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A LIST OF BIRDS AND THEIR WEIGHTS FROM SAÜL, FRENCH GUIANA

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French Guiana, a department of France, is both the least developed and most sparsely populated of the Guianas and, with the exception of minor perturbations caused by scattered small villages, the avifauna and habitats of the interior parts of the country are little disturbed by human activity. Much of French Guiana is untouched rainforest and the area around Saül (03°37'N, 53°12'W) 175 km SW of Cayenne comprizes many of the tallest forest stands in the country (R. A. A. Oldemann, pers. comm.). Access to the interior is by small boat navigation of rivers and streams or by small planes. Most investigators who have studied the avifauna of the country have worked along the coast or major rivers (Ménégaux 1904, 1907, 1908; Von Berlepsch 1908a, 1908b; Penard and Penard 1908, 1910; Berlioz 1962). In contrast, the Saül site is not near a major river and only Tostain (1980) has reported on birds of the Saül area.

The region in which Saül is located is hilly, largely covered with dense mature rainforests with some land cleared for agriculture. An airstrip 6 km SE of Saül and the road leading to Saül from the NE are bordered by secondary growth forest dominated by trees of the genera *Cecropia, Musa,* and *Artocarpus*. Many introduced fruit (*Citrus* spp., bread fruit [*Artocarpus*], Mango [*Manigtera*], avocado [*Persea*]) and palm (*Arecaceae*) trees grow in the village of Saül. On the outskirts of Saül there is a 400m² area of open grassland formerly used for agriculture, but abandoned for that purpose after the soil nutrients were leached out.

Through the efforts of O.R.S.T.O.M. (Office de la recherche scientifique et technologique d'Outre-mer) foot paths have been cut through local forest in preparation for the establishment of a national park in the area.

Within a few kilometers of Saül the hills are covered with tall trees (40 m) with enormous buttresses. Undergrowth there is very sparse due to the heavy canopy layer and rapid leaching. Our goals were to survey the local avifauna in mid-winter and spring and to obtain weights not previously available for many species.

METHODS

From 23 April to May 1976, J. A. Dick and W. B. McGillivray obtained a reference collection of bird specimens and studied aspects of the natural history and ecology of the avifauna of the Saül area. In 1977, from 21 January–27 February, W. B. McGillivray with D. J. Brooks returned to Saül to continue the fieldwork. The specimens acquired during the first trip are housed in the Royal Ontario Museum (ROM), Toronto, Canada and those of the second trip in the Museum of Natural History, University of Kansas (KU), Lawrence, Kansas.

In 1976, J. A. Dick and W. B. McGillivray set 10, 12-m mist nets in a row in mature rainforest 3 km SE of Saül. The families Apocynaceae, Bursaraceae, Lecythidaceae, Sapo-taceae, Leguminosae, Rubiaceae, Anacardiaceae, Moraceae and Arecaceae were conspicu-ously represented in the rainforest. Most acquisition in 1976, apart from netted birds, was done along the road to the airstrip or near the airstrip itself. In 1977, mist nets were set up in the same area as in 1976. Also in that year, two nets were placed at heights of 10 and 15 m near a flowering *Miconia* tree along the airport road. In addition in 1977, five other nets were positioned along a creek bed in secondary growth 1 km E of the village. Common trees at that site were of the families Euphorbiaceae and Leguminosae.

The rainy season in French Guiana in part encompasses April and May; unstable weather with frequent rain is expected at this time. During the 1976 field season, Saül received an above average amount of precipitation (40 cm in 21 days). January and February are transition months between dry and wet seasons. Nevertheless, prior to our arrival heavy rains fell in 1976 in both of these months.

Mist nets were checked at least four times a day from 07:30 to 17:30. After the final daily visit at 17:30 the nets were furled to prevent damage at night by bats. The nets were opened the next morning 1 h prior to the first net check at 07:30. Between net checks one or two sorties searching for birds were made per day that covered from 3–6 km from the main net set.

We follow the nomenclature of Morony et al. (1975) for species and Peters et al. (1934– 1979) for the subspecies.

SPECIES ACCOUNTS AND COMMENTS

Great Tinamou (*Tinamus major*). – Downy young male (ROM 125756) 71 g, 16 May 1976; adult male (KU 72056) 970 g, 23 January 1977. *T. major* was not common near Saül, probably due to hunting pressures, although birds of the genus *Crypturellus* were heard frequently in the dense forest some distance from the village.

Variegated Tinamou (Crypturellus variegatus). – Immature male (ROM 125757) 250 g, 15 May 1976. This was a common species locally.

Rufescent Tiger-Heron (*Tigrisoma lineatum*). – Adult female (KU 72054) 965 g, 26 January 1977. Presence of this species was noteworthy because of the low level of water in the small creek along which the bird was taken during this dry season.

Swallow-tailed Kite (Elanoides forficatus). - We saw several individuals of this species

foraging on insects just above the canopy, 24 April, 2 and 13 May 1976 (see also McGillivray and Brooks 1979).

Double-toothed Kite (*Harpagus bidentatus*). – Adult male (KU 72071) 170 g, donated to the field crew 26 January 1977. The stomach of this bird contained insect remains.

Plumbeous Kite (*Ictinia plumbea*). – We observed this bird foraging above the canopy, 2 May 1976.

White Hawk (*Leucopternis albicollis*).—A single individual was seen perched 40 m up in a tree near the village, 25 April 1976.

Harpy Eagle (*Harpia harpyja*). – McGillivray noted seeing this species on 24 April 1976. An adult female (KU 71976) was found dead and was donated to the field crew by locals, 23 January 1977.

Red-throated Caracara (*Daptrius americanus*). – Flocks of up to 20 individuals were seen on 13 and 14 May 1976 in local mature forest.

Little Chachalaca (*Ortalis motmot*). – Adult female (KU 72021) 500 g, in breeding condition, 22 January 1977. This species was heard calling in thick secondary growth bordering the airstrip, 26 April 1976. The specimen was obtained at this site in 1977. Haverschmidt (1968) noted that it is usually found in the coastal or savanna areas in Surinam.

Marail Guan (*Penelope marail*).—Immature male (ROM 25758) 920 g, 12 May 1976; adult female (ROM 125760) 800 g, 15 May 1976; adult female (ROM 125759) 1000 g; adult male (KU 72081) 930 g, 29 January 1977. The specimens were obtained in mature forest. The adults had ova 2 and 3 mm in diameter, respectively.

Gray-winged Trumpeter (*Psophia crepitans*). – Adult male (KU 72080) 1050 g, with gonads enlarged, 20 February 1977. The *woo-woo-woo* call of this species is easily imitated by local hunters and used to attract birds for easy capture by them.

Solitary Sandpiper (*Tringa solitaria*). – Adult male (KU 72050) 40 g, 24 February 1977. Although Haverschmidt (1968) commented that *Tringa* winters inland, it was surprising to find a pair, from which our specimen came, wintering in a tiny clearing surrounded by thick forest.

Ruddy Ground-Dove (*Columbina talpacoti*). – Two adult males (KU 71851, KU 72066) 45 g, 50 g, 22 and 28 January 1977. This common species was found in open burns and open wet grassland.

Gray-fronted Dove (*Leptotila rufaxilla*). – Adult females (ROM 125761, ROM 126590) 175 g, 180 g, in breeding condition, 20 April and 15 May 1976. Adult female (KU 71826) 170 g, in breeding condition, 13 February 1977. This species was common in dense secondary growth.

Red-and-green Macaw (Ara chloroptera). – Adult male (KU 71831) 1250 g, donated to the field crew 30 January 1977. Tostain (1980) indicated that this species is new to Saül; however, de Schauensee and Phelps (1978) included the Guianas within the distribution of this species.

White-eyed Parakeet (Aratinga leucophthalmus). – Previously McGillivray positively identified individuals of this species, 24 April 1976. Three adult females (KU 71952, KU 71883, and KU 71531) 100 g, 140 g, and 155 g, 12, 14, and 16 February 1979; adult male (KU 71899) 154 g, 12 February 1977. Haverschmidt (1968) commented that A. leuco-phthalmus is not well known from the interior of Surinam.

Painted Parakeet (*Pyrrhura picta*). – Three adult males (KU 71804, KU 71925, KU 71926) 66 g, 67 g, and 65 g, 24 and 28 January 1977.

Blue-headed Parrot (*Pionus menstruus*). – Five adult males (KU 71939, KU 71940, KU 72082, KU 72034, KU 72039) $\bar{x} = 250 \pm 4.5$ g (242–254 g), in breeding condition, 28 January (2), 6 February (2), 8 February (1) 1977; adult female (KU 71940) 263 g, in breeding condition, 28 January 1977.

