducted with the support and under the auspices of the Government of Trinidad and Tobago, the Colonial Development and Welfare Scheme and The Rockfeller Foundation.