

Faunal checklist of the Aripo Savannas (Scientific Reserve)

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Most of the research in the Aripo Savannas has centered on the unique plants and soil conditions of the area, leaving the fauna relatively unknown and potentially misunderstood. Baseline information on species' abundance, habitat preferences, home ranges, social behaviour and birth/mortality rates is almost entirely lacking. Those persons who would pursue faunal studies in the Aripo Savannas are often discouraged by the inherent difficulty of obtaining necessary data from an area which, until recently, had not been given legal protection or considered of national concern.

During 1986 and part of 1987, Trinidad Parks and Wildlife staff, members of the Field Naturalists' Club, faculty and students of the University of the West Indies, Emperor Valley Zoo staff, and private citizens worked together to compile a comprehensive species list of the area. This list represents only a beginning for the fauna of the Aripo Savannas; future naturalists and researchers are left with the enormous task of expanding this list and understanding the complex ecological relationships between the members of the flora and fauna of this unique ecosystem.

Sources

H. Boos, R. ffrench, J. Michalski, V. Quesnel, S. Schwab, J. Seyjagat, G. White, and members of the Wildlife Section of the Forestry Division were all contributors to this faunal checklist. Species names came directly from the contributors, with scientific names, author citations, and verifications by Blake (1977), Boos (1986), Corbet and Hill (1980), De Schauensee (1966), Dyar (1928), ffrench (1980), Frost (1985), Grzimek (1973, 1975), Klots (n.d.), Pritchard and Trebbau (1984), Snyder (1949), Swartz and Thomas (1975), and Watson and Whalley (1975).

Those who want to refer to the original list (Schwab 1985) should contact the Parks Section, Forestry Division, Port of Spain. Persons requiring information on a specific faunal group found in the Aripo Savannas are directed to Adamson (1940), Alkins et. al (1981-82), ffrench (1980), Goodwin and Greenhall (1964), Hails (1983), Hislop (1985), Tikasingh (1974), The Trinidad Field Naturalists' Club (1979, 1985), and Trinidad Regional Virus Laboratory (1970, now the Centre for Epidemiology).

Detailed information on the vegetation and natural history of the area can be found in Bacon (1978), Beard (1946, 1953), Quesnel (1979), Richardson (1963), Forestry Division (1982), and Schwab (1988).

Invertebrates

Much speculation has surrounded the role of termites and earthworms in shaping the features of the open savanna including the building of mounds and hogwallow depressions. Adamson (1940) identified *Nasutitermes ephratae* as the termite responsible for the strange earthen mounds constructed of soil, saliva and feces (Bacon 1978) in the open savanna, the same species which curiously builds tree nests in the palm marsh and marsh forest! In a preliminary study of the open

savanna mounds, Hails (1983) determined that drainage and worm activity affected the density of termites, which in turn influenced the location of some savanna vegetation.

Other invertebrate studies in the Aripo Savannas have been limited. Tikasingh (1974) and the Trinidad Regional Virus Laboratory (1970) collected hundreds of insects from the area of which six mosquito species are listed here. J. Michalski recently completed a book on the dragonflies of Trinidad, and has contributed a narrative and his list of the dragonflies and butterflies of the area, totalling 46 and 15 species respectively. Other studies on the relative density of three species of savanna grasshoppers (F. Arman pers. comm.), and caterpillar and butterfly populations of the area (S. Smith pers. comm.) are pending.

The Odonata of the Aripo Savannas

by John Michalski

The odonate fauna of the Aripo Savannas, like that of so many other well-studied groups, contains many species that are not found commonly anywhere else in Trinidad. A few species, such as the damselfly *Lestes mediorufus*, have been found nowhere else on the whole island. Almost all odonates require standing or running water in which to pass their nymphal stages. In the rainy season, the savannas are, of course, very wet, much of the total area being actually submerged by a few inches of water, and this makes for very good odonate habitat indeed. However, much of the year the savannas are in fact quite dry and the species that have settled down in the savannas have had to cope with this problem in various ways.