Dusky Parrot (P. fuscus). - Adult female (KU 71543) 198 g, with ovary enlarged, 5 February 1977.

Red-fan Parrot (*Deroptyus accipitrinus*). – Five individuals of this species were observed 25 April 1976 north of the airstrip. One bird was perched on a branch 10 m from the ground over the path and displayed its fan and vocalized in our presence.

Squirrel Cuckoo (*Piaya cayana*). – Two adult males (ROM 125762, ROM 126632) 100 g, 110 g, 2 and 8 May 1976; two adult males (KU 71859, KU 71521) 106 g, 112 g, 25 January and 5 February; three adult females (KU 71520, KU 71874, KU 72068) 108 g, 104 g, and 100 g, 25 January, 5 and 8 February 1977.

Smooth-billed Ani (Crotophaga ani). – Adult male (KU 72051) 106 g, in breeding condition, 21 February 1977. A small flock was seen at the Saül airstrip on 24 April 1976.

Spectacled Owl (*Pulsatrix perspicillata*). – Adult female (KU 72052) 850 g, found dead in grassland near Saül, 3 February 1977.

Lesser Nighthawk (Chordeiles acutipennis). – Adult female (KU 72063) 60 g, 6 February 1977, from the Saül airstrip. Usually found in savannas in Surinam (Haverschmidt 1968).

Blackish Nightjar (*Caprimulgus nigrescens*). – Adult male (ROM 125763) 35 g, 25 April 1976. This bird was flushed from the ground at the Saül airstrip, the only site where this species was encountered.

Band-rumped Swift (*Chaetura spinicauda*). – Three males (ROM 125766, ROM 125767, ROM 125768) 15.2 g, 15 g and 13.8 g, and three females (ROM 125764, ROM 125765, ROM 127634) 16 g, 17 g, and 14.5 g, 25 April 1976. These specimens were all taken from a flock of over 100 birds as they foraged 20 m off the ground over the airstrip.

Rufous-breasted Hermit (*Glaucis hirsuta*).—Two males (ROM 125770, ROM 127639) 7.5 g, 6.8 g, 9 and 15 May; female (ROM 125769) 6.5 g, 7 May 1976; adult female (KU 71855) 6.5 g, 27 January 1977.

Long-tailed Hermit (*Phaethornis superciliosus*).—Adult male (ROM 126771) 5 g, 27 April 1976; two females (ROM 125773, ROM 127636) 3.5 g, 3.5 g, 28 April and 12 May 1976; two adult males (KU 71860, KU 72040) 4 g, 5 g, 28 January and 11 February; one unsexed adult (KU 73383) 4 g, 31 January; adult female (KU 71924) 4 g, 22 January 1977. This species was abundant near Saül, being encountered daily.

Great-billed Hermit (*P. malaris*). – Two adult males (ROM 125772, ROM 127654) 10 g, 7.5 g, 26 April and 12 May 1976.

Gray-breasted Sabrewing (*Campylopterus largipennis*). – One male (ROM 125776) 9.5 g, 5 May and a female (ROM 125777) 8 g, 6 May 1976; adult male (KU 71829) 9 g, 14 February; two adult females (KU 71811, KU 72047) 7.5 g, 8 g, 4 and 13 February 1977. Birds were encountered in edge habitat along the airstrip road. This species is uncommon in adjacent Surinam (Haverschmidt 1968).

Blue-chinned Sapphire (*Chlorestes notatus*). – Two adult females (KU 71827, KU 71902) 4 g, 4.5 g, 11 and 20 February 1977.

Fork-tailed Woodnymph (*Thalurania furcata*). – Adult male (ROM 125778) 4 g, 14 May 1976; adult male (KU 71828) 5 g, 12 February; unsexed adult (KU 73385) 4 g, 18 February; adult female (KU 71838) 4 g, 1 February 1977.

Black-eared Fairy (*Heliothrix aurita*). – Male (ROM 125774) 5 g, 16 May; female (ROM 125775) 5 g, 7 May 1976; adult male (KU 71534) 5 g, 17 February 1977. Another edge species, Haverschmidt (1968) considered it rare in hilly forests in the interior of Surinam.

Black-tailed Trogon (*Trogon melanurus*). – Unsexed adult (KU 73311) 52 g, 29 January; adult female (KU 71537) 56 g, 2 February 1977. White-tailed Trogon (*T. viridis*). – Adult male (KU 71816) 96 g, 25 January 1977.

Black-throated Trogon (T. rufus).-Unsexed adult (KU 73311) 52 g, 29 January 1977; adult female (KU 71537) 56 g, 2 February 1977.

Violaceous Trogon (*T. violaceus*).—Adult female (ROM 125779) 53.5 g, 7 May 1976; adult male (KU 71867) 51 g, 21 January 1977. This species was fairly common in the Saül area in 1976.

Blue-crowned Motmot (*Momotus momota*). – Adult male (ROM 126646) 120 g, 13 May 1976; adult male (KU 72017), adult female (KU 71533) 142 g, 138 g, 16 and 17 February 1977. This species was seemingly uncommon near Saül.

Yellow-billed Jacamar (*Galbula albirostris*).—Male (ROM 125786) 19 g, 19 May 1976; female (ROM 127662) 20 g, 11 May 1976; adult male (KU 72026) 18 g, 17 February; two adult females (KU 72042, KU 72043) 20 g, 19 g, 9 and 17 February 1977. This species and *G. dea* were frequently seen flycatching from dead branches in open areas or lower canopy of the forest.

Paradise Jacamar (G. dea). – Two adult males (ROM 125784, ROM 125785) 31 g, 31.5 g, 2 May 1976; adult male (KU 71891) 25 g, and an unsexed adult (KU 73310) 29 g, 29 January; two adult females (KU 71853, KU 71890) 30 g, 23 g, 22 and 29 January 1977.

Great Jacamar (Jacamerops aurea). - Adult female (KU 71856) 66 g, 27 January 1977.

White-necked Puffbird (*Notharchus macrocrhynchus*).—Adult female (KU 71522) 85 g, 3 February 1977. An adult was seen on 24 April 1976 while perched on a dead branch at the outer edge of a tree crown about 30 m above the forest floor.

Spotted Puffbird (Bucco tamatia). - Adult male (KU 71871) 38 g, 2 February 1977.

White-chested Puffbird (*Malacoptila fusca*). – Female (ROM 125782) 39 g, 6 May 1976. Apparently this species is not common in Surinam (Haverschmidt 1968).

Black Nunbird (*Monasa atra*). – Female (ROM 125781) 1 May 1976; two adult males (KU 71806, KU 71861) 94 g, 104 g, 22 and 28 January; three adult females (KU 71934, KU 72053, KU 71862) 84–97 g, 26 and 28 January 1977.

Black-spotted Barbet (*Capito niger*). – Adult male (ROM 125780) 56 g, 2 May; adult female (ROM 127644) 57.5 g, with an enlarged oviduct, 15 May 1976; adult male (KU 71529) 58 g, and an adult female (KU 71519) 60 g, 5 February 1977.

Green Aracari (Pteroglossus viridis). – Two adult males (KU 71870, KU 71869) 136 g, 156 g, 3 February 1977.

Black-necked Aracari (*P. aracari atricollis*).—This species was observed foraging about 30 m above the ground on a green fig-type fruit on 3 May 1976.

Guianan Toucanet (Selenidera culik).-Male (ROM 125788) 140 g, 14 May 1976; adult male (KU 72015) 140 g, 24 January 1977.

Red-billed Toucan (*Ramphastos tucanus*).—Adult female (ROM 125787) 600 g, 27 April 1976; adult female (KU 71957) 560 g, in breeding condition, 7 February 1977. This species seemed to be more solitary in its habits than other toucans seen.

Yellow-tufted Woodpecker (*Melanerpes cruentatus*). – Two adult males (KU 72019, KU 72024) 63 g, 58 g, 16 February; adult female (KU 71553) 62 g, 7 February 1977. In January 1977, a large family group used a nest cavity 25 m above the ground.

Yellow-throated Woodpecker (*Piculus flavigula*).—Male (ROM 125790) 60 g, 11 May; female (ROM 125789) 15 May 1976; adult female (KU 71854) 56 g, 26 January 1977. Both birds from 1976 were foraging on tree trunks from 7–12 m above the ground.

Chestnut Woodpecker (Celeus elegans).-Adult male (KU 72014) 176 g, in breeding condition, 24 January 1977.

Lineated Woodpecker (*Dryocopus lineatus*). – Male (ROM 125794) 200 g, 20 April 1976; adult female (KU 71922) 209 g, 22 January 1977. This species was normally seen on tree trunks far above the forest floor.

Red-necked Woodpecker (*Phloeoceastes rubicollis*). – Adult male (ROM 125792) 230 g, 4 May; two females (ROM 125793, ROM 125791), an immature and an adult, 182 g, 200 g, 16 and 10 May 1976, respectively; two adult males (KU 71886, KU 72058) 220 g, 239

g, 23 January and 12 February 1977. Often seen within 2 m of the ground foraging for insects on tree trunks, this species was the most common of the woodpeckers seen in 1977. Plain-brown Woodcreeper (*Dendrocincla fuliginosa*). – Adult female (ROM 125799) 39

g, 10 May 1976. This species was fairly common in mature forest.

White-chinned Woodcreeper (*D. merula*). – Adult female (ROM 125800) 44 g, 29 April 1976. Our specimen came from edge near mature forest. Haverschmidt (1968) considered this species uncommon in Surinam.

Wedge-billed Woodcreeper (*Glyphorhynchus spirurus*). – Two adult males (ROM 126861, ROM 127209) 4 and 14 May 1976; two males with skulls not ossified (ROM 125801, ROM 127207) 28 April and 14 May; one adult female (ROM 127658) 13 g, 9 May 1976; two adult males (KU 71842, KU 71884) with gonads enlarging, 31 January and 1 February; two adult females (KU 71839, KU 71840) both 13 g, 31 January 1977. The eight males weighed from 13–14 g. This species was common and tended to forage within 3 m of the forest floor on tree trunks and often was caught in the bottom bay of a mist net.

Barred Woodcreeper (*Dendrocolaptes certhia*). – Adult male (KU 71845), adult female (KU 71837) 70 g, 69 g, 29 January 1977.

Chestnut-rumped Woodcreeper (*Xiphorhynchus pardalotus*).—Adult male (ROM 125797), adult female (ROM 125796) 36.8 g, 33 g, 4 and 5 May 1976; adult male (KU 72075) 40 g, 17 February, two adult females (KU 71893, KU 71855) 35 g, 37 g, 29 January and 17 February 1977.

Buff-throated Woodcreeper (X. guttatus polystictus). – Adult female (ROM 125795) 59.5 g, with ovary enlarged, 30 April 1976; three adult males (KU 71866, KU 21936, KU 71542) 66 g, 68 g, and 74 g, with gonads enlarged, 23, 25 January and 5 February 1977. Haverschmidt (1968) recorded this species from the coastal mangroves and sand ridges of Surinam.

Curve-billed Scythebill (*Campylorhamphus procurvoides*). – Adult male (ROM 125798) 33 g, with gonads enlarged, 29 April 1976. Apparently it is rare in Surinam (Haverschmidt 1968).

Plain-crowned Spinetail (*Synallaxis gujanensis*).—Two adult females (KU 71539, KU 72043) 20.5 g, 18 g, 3 and 5 February 1977. This species was seen by us foraging in the village nearly every day. McGillivray in his journal noted its call as a loud *ke-he* and he further noted how commonly the call was heard in the village. We found an occupied nest of this species 8 May in an abandoned termite nest.

Cabinis' Spinetail (S. cabanisi obscurior). – Adult male (no number) 20 g, an unsexed adult (KU 73386) 19 g, and an adult female (KU 71901) 18.5 g, 9, 2, and 6 February 1977, respectively.

Rufous-tailed Foliage-gleaner (*Philydor ruficaudatus*). – Two adult males (ROM 125808, ROM 125809) 28 g, 24 g, 4 May and 28 April; female (ROM 125810) 25 g, 4 May 1976.

Rufous-rumped Foliage-gleaner (P. erythrocercus). – Two adult males (KU 71526, KU 71557) 25.5 g, 35 g, adult female (KU 71846) 24 g, 5, 6 February and 29 January 1977.

Olive-backed Foliage-gleaner (*Automolus infuscatus cervicalis*). – Adult male (ROM 125803) 33.5 g, adult female (ROM 125806) 35 g, with ovary enlarged, 4 May and 28 April 1976, respectively; immature male (ROM 125804) 32 g, immature female (ROM 127648) 30 g, 5 and 13 May 1976, respectively; two adult males (KU 71876, KU 72079) both 32 g, with gonads enlarged; adult female (KU 71844) 35 g, with largest ovum = 13×12 mm, 21 February 1977.

Ruddy Foliage-gleaner (A. rubiginosus obscurus).-Adult male (ROM 125807) 32 g, 5 May 1976.

Chestnut-crowned Foliage-gleaner (A. rufipileatus consobrinus). – Adult male (KU 71878) 35 g, with testes enlarged, 29 January 1977.

Short-billed Leafscraper (Sclerurus rufigularis fulvigularis). - Adult female (ROM 125811)

20.8 g, 4 May 1976; adult male (KU 71535) 22 g, with gonads enlarged, adult female (KU 71806) 22 g, 3 and 4 February 1977.

Plain Xenops (Xenops minutus ruficaudus). – Adult male (ROM 125805) 13.8 g, adult female (ROM 125802) 11.5 g, 26 and 20 April 1976.

Fasciated Antshrike (*Cymbilaimus lineatus*). – Adult female (ROM 125812) 37 g, 2 May 1976. This bird was in a mixed flock foraging in the canopy about 10 m above the ground.

Mouse-colored Antshrike (*Thamnophilus murinus*). – Two adult males (ROM 125834, ROM 125835) 19 g, 21 g, 2 and 5 May 1976. Four adult males (KU 71914, KU 71942, KU 71943, KU 71949) $\bar{x} = 17.6 \pm 0.37$ g (17–18 g), 31 January, 19 and 20 February 1977.

Dusky-throated Antshrike (*Thamnomanes ardesiacus*). – Two specimens, one an adult male (no number) and another bird, sex unknown (no number) 31 January 1977 and 20 February 1977, respectively.

Cinereous Antshrike (*T. caesius glaucus*).—Three adult females (ROM 125329, ROM 125830, ROM 127656) 2, 4, and 13 May 1976; four males (ROM 125826, ROM 125827, ROM 125828, ROM 127666) 5, 4, 11, and 14 May, respectively; three adult males (KU 71913, KU 71538, KU 72074) 31 January, 4 and 17 February; two adult females (KU 71834, KU 71822) 2 and 3 February 1977. The seven adult males' average weight was 16.3 ± 1.4 g (13–17.5 g), and the five adult females' weight averaged 15.6 ± 1.3 g (15–18 g). This species was often represented in the flocks that foraged in the forest canopy.

Brown-bellied Antwren (*Myrmotherula gutturalis*). – Immature female (ROM 125847) 4 May 1976; adult male (KU 71907) 9 g, 17 February 1977; three adult females (KU 71850, KU 71813, KU 72073) 31 January, 4 and 17 February 1977. The four females' average weight was 9.1 ± 0.2 g (9–9.5 g).

White-flanked Antwren (*M. axillaris*). – Three adult males (ROM 125848, ROM 125849, ROM 125850) 12, 4, and 8 May 1976, respectively. Two adult males (KU 71843, KU 71900) both birds with gonads enlarged, 31 January and 7 February 1977. The average weight for the five adult males was 7.5 ± 0.7 g (7–9 g).

Long-winged Antwren (*M. longipennis*).—Three adult males (ROM 125842, ROM 125843, ROM 125844) 14 and (latter 2) 4 May 1976, respectively; two adult females (ROM 125846, ROM 127640) 4 and 6 May 1976, immature female (ROM 125845) 4 May 1976; adult male (KU 71912) with testis = 7×3 mm, 31 January 1977; two other adult males (KU 71915, KU 71903) 31 January and 17 February 1977; two adult females (KU 71916, KU 71906) 1 and 17 February 1977. The six adult males' average weight was 8.9 ± 1.8 g (8–13 g) and the average weight for the five females was 8.8 ± 1 g (7.5–10 g).

Gray Antwren (*M. menetriesii cinereiventris*). – Three adult males (ROM 125851, ROM 125852, ROM 127663) 8.5 g, 8.7 g, and 9 g, 4 and 6 May 1976; adult female (ROM 125853) 9.5 g, 4 May 1976; adult female (KU 71905) 8.5 g, 17 February 1977.

Dot-winged Antwren (*Microrhopias quixensis microsticta*).—Adult male (ROM 125854) 9.5 g, 7 May 1976; adult female (ROM 125855) 10 g, 13 May 1976; adult male (KU 71812) 9 g, 3 February 1977. This species was observed in May 1976 in mixed flocks foraging in dense secondary growth usually within 2 m of the forest floor.