The first, and perhaps most obvious, way of coping with seasonal conditions has been to limit the duration of the nymphal development to the wet season so that the adults emerge from the water and become airborne before everything dries up. This is surely what almost all of the Aripo species do. Even adult odonates need somewhat humid conditions however and added to this is the fact that many of the insects which make up their diet (mosquitos, midges, etc.) also need a very moist environment in which to live and reproduce. The species of the Aripo Savannas seem to make up for this by keeping largely to the hummocks and other shadier places as the savanna dries up. In addition, there are one or two places on the savanna where standing water remains throughout most of the year. An abandoned military ground provides several large craters where water collects to a depth of several feet and a canal that extends to the left of the main access road in Savanna #1 stays fairly wet throughout the dry season. Collecting at these spots is usually quite good, though they are dominated by the larger species of strong-flying dragonflies, whose eating requirements probably demand that they find larger "water holes" to patrol. The smaller, more weak-flying species, including most of the damselflies, keep to smaller wet patches and, in the very driest months, may even be seen flying along the deeper wheel ruts where the grasses are still green and the humidity must surely be somewhat higher than the surrounding savanna.

Some of the most spectacular species of odonates may be seen

at the Aripo Savannas and many of these are seldom, if ever, seen anywhere else on the island. These include the mammoth, lime green *Coryphaeschna viriditas*, and the almost fluorescent red *Aphylla producta*, *Rhodopygia hollandi*, and *Planiplax phoenicura*. The Trinidad range of these last three is so far restricted to the savannas. Also found here is the strange *Zenithoptera americana*, unusual not only because its wings are entirely metallic blue, but also because it flies and rests in the manner of the *Heliconius* butterfly, a behaviour I have seen in no other odonate.

Fish, Reptiles and Amphibians

Alkins et al. (1981-82) reported seven fish in the Aripo Savannas. Those species collected were from temporary, generally stagnant, ponds which form during the rainy season. These fish are adapted to deal with the problems of low oxygen in the temporary ponds and disperse once these ponds begin to dry up. Some of the area's fish use both aquatic and aerial respiration; some even use the intestine as a site for oxygen uptake. Dispersal problems have been solved by fish becoming efficient overlanders with well developed fins that act as "legs" to carry them to larger ponds or rivers as the temporary ponds dry.

Only four terrestrial turtles have been identified in Trinidad and all of them have been sighted in the Aripo Savannas (J. Seyjagat pers. comm.). These sightings are important because, to date, the Aripo Savannas area is the only place in Trinidad where all four are present. There is a relatively large number of snakes in the area (13) which use a variety of methods to kill their prey. The macajuel (*Boa constrictor constrictor*) suffocates its prey while the tigre (*Spilotes pullatus pullatus*), like most common snakes, swallows its prey alive. The two poisonous, and perhaps most feared snakes, the bushmaster (*Lachesis muta muta*) and fer-de-lance (*Bothrops atrox*) hunt primarily at night.

Birds

During a brief meeting with me in 1985, R. French identified 96 birds for the Aripo Savannas. In 1986, Wildlife Section staff and Field Naturalists' Club members reported an additional 32 birds for a total of 128 species for the area. This total represents 32% of the birds recorded for all of Trinidad.

Two species, the Large-billed Seed-finch or Twa-twa (*Oryzoborus crassirostris*) and the Lined Seedeater or chat (*Sporophila lineola*) have not been reported in recent years (G. Hislop, J. Kenny, pers. comm.). The former is considered to be extirpated from the island, although both are listed in the hope of their being seen again.

Mammals

Twenty-six mammals have been reported in the Aripo Savannas, ranging in size from the tiny grass mouse (*Akodon urichi*) to the dog-sized brocket deer (*Mazama americana*). The latter, in addition to the lappe (*Agouti paca*), agouti (*Dasyprocta leporina*), and tatoo (*Dasybus novemcinctus*) are favoured by hunters for their meat. Five species of water rat and four species of opossum also make their home in the area.