Dusky Antbird (*Cercomacra tyrannina saturator*). – Immature female (ROM 127633) 15 g, 12 May 1976.

White-browed Antbird (*Myrmoborus leucophrys angustirostris*).—Adult male (ROM 125837) 20 g, 12 May 1976; two adult males (KU 71889, KU 71880) 22 g, 20 g, 29 January 1977; three adult females (KU 72064, KU 71919, KU 71917) 22 g, 20 g, and 19 g, 27, 30 and 31 January 1977.

Warbling Antbird (Hypocnemis cantator). – Adult male (ROM 125856) 13 g, 7 May 1976; adult female (ROM 127638) 12 g, 12 May 1976.

Black-headed Antbird (Percnostola rufifrons).-Two adult males (ROM 125824, ROM

125825) 28 April and 10 May 1976; immature male (ROM 125823) 9 May 1976; adult male (KU 71911) 8 February 1977. These four males weighed 30.4 ± 1.8 g (28.3–33 g).

Ferruginous-backed Antbird (Myrmeciza ferruginea). – Adult male (ROM 125836) 29 g, 5 May 1976; two adult males (KU 71524, KU 71525) 27 g, 26 g, 20 and 21 February 1977.

Black-throated Antbird (*M. atrothorax*). – Adult male (KU 71888) 15 g, 29 January 1977. White-plumed Antbird (*Pithys albifrons*). – Adult male (ROM 125814) 21 g, 12 May;

three adult females (ROM 125813, ROM 125815, ROM 125816) 30 April, 6 and 12 May 1976; adult male (KU 71551) 21 g, testis = 7×3 mm, 5 February 1977; adult female (KU 71552) largest ovum = 6×4 mm, 5 February 1977; three adult females (KU 71832, KU 72028, KU 71547) 1, 17, and 20 February 1977; adult male (KU 71546) 20 g, 20 February 1977. These seven adult females weighed an average of 22.2 ± 1.4 g (20–24.5 g). This species was observed in small flocks following an army ant column north of the airstrip on 25 April 1976.

Rufous-throated Antbird (*Gymnopithys rufigula*). – Adult male (ROM 125818) with testis = 6×3 mm, adult female (ROM 125817) both 27 April 1976; three adult males (KU 72076, KU 71548, KU 71824) 18, 19, and 21 February 1977; adult female (KU 71536) 29.5 g, 4 February 1977. The male (KU 72076) had an enlarged testis measuring 8×4 mm. The four males' average wieght was 28 ± 1.9 g (25–31 g).

Scale-backed Antbird (*Hylophylax poecilonota*).—Adult male (ROM 125839) 17.5 g, gonads enlarged; adult male (ROM 125838) 28 April and 16 May 1976; three adult females (ROM 125840, ROM 125841, ROM 127661) 12, 1 and 10 May 1976, respectively; adult male (KU 71544) 17 g, female (KU 71946) 17 g, 20 February 1977. The four females' average weight was 16.9 ± 0.6 g (16–17.8 g). Haverschmidt (1968) considered this species to be rare in the Savanna forests in Surinam.

Rufous-capped Antthrush (*Formicarius colma*).—Adult male (KU 71545) 44 g, with testis = 10×7 mm, 19 February 1977. This species is rare in Surinam (Haverschmidt 1968).

Black-faced Antthrush (F. analis crissalis). – Immature male (ROM 125831) 66 g, 10 May 1976.

Spotted Antpitta (Hylopezus macularius). – Adult male (ROM 125857) 38 g, 6 May 1976; adult male (KU 71949) 43 g, 19 February 1977.

Chestnut-belted Gnateater (*Conopophaga aurita*) (Frontispiece). – Adult male (ROM 125858) 13.2 g, 5 May 1976; adult female (ROM 125859) 12 g, 11 May 1976. Both birds had enlarged gonads.

Ringed Antpipit (Corythopis torquata anthoides).-Adult female (KU 71945) 15 g, 19 February 1977.

Screaming Piha (*Lipaugus vociferans*). – Three adult males (KU 71920, KU 72057, KU 71951), all three with testes larger than 10×5 mm and body weights of 65–82 g, 23 January and 11 February 1977. This bird's call is a loud shrill *pee-yee-pee-ooo* that seems to originate much higher in the canopy than its actual source.

Black-tailed Tityra (*Tityra cayana*). – Two adult males (KU 72055, KU 71858) weighing 64 g and 62 g, were obtained 22 and 25 January 1977. An active nest of this species was noted 31 January 1977. It was located 33 m above the forest floor in the end of a hollow branch.

Spangled Cotinga (*Cotinga cayana*). – Juvenile male (no number) 65 g, 21 January 1977; adult female (KU 71923) 73 g, 26 January 1977.

Purple-throated Fruitcrow (*Querula purpurata*). – Two adult males (ROM 125861, ROM 125862) 8 May 1976; two adult males (KU 71927, KU 71810) 28 January and 3 February 1977; adult female (KU 72020) 88 g, 24 January 1977. The four males' average weight was

 107.5 ± 8.9 g (100–122 g). This species was frequently seen in tiered, swampy rainforest usually more than 6 m above the forest floor.

Capuchinbird (*Perissocephalus tricolor*). – Adult male (ROM 125860) 360 g, 11 May 1976. McGillivray noted that the call is reminiscent of a chain saw. He also comments that the species is eaten by local people.

Golden-headed Manakin (*Pipra erythrocephala*). – Three adult males (ROM 125874, ROM 125875, ROM 125876) 5 May, 29 April and 6 May, respectively; two adult females (ROM 125878, ROM 127651) 5 and 12 May 1976; sub-adult male (KU 71929) with some orange feathers appearing as flecks on the crown, 30 January 1977; one adult female (KU 72049) with the largest ovum = 6×5 mm, 2 February; three adult females (KU 71928, KU 71930, KU 71819) 29, 31 January and 6 February 1977. The four males' average weight was 10.8 ± 1.1 g (9.5–12.5 g) and the six females weighed an average of 12.5 ± 1.5 g (11.8–14.5 g).

White-crowned Manakin (*P. pipra*). – Two adult males (ROM 125871, ROM 125872) 29 April and 16 May 1976; immature male (ROM 125873) 30 April 1976; adult female (ROM 125877), immature female (ROM 127636) 29 April and 16 May 1976; adult male (KU 71530) testis = 6×3 mm, 4 February 1977; two females (KU 72081, KU 71857) with largest ova = 4×4 mm and 2×2 mm, 16 and 20 February 1977, respectively. The average weight for the four males was 11.2 ± 0.9 g (10.2–12.5 g) and the four females weighed an average of 13.1 ± 0.7 g (12.4–14 g).

White-fronted Manakin (*P. serena*).—Four adult males (ROM 125866, ROM 125867, ROM 125868, ROM 125869) 5 and 8 May 1976; adult male (ROM 125970) 29 April 1976; immature male (ROM 127657) 10 May 1976; two adult males (no number, KU 71938) 31 January and 1 February 1977; juvenile male (KU 71833) 2 February 1977; adult female (KU 72048) 11 g, 31 January 1977. The nine males' average weight was 11.4 ± 0.4 g (10.8–12 g).

White-bearded Manakin (*Manacus manacus*). – Two immature males (ROM 126759, ROM 127649) 13 and 15 May 1976; adult male (KU 71807) testis = 6×3 mm, 2 February 1977; two adult females (KU 71879, KU 71540) with largest ova = 2×2 mm and 4×4 mm, 29 January and 3 February 1977; two adult females (KU 71849, KU 71809) 29 January and 2 February 1977. The five males' average weight was 17 ± 2 g (14–20 g) and the four adult females weighed an average of 15.5 ± 3 g (12–20 g).

Tiny Tyrant-Manakin (*Tyranneutes virescens*). – Female (ROM 127643) 11 g, 4 May 1976. This bird was taken at the edge of the mature forest. De Schauensee (1970) did not include French Guiana in the range of this species and thus our specimen constitutes the first record of this species for French Guiana.

Wing-barred Manakin (Piprites chloris chlorion).-Immature male (ROM 125865) 16.5 g, 2 May 1976.

Thrush-like Manakin (*Schiffornis turdinus wallacii*). – Two adult males (ROM 125880, ROM 127664) 32 g, 30 g, 13 and 15 May 1976; two adult males (KU 71877, KU 71904) 30.4 g, 30 g, 1 and 18 February 1977.

Long-tailed Tyrant (*Colonia colonus poecilonotus*). — This species was fairly common near Saül, but no specimens were acquired. This species was often observed flycatching from a dead branch. McGillivray noted on 8 May 1976 that a bird perched on an exposed stump 30–40 m high and uttered its call between foraging sorties. Ten foraging sorties were observed in which the bird caught insects within 5 m of the perch, returning to the same perch after each catch.

Fork-tailed Flycatcher (*Tyrannus savana*). – An individual of this species was seen by McGillivray in the open area near the Saül airstrip on 25 April 1976.

Tropical Kingbird (*Tyrannus melancholicus*). – Adult female (ROM 127208) 40.8 g, 7 May 1976. This bird was found in open scrub habitat near the Saül airstrip.

Variegated Flycatcher (Empidonomus varius rufinus).-Adult male (ROM 125883) 26 g, 15 May 1976.

Piratic Flycatcher (Legatus leucophaius).—One bird was identified on 24 April 1976 in the edge habitat near the Saül airstrip.

White-ringed Flycatcher (Conopias parva). – Adult male (KU 72062) 24 g, 10 February 1977.

Boat-billed Flycatcher (Megarhynchus pitangua).-Adult female (KU 71913) 60 g, 31 January 1977.

White-crested Spadebill (*Platyrinchus platyrhynchos*). – Adult male (ROM 125882) 13 g, adult female (ROM 125881) 12.8 g, 28 April 1976; adult female (KU 71835) 12 g, 1 February 1977. This species was occasionally seen foraging within 1 m of the forest floor.

Yellow-margined Flycatcher (*Tolmomyias assimilis examinatus*). – Adult male (KU 71954) 12.5 g, 1 February 1977; adult female (KU 71918) 12 g, 6 February 1977. An individual of this species was seen by McGillivray on 1 May 1976.

Gray-crowned Flycatcher (T. poliocephalus sclateri).-Immature female (ROM 125890) 12 g, 26 April 1976.

Rusty-margined Flycatcher (*Myiozetes cayanensis*). – This species was seen in the old field habitat bordering the Saül airstrip, 24 April 1976. Two adult males (KU 72067, no number) 25 g, 28 g, the latter with testes = 15×5 mm, 18 and 21 February 1977.

Great Kiskadee (*Pitangus sulphuratus*). – Between 23 April and 17 May 1976, this species was regularly heard and seen in Saül and in the old field habitat by the airstrip.

Bright-rumped Attila (Attila spadiceus). – Adult female (ROM 127653) 38 g, 11 May 1976; adult female (KU 71815) 35 g, 3 February 1977.

Grayish Mourner (*Rhytipterna simplex fredeici*). – Two adult males (ROM 125864, ROM 127655) 1 and 15 May 1976; two adult males (KU 72069, KU 71541) 25 January and 5 February 1979; adult female (KU 71808) 36 g, 3 February 1977. The four adult males' average weight was 35.7 ± 1.8 g (33–38 g).

Cinereous Mourner (*Laniocera hypopyrrha*). – Adult female (ROM 125863) 47.7 g, 5 May 1976. This and the above species were seen foraging together in the canopy.

Ruddy-tailed Flycatcher (*Terenotriccus erythrurus*).-Adult male (ROM 125893) 7.5 g, 26 April 1976. This species seemed to prefer the lower strata of the forest.

Sulphur-rumped Flycatcher (*Myiobius barbatus*). – Three adult males (ROM 125888, ROM 125889, ROM 127646) 28 April (first two) and 10 May 1976; two adult males (KU 71848, KU 71554) 30 January and 8 February 1977. The average weight of the five adult males was 11.3 ± 1.2 g (9.3–12.5 g).

Royal Flycatcher (*Onychorhynchus coronatus*). – Two adult males (ROM 125886, ROM 125887) both 14 g, 4 and 15 May 1976. The distraction display of this species has been described elsewhere (Dick and Mitchell 1979).

Rufous-tailed Flatbill (Ramphotrigon ruficauda).-Adult male (ROM 125882) 19 g, 4 May 1976.

Common Tody-Flycatcher (*Todirostrum cinereum*). – Adult female (KU 72072) 6.5 g, with ovary enlarged (7×3 mm), 17 February 1977.

White-eyed Tody-Tyrant (*Idioptilon zosterops*). – Adult male (ROM 127642) 10.5 g, 10 May 1976; adult female (KU 71523) 8 g, 20 February 1977.

Olive-green Tyrannulet (*Phylloscartes virescens*).—Immature male (ROM 125892) 12.8 g, adult female (ROM 125891) 11 g, 28 April and 1 May 1976.

Yellow-bellied Elaenia (*Elaenia flavogaster*). – Adult female (KU 72025) 25 g, with ovary enlarged (10×7 mm), 16 February 1977.

Forest Elaenia (*Myiopagis gaimardii guianensis*). – Adult male (ROM 125885) 13 g, 15 May 1976; adult male (KU 71801) 12.5 g, adult female (KU 72044) 10 g, both 13 February 1977.

McConnell's Flycatcher (*Pipromorpha macconnelli*). — Two immature males (ROM 125894, ROM 126760) 2 and 12 May 1976; adult male (ROM 126505) 15 May 1976; two immature females (ROM 126584, ROM 127665) 14 and 3 May 1976, respectively; an adult male (KU 71841) 31 January 1977; two adult females (KU 71555, KU 72036) 7 and 11 February 1977. The four males' average weight was 13.1 ± 1.3 g (11–14.5 g) and the weight of the four females was 10.1 ± 2 g (8–13 g).

White-banded Swallow (Atticora fasciata). – Immature female (KU 71556) 10 g, 7 February 1977.

White-thighed Swallow (*Neochelidon tibialis*).—An adult female (ROM 125900) and an immature female (ROM 127659) were taken on an open slope near the Saül gas-powered generator. These two birds constitute the first records of this species in French Guiana (Dick and Barlow 1977).

Wing-banded Wren (*Microcerculus bambla*).-One unsexed adult (KU 73364) 17.5 g, 4 February 1977.

Musician Wren (*Cyphorhinus arada*). – Two adult males (ROM 125895, ROM 127660) both 22 g, 11 and 4 May 1976; adult female (KU 71527) 18 g, 5 February 1977.

Cocoa Thrush (*Turdus fumigatus*). – Adult female (KU 71830) 80 g, with ovary = 13×8 mm, 1 February 1977.

White-necked Thrush (*T. albicollis phaeopygus*).—Two adult males (KU 71937, KU 72022) 54 g, 44 g, both in breeding condition (testes = $13 \times 8 \text{ mm}$, $14 \times 7 \text{ mm}$), 31 January and 16 February 1977.

Collared Gnatwren (*Microbates collaris*). – Three adult males (ROM 125903, KU 71814, KU 71944) 11 g, 11.5 g, and 10 g, 6 May 1976, 4 and 19 February 1977, respectively.

Blue-black Grassquit (Volatina jacarina splendens). – Three adult males (KU 72013, KU 71955, KU 72037) 24 January, 6 and 5 February 1977; one immature male (KU 72038) 9 February 1977; adult female (KU 71818) 9 g, 25 January 1977. The four males' average weight was 9.1 ± 1 g (7.5–10 g). This species was seen in old field habitats near the airstrip and in the village. McGillivray noted that a common behavior of adult males was to jump vertically ca 35 cm off a perch while fanning the rectrices and flapping the wings several times. This behavior was repeated frequently, sometimes combined with a zzzt vocalization.

Chestnut-bellied Seedeater (Sporophila castaneiventris). – Two adult males (KU 71872, KU 72016) 6.2 g, 8.5 g, 25 January and 16 February 1977; adult female (KU 71550) 7.5 g, 5 February 1977. All three birds were in breeding condition; the males had testes measuring over 6×5 mm. This species was often seen in small flocks with Volatina in the old field habitat, especially near Saül.

Pectoral Sparrow (Arremon taciturnus).—Adult female (ROM 125925) 22.5 g, 14 May 1976; three adult males (KU 72065, KU 71892, KU 71823) 26 g, 28 g, and 25 g, testes measured from 9×9 to 11×6 mm, 27, 29 January and 5 February 1977, respectively; adult female (KU 71935) 31 g, 26 January 1977. This species frequented old field habitat near the airstrip.

Buff-throated Saltator (*Saltator maximus*). – Adult female (KU 71948) 46 g, largest ovum = 2×2 mm, 20 February 1977.

Blue-back Grosbeak (*Passerina cyanoides rothschildii*). – Two adult males (ROM 125926, ROM 125927) 6 and 4 May 1976; two adult females (ROM 127652, ROM 125928) 25 g, 28 g, 12 and 4 May 1976. All four birds were in breeding condition. Three adult males (KU 71528, KU 71950, KU 72046) 4, 9, and 13 February 1977. The testes of these birds were somewhat enlarged. The average weight of the five adult males was 27.5 ± 1 g (26–29 g).

Guira Tanager (Hemithraupis guira nigrigula). – Adult female (KU 71525) 9.5 g, 20 February 1977.

Yellow-backed Tanager (*H. flavicollis*). – This species was seen by McGillivray on 1 May 1976 in a mixed flock that was foraging in a breadfruit tree.

Fulvous Shrike-Tanager (*Lanio fulvus*). – Adult female (ROM 125902) 25 g, 4 May 1976. This bird was in a mixed flock foraging within 6 m of the forest floor.

Flame-crested Tanager (Tachyphonus cristatus).-Adult female (KU 71532) 17.5 g, 16 February 1977.

Silver-beaked Tanager (*Ramphocelus carbo*). – Three adult males (KU 71847, KU 71836, KU 72035) 20 g, 27 g, and 28 g, 29 January, 2 and 13 February 1977; two adult females (KU 71932, KU 71908) 24 g, 25 g, 30 January and 12 February 1977. The second male, with testes = 12×8 mm, and the latter females, with largest ovum = 3×2 mm, were in breeding condition.

Blue-gray Tanager (*Thraupis episcopus*). – Adult male (ROM 125901) 37 g, 10 May 1976; adult male (KU 72086) 36 g, adult female (KU 72045) 30 g, 21 and 13 February 1977. Courtship behavior by this species was observed on 27 April 1976.

Golden-bellied Euphonia (Euphonia chrysopasta nitida).-Adult (KU 73312) 13 g, 9 February 1977.

Turquoise Tanager (*Tangara mexicana*). – Adult male (ROM 127647) 22 g, 12 May 1976; two adult males (KU 71864, KU 71863) 19 g, 17 g, 25 January 1977; two adult females (KU 71865, KU 81821) 18.5 g, 20.5 g, 25 January and 8 February 1977.

Paradise Tanager (*T. chilensis paradisea*). – Three adult males (KU 71803, no number, KU 72023) 16 g, 17 g, and 16.5 g, 24 January, 8 and 16 February; adult female (KU 72027) 16.5 g, 16 February 1977. The male and female acquired on 16 February were in breeding condition. The male had testes measuring 12×12 mm and the largest ovum of the female measured 5×5 mm.

Spotted Tanager (*T. punctata*).-Immature male (KU 73365) 14.5 g, adult male (KU 72041) 14 g, 17 and 11 February 1977, respectively.

Bay-headed Tanager (T. gyrola). - Adult male (ROM 125899) 11 g, 3 May 1976.

Black-faced Dacnis (Dacnis lineata). - Adult male (ROM 125899) 11 g, 3 May 1976.

Blue Dacnis (*D. cayana*). – Immature male (ROM 127641) 11 g, 3 May 1976; adult male (KU 72030) 11 g, 17 February 1977; juvenile male (KU 71894) 12 g, 12 February 1977; adult female (KU 72032) 11.5 g, 16 February 1977; juvenile female (KU 72031) 12 g, 17 February 1977.

Green Honeycreeper (Chlorophanes spiza). – Adult female (KU 71802) 17 g, 13 February 1977.

Red-legged Honeycreeper (*Cyanerpes cyaneus*). – Adult female (ROM 125897) 13 g, immature female (ROM 125898) 13 g, both 3 May 1976; adult female (KU 72057) 15 g, adult male (KU 71947) 14 g, 9 and 18 February 1977, respectively. Both birds were in breeding condition, the male with testes = 7×5 mm and the female with the largest ovum = 6×5 mm.

River Warbler (*Phaeothlypis rivularis mesoleuca*). – Adult male (ROM 127635) 12 g, 13 May 1976.

Bicolored Conebill (Conirostrum bicolor).-Bird in juvenal plumage (no number) 12 g, 17 February 1977.

Bananaquit (*Coereba flaveola minima*).—Adult male (ROM 125896) 10 g, 1 May 1976; adult male (KU 72070) 7.5 g, 25 January 1977. This species was most often seen in secondary growth and the parkland habitat of Saül village.

Rufous-browed Peppershrike (*Cyclarhis gujanensis*). – Thirteen adult males (ROM 125905– ROM 125916, ROM 127650) mean weight = 26.6 ± 1.9 g (24–30 g), 1–14 May 1976; two adult females (ROM 125904, ROM 125917) 26.5 g, 25.5 g, 11 and 14 May 1976; immature

male (KU 71798) 27 g, adult female (KU 71799) 30 g, both 13 February 1977. The May birds were behaving territorially, but had not yet started to breed.

Slaty-capped Shrike-Vireo (Vireolanius leucotis). – Adult male (ROM 127334) 21.5 g, 10 February 1977.

Black-whiskered Vireo (*Vireo a. altiloquus*).—Immature male (ROM 127335) 23.5 g, 12 February 1977. This species has not previously been reported for French Guiana.

Red-eyed Vireo (*V. olivaceus vividior*). – Immature female (ROM 125918) 13.5 g, 12 May 1976; unsexed adult (ROM 127645) 12.8 g, 15 May 1976. Six adult males (KU 71909, KU 71910, KU 72060, KU 72061, KU 71896, KU 71800) with an average weight of 15.2 \pm 0.7 g (14–16 g) were acquired from 9–13 February 1977.

Tawny-crowned Greenlet (*Hylophilus ochraceiceps luteifrons*). – Two adult males (ROM 125920, ROM 125921) 10.2 g, 10.8 g, 26 April and 11 May 1976; immature female (ROM 125919) 10 g, 26 April 1976; adult male (KU 71953) 11 g, 5 February 1977.

Green Oropendola (*Psarocolius viridis*). – Adult male (ROM 125923) 360 g, adult female (ROM 125924) 215 g, both 14 May 1976; adult male (KU 71887) 460 g, with testes = 20×10 mm, 22 January 1977. McGillivray recorded the call as a very melodius liquid *toodle-oole-ool*.

Yellow-rumped Cacique (*Cacicus cela*). – Adult male (ROM 125922) 118 g, 16 May 1976; adult male (KU 71868) 102 g, adult female (KU 71921) both in breeding condition with testes = 15×5 mm and largest ovum = 2×2 mm, respectively, both 22 January 1977; five additional adult females (KU 71873, KU 71817, KU 71875, KU 71881, KU 71882) 21 January–15 February 1977. The six females' average weight was 87.8 ± 18.4 g (67–110 g). In January and February, individuals of this species were observed high in the canopy aggressively chasing each other. A tree in the open grassland outside of Saül contained about 100 pendant nests. Birds were observed copulating in this tree on 25 January. There, displaying by as many as eight individuals at once was seen.

Red-rumped Cacique (C. haemorrhous). – Adult male (KU 71956) 108 g, 6 February 1977. This species used the same tree as a nest-site as C. cela, but it was less numerous.

Yellow Oriole (Icterus nigrogularis). - This species was seen on 2 May 1976 near Saül by McGillivray.

Giant Cowbird (*Scaphidura oryzivora*). – Adult male (KU 71933) 174 g, with testes measuring 12×10 mm, 1 February 1977. Cowbirds were seen inspecting active nests of *Cacicus cela* in early February in the communal nesting tree mentioned above. Cowbirds frequented wet grassland, foraging there in large flocks with *Crotophaga ani* and both species of *Cacicus*.

CONCLUSIONS AND SUMMARY

A total of 172 species, 56 nonpasserines and 116 passerines, were taken or positively identified in the vicinity of Saül. Seventy-eight species were common to both trips; 43 were unique to the first and 49 unique to the second. Three species were reported in French Guiana for the first time. They were: *Tyrannuetes virescens, Neochelidon tibialis* and *Vireo altiloquus.*

Over 70% of the species of birds encountered at Saül preferred strata in mature forest or adjacent edge situations (Appendix).

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Tringa solitaria - - - - X - Columbina talpacoti - - - X X Leptotila rufaxilla - - - X X Ara chloroptera X - - - X - Ara chloroptera X - - - - - - Aratinga leucophthalmus - - - - - - - Pyrrhura picta X - - - - - - - Pionus mentruus X - </td <td></td> <td>_</td> <td>-</td> <td>Х</td> <td>-</td> <td>_</td> <td>_</td> <td>_</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td>		_	-	Х	-	_	_	_	-	-	-	-
Columbina talpacoti - - - - X X Leptotila rufaxilla - - - X - - Ara chloroptera X - - - - - - Ara chloroptera X - - - - - - - Ara chloroptera X - - - - - - - - - Aratinga leucophthalmus -		_	_	-	_	_	-	Х	_	-	-	_
Leptotila rufaxilla - - - X - - Ara chloroptera X - - - - - - Aratinga leucophthalmus - - - - - - - - Pyrrhura picta X - <td></td> <td>-</td> <td>_</td> <td>_</td> <td>_</td> <td>_</td> <td>-</td> <td>х</td> <td>х</td> <td>х</td> <td>-</td> <td>_</td>		-	_	_	_	_	-	х	х	х	-	_
Ara chloroptera X -		-	_	_	_	_	X	-	_	-	-	-
Aratinga leucophthalmus - - - - - X Pyrrhura picta X -		х	-	-	-	_	_	-	_	-	-	-
Pyrrhura picta X -		_	-	-	_	_	-	-	х	Х	-	_
Pionus mentruus X -		Х	_	_	_	_	_	_	_	-	_	-
Deroptyus accipitrinus $X = X = X$ Piaya cayana $X = X = $		х	_	_	_	_	_	-	_	_	-	-
Deroptyus accipitrinus $X X X Y$ Piaya cayana $X X - X Y$ Crotophaga ani $ X Y$ Pulsatrix perspicillata $X Y$ $X X Y$ Chordeiles acutipennis $ X Y$ $ X Y$ Caprimulgus nigrescens $ X Y$ $ X Y$ Chaetura spinicauda $ X Y$ $ X Y$ Glaucis hirsuta $- X X$ $ X$ Phaethornis superciliosus $- X$		Х	_	_	_	_	_	_	-	-	_	_
Piaya cayanaXX-Crotophaga aniPulsatrix perspicillataXChordeiles acutipennisXCaprimulgus nigrescensXChaetura spinicaudaXGlaucis hirsuta-XX-Phaethornis superciliosus-XP. malaris-XCampylopterus largipennis-XChlorestes notatus-XThalurania furcata-XTrogon melanurusXT. viridis-XT. violaceusXXGalbula albirostris-X	ccipitrinus	X	_	_	_	_	_	_	_	_	_	_
Crotophaga ani -		X	_	_	-	_	х	_	_	_	_	_
Pulsatrix perspicillata X - <td></td> <td>-</td> <td>_</td> <td>_</td> <td>_</td> <td>_</td> <td>_</td> <td>_</td> <td>-</td> <td>х</td> <td>X</td> <td>_</td>		-	_	_	_	_	_	_	-	х	X	_
Chordeiles acutipennis $ -$ <td></td> <td>х</td> <td>_</td> <td>_</td> <td>_</td> <td>_</td> <td>_</td> <td>_</td> <td>_</td> <td>_</td> <td>х</td> <td>_</td>		х	_	_	_	_	_	_	_	_	х	_
Caprimulgus nigrescens $ -$			-	_	-	х	_	-	_	_	_	_
Chaetura spinicauda -		-	_	_	_		_	-	-	-	_	_
Glaucis hirsuta - X - - X - - Phaethornis superciliosus - X - </td <td></td> <td>_</td> <td>-</td> <td>-</td> <td>_</td> <td>_</td> <td>_</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>x</td>		_	-	-	_	_	_	-	-	-	-	x
Phaethornis superciliosus $ X$ $ -$ <		-	X	-	-	_	X	_		-	_	_
P. malaris $-$ X $ -$		_		-	_	_	_	-	_	_	х	-
Campylopterus largipennis $ X$ $ X$ $ -$ <	•	-	х	-	-	_	_	-	-	-	-	-
Chlorestes notatus $ X$ $ -$ <	rus largipennis	-		_	_	х	_	-	-	_	_	-
Thalurania furcata - X -		-		_	_	_	_	-	-	_	_	-
Heliothrix aurita X -		_		_	_	_	_	-	-	-	_	_
Trogon melanurus X - -		x	_	-	_	_	-	-	_	-	_	-
T. viridis X X -			-	-		-	-	_	_	-	_	-
T. rufus - X -<			x	_	_	_	_	-	-	_	_	-
T. violaceusXXMomotus momotaXXGalbula albirostris-X		_		_	_	_	_	_	_	-	_	_
Momotus momotaXXGalbula albirostris-X		x		_	-	_	-	-	_	-	_	_
Galbula albirostris – X – – – – –	omota			_	_	_	-	_	-	_	_	_
		_		_	_	_	-	-	-	-	-	_
		-	x	_	_	-	_	_	_	-	x	_
Jacamerops aurea X	aurea	_	-	_	x	-	-	_	-	-	-	_

APPENDIX GROSS HABITAT PREFERENCES OF BIRDS AT SAÜL

	Co	NTINI	UED								
					Habit	at pre	ference				
Species*	FC [▶]	FU	FF	R	0	SG	OCF	Р	G	E	OA
Notharchus macrocrhynchus	Х	-	-	-	-	-	-	-	-	-	-
Bucco tamatia	-	-	-	-	-	-	-	-	-	Х	-
Malacoptila fusca	_	Х	_	-	_	-	-	-	-	_	-
Monasa atra	Х	-	_	_	-	-	-	-	-	-	-
Capito niger	Х	-	_	-	-	-	_	-	-	-	-
Pteroglossus viridis	Х	_	-	-	-	-	-	-	-	-	-
P. aracari	Х	-	-	_	-	-	-	-	-	_	-
Selenidera culik	Х	_	-	-	_	-	-	-	-	-	-
Ramphastos tucanus	Х	-	_	_	-	-	-	-	_	_	_
Melanerpes cruentatus	Х	_	_	_	_	_	_	_	_	X	_
Piculus flavigula	Х	_	_	_	_	_	-	_	_	-	-
Celeus elegans	X	X	-	_	_	-	_	_	-	_	_
Dryocopus lineatus	X	_	_	_	_	_	_	_	_	_	_
Phloeoceastes rubicollis	X	_	_	_	_	_	_	_	_	_	_
Dendrocincla fuliginosa	_	x	_	_	_	_	_	_	_	_	_
D. merula	_	X	_	_	_	_	_	_	_	_	_
Glyphorhynchus spirurus	-	X	_	_	_	_	_	_	_	_	_
Dendrocolaptes certhia		X	-	_	_	_	_	_	_	_	_
Xiphorhynchus pardalotus		X									
X. guttatus		X									
Campylorhamphus procurvoides	_	X	_	_	_			_	_	_	
Synallaxis gujanensis	_	X	-	_	_	x	_	_	-	-	_
S, cabanisi	_	X	-	-	_	л	-	-	-	_	
		X	-	-	-	_	-	-	-	_	_
Philydor ruficaudatus	_	X	-	-	-	-	-	-	-	-	-
P. erythrocercus	-		-	-	-	-	-	-	-	-	-
Automolus infuscatus	-	X	-	-	-	-	-	-	-	-	-
A. rubiginosus	-	X	-	-	-	-	-	-	-	-	-
A. rufipileatus	-	X	-	-	-	-	-	-	-	-	-
Sclerurus rufigularis	-	Х	-	-	-	-	-	-	-	-	-
Xenops minutus	Х	-	-	-	-	-	-	-	-	-	-
Cymbilaimus lineatus	-	X	-	-	-	-	-	-	-	-	-
Thamnophilus murinus	-	X	-	-	-	-	-	-	-	-	-
Thamnomanes ardesiacus	-	Х	-	-	-	-	-	-	-	-	-
T. caesius	-	Х	-	-	-	-	-	-	-	-	-
Myrmotherula gutturalis	-	Х	-	-	-	-	-	-	-	-	-
M. axillaris	-	Х	-	-	-	-	-	-	-	-	-
M. longipennis	Х	-	-	-	-	-	-	-	-	-	-
M. menetriesii	Х	-	-	-	-	-	-	-	-	-	-
Microrhopias quixensis	-	Х	-	-	-	-	-	-	-	-	-
Cercomacra tyrannina	-	Х	-	-	-	-	-	-	-	-	-
Myrmoborus leucophrys	-	Х	-	Х	-	-	-	-	-	-	-
Hypocnemis cantator	-	Х	Х	-	-	-	-	-	-	-	-

APPENDIX CONTINUED

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		PENI									
					Habit	at pret	ference				
Species*	FC ^b	FU	FF	R	0	SG	OCF	Р	G	E	OA
Percnostola rufifrons	-	х	х	_		_	-	-	_	_	-
Myrmeciza ferruginea	-	-	Х	_	_	_	_	-	-	_	_
M. atrothorax	_	Х	Х	_	_	_	_	_	_	х	_
Pithys albifrons	-	х	х	-	-	_	_	_	_	_	_
Gymnopithys rufigula	-	х	х	-		_	-	-	-	_	-
Hylophylax poecilonota	_	х	_	_	_	_	_	1-	-	_	_
Formicarius colma	-	_	х	_	_	_	-	_	-	_	_
F. analis	-	_	X	_	_	-	_	_	_	_	-
Hylopezus macularius	_	_	X	_	_	_	-	_	_	_	_
Conopophaga aurita	_	-	X	_	_	_	_	-	-	_	-
Corythopis torquata	_	_	X	х	_	_	_	_	_	_	_
Lipaugus vociferans	х	x	_	_	_	_	_	_	_	_	_
Tityra cayana	x	-	_	_	_	_	_	_	_	_	_
Cotinga cayana	X	_	_	_	_	_	_	_	_	_	
Querula purpurata	x										
Perissocephalus tricolor	X	_				_	_	_			_
Pipra erythrocephala	A	x	_	_	_	_	_	_		_	
P. pipra	_	X	_	-	-	_	_	_	-	-	-
P. serena	_	X	_	-	-	-	-	-	-	-	-
	_	X	_	-	-	-	-	-	-	-	-
Manacus manacus	_	X	-	-	-	-	-	-	-	-	-
Tyranneutes virescens	- v		-	-	-	-	-	-	-	-	-
Piprites chloris	Х	-	-	-	~	-	-	-	-	-	-
Schiffornis turdinus	-	Х	-	-	-	-	-	-	-	-	-
Colonia colonus	Х	-	-	-	-	-	-	-	-	-	-
Muscivora tyrannus	-	-	-	-	X	-	-	X	-	-	-
Tyrannus melancholicus	-	-	-	-	X	-	-	X	-	X	-
Empidonomus varius	-	-	-	-	X	-	-	X	-	X	-
Legatus leucophaius	-	-	-	-	X	_		Х	-	X	-
Conopias parva	_	-	-	-	-	X	-	-	-	Х	-
Megarhynchus pitangua	Х	-	-	-	-	-	-	-	-	Х	-
Platyrinchus platyrhynchos	-	X	-	-	-	-	-	-	-	-	-
Tolmomyias assimilis	-	Х	-	-	-	-	-	-	-	-	-
T. poliocephalus	Х	Х	-	-	-	-	-	-	-	-	-
Myiozetes cayanensis	-	-	-	-	Х	-	-	Х	-	Х	-
Pitangus sulphuratus	-	-	-	-	Х	-	-	Х	-	Х	-
Attila spadiceus	-	Х	-	-	-	-	-	-	-	-	-
Rhytipterna simplex	Х		-	-	-	-	-	-	-	-	-
Laniocera hypopyrrha	-	Х	-	-	-	-	-	-	-	-	-
Terenotriccus erythrurus	-	Х	-	-	-	-	-	-	-	-	-
Myiobius barbatus	Х	Х	-	-	-	-	-	-	-	-	-
Onychorhynchus coronatus	-	Х	-	х	-	-	-	-	-	-	-
Ramphotrigon ruficauda	-	Х	-	-	-	-	-	-	-	-	-

		PENI									
					Habit	at pref	ference				
Species*	FC ^b	FU	FF	R	0	SG	OCF	Р	G	E	OA
Todirostrum cinereum	-	-	_	-	-	Х	_	_	_	X	_
Idioptilon zosterops	Х	Х	-	-	-	_	_	-	-	-	-
Phylloscartes virescens	Х	-	-	-	-	-	-	-	-	-	-
Elaenia flavogaster	-	-	_	-	Х	_	_	Х	-	Х	-
Myiopagis gaimardii	Х	Х	-	-	-	_	_	-	_	_	-
Pipromorpha macconnelli	-	Х	-	-	-	_	-	-	-	-	-
Atticora fasciata	_	-	-	Х	-	-	-	-	-	-	-
Neochelidon tibialis	_	_	_	_	_	-	_	-	_	_	Х
Microcerculus bambla	-	Х	_	_	_	_	_	-	-	_	-
Cyphorhinus arada	_	Х	-	-	_	_	_	_	_	_	-
Turdus fumigatus	-	X	_	х	_	_	_	_	_	_	-
T. albicollis	_	X	х	_	_	_	_	_	_	_	-
Microbates collaris	_	X	_	_	_	х	_	_	_	_	_
Volatina jacarina	_	_	_	_	_	_	x	_	X	x	_
Sporophila castaneiventris	_	_	_	_	x	_	_	_	X	X	_
Arremon taciturnus			x		-	_	_	_	-	_	_
Saltator maximus			X			X				х	
Passerina cyanoides		x	Λ	x		Λ				~	
	x	Λ	_	л	_	_	_		_	_	
Hemithraupis guira	X	_	-	_	-	_	_	_	-	_	
H. flavicollis	X	-	-	-	_		_	-	-	_	
Lanio fulvus		-	-	-	-	-	-	-	-	_	_
Tachyphonus cristatus	Х	-	-	-	-	- v	-	-	-	x	-
Ramphocelus carbo	-	-	-	-	-	Х	-	-	-		-
Thraupis episcopus	-	-	-	-	-	-	-	Х	-	Х	-
Euphonia chrysopasta	-	-	-	-	-	Х	-	-	-	-	-
Tangara mexicana	_	-	-	-	-	-	-	Х	-	-	-
T. chilensis	X	-	-	-	-	-	-	-	-	-	-
T. punctata	Х	-	-	-	-	-	-	-	-	-	-
T. gyrola	X	-	-	-	-	-	-	-	-		-
Dacnis lineata	Х	-	-	-	-	-	-	-	-	-	-
D. cayana	Х	-	-	-	-	-	-	-	-	X	-
Chlorophanes spiza	Х	-	-	-	-	-	-	-	-	-	-
Cyanerpes cyaneus	Х	-	-	-	-	-	-	-	-	-	-
Phaeothlypis rivularis	-	-	Х	Х	-	-	-	-	-	-	-
Conirostrum bicolor	Х	Х	-	-	-	-	-	-	-	-	-
Coereba flaveola	-	-	-	-	-	-	-	Х	-	Х	-
Cyclarhis gujanensis	-	-	-	-	-	-	-	Х	-	Х	-
Vireolanius leucotis	Х	-	-	-	-	-	-	-	-	-	-
Vireo altiloguus	X	-	-	-	-	-	-	-	-	-	-
V. olivaceus	Х	-	-	-	-	-	-	-	-	-	-
Hylophilus ochraceiceps	-	Х	-	-	-	-	-	-	-	-	-
Psarocolius viridis	Х	-	_	-	-	-	-	-	-	-	-

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		PENI																	
Species*					Habit	at prei	ference												
	F C ^b	FU	FF	R	0	SG	OCF	Р	G	E	OA								
Cacicus cela	Х	-	-	-	-	-	-	-	-	Х	-								
C. haemorrhous	Х	_	-	_	_	-	_	-	-	Х	_								
Icterus nigrogularis	-	-	-	Х	_	Х	_	-	-	-	-								
Scaphidura oryzivora	Х	-	-	-	-	-	-	-	-	X	_								

* Birds near Saül showed percent habitat and niche preferences based on number of species per habitat type/ 172×100 as follows: undergrowth-26.9; canopy-23.4; mid-canopy-forest floor-7.8; canopy-edge-7.2; forest floor-5.4; open parkland-edge-4.8; undergrowth-forest floor-3.0; undergrowth-riparian-2.4; undergrowth-second-2.4; secondary-edge-2.4; grassland-edge-1.8; undergrowth-edge-1.2; riparian-1.2; open -1.2; forest floor-riparian-1.2; open aerial-1.2; open clearing forest-0.6; parkland-0.6; secondary canopy-0.6; forest floor-secondary-edge-0.6; forest floor-canopy-0.6.

^b Acronyms for habitats are as follows: FC = forest canopy, FU = forest undergrowth, FF = forest floor, R = riparian, O = open airstrip, SG = secondary growth, OCF = open clearing in forest, P = parkland, G = grassland, E = edge, OA = (aerial) open airstrip.

COLOR PLATE

Inclusion of the colorplate frontispiece of Chestnut-bellied Gnatcatchers (*Conophaga aurita*) has been made possible through an endowment established by George Miksch Sutton (1896–1982). Painting by John P. O'Neill.

CHANGE IN EDITOR

Dr. Keith A. Bildstein will be serving as the Editor of The Wilson Bulletin beginning with Volume 97. As of 15 May 1984, all manuscripts submitted for publication in the journal should be sent to him at the Department of Biology, Winthrop College, Rock Hill, SC 29733. All manuscripts received prior to 15 May 1984 will continue to be processed by Dr. Jon C. Barlow.



Dick, James A, McGillivray, W. Bruce, and Brooks, David J. 1984. "A List of Birds and Their Weights from Saül, French Guiana." *The Wilson bulletin* 96(3), 347–365.

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