The List

Insecta

ODONATA (dragonflies and damselflies)

Anisoptera (dragonflies)

Aeshnoidea (clubtails and darners)

Gomphidae (clubtails)

Aphylla producta Selys

Aeschnidae (darners)

Coryphaeschna viriditas Calvert

Libelluloidea (skimmers)

Libellulidae

Brechmorhoga nubecula Rambur

Dythemis cannacrioides Calvert

Dythemis multipunctata Kirby

Erythemis credula Hagen

Erythrodiplax amazonica amazonica Sjostedt

Erythrodiplax basalis Kirby

Erythrodiplax castanea Burmeister

Erythrodiplax famula famula Erichson

Erythrodiplax umbrata Linn.

Idiataphe amazonica Kirby-

Macrothemis hemichlora Burmeister

Macrothemis imitans leucozona Ris

Macrothemis pumila Karsch

Micrathyria "near *eximia*" sp. nov. (undescribed)

Micrathyria "near *mengeri*" sp. nov. (undescribed)

Micrathyria laevigata Calvert

Micrathyria ocellata dentiens Calvert

Nephepeltia phryne Perty

Orthemis cultriformis Calvert

Orthemis ferruginea Fabricius

Perithemis electra Ris

Perithemis mooma Kirby

Perithemis thais Kirby

Planiplax phoenicura Ris

Rhodopygia hollandi Calvert

Tauriphila argo Hagen

Tramea binotata Rambur

Uracis imbuta Burmeister

Zenithoptera americana Linn.

Zygoptera (damselflies)

Calopterygidae (broad-winged damselflies)

Hetaerina macropus Selys

Lestidae (spread-winged damselflies)

Lestes forficula Rambur

Lestes mediorufus Calvert

Coenagrionidae (narrow-winged damselflies)

Acanthagrion kennedii Williamson

Acanthagrion luteum Racenis

Argia pulla Hagen

Argia translata Hagen

Ischnura capreola Hagen

Nehallenia minutum Selys

Ischnura ramburii Selys

Metaleptobasis brysonima Williamson

Metaleptobasis manicaria Williamson

Metaleptobasis mauritia Williamson

Telagrion raineyi Williamson

Aeolagrion dorsale Burmeister

ORTHOPTERA (grasshoppers)

Neoconocephalus sp., long-horned grasshopper

ISOPTERA (termites)

Nasutitermes ephratae Emerson

COLEOPTERA (beetles)

Aniara sepulchralis, black beetle

LEPIDOPTERA (butterflies and moths)

Frenatae

Castnioidea

Castniidae

Castnia licus Drury

Papilionoidea (butterflies)

Papilionidae (swallowtails)

Battus polydamas Linn., black page, gold rim,
polydamas swallowtail

Pieridae (whites, sulfurs, orange-tips)

Eurema sp. (either *nise* Cramer, *elatheia* (Rob.), or
albula Cramer)

Lycaenidae (gossamer-winged butterflies)

Tmolus sp.

Nymphalidae (brush-footed butterflies)

Anartia jatrophae Linn., white or American
peacock, biscuit butterfly

Junonia geneveva Cram.

Adelpha cytherea Linn.

Satyridae

Euptychia hermes Fabr.

Euptychia sp. (*palladia* Butl. or *penelope* Fabr.)

Heliconiidae (heliconians)

Dryas iulia Fabr.

Heliconius sara thamar Huebner

Heliconius ricini Linn.

Heliconius erato hydara Hewiston

Heliconius melpomene euryades Riff.

Danaidae (milkweed butterflies)

Danaus plexippus megalippe Linn.

DIPTERA (true flies)

Culex portesi, mosquito

Culex taeniopus Dyar & Knab, mosquito

Cules declarator Dyar & Knab, mosquito

Culex vomerifer, mosquito

Lutzomyia flaviscutellata, sand fly

Wyeomyia arthrostigma, mosquito

Wyeomyia splendida Bonne-Wepster & Bonne

Pisces

CHARACINIDAE (characins)

Astyanax bimaculatus (Linnaeus), sardine

Hemigrammus unilineatus (Gill), tetras

Copeina arnoldi Regan, copeina

ERYTHRINIDAE

Hoplerythrinus unitaeniatus (Spix), yarrow

Hoplias malabaricus (Bloch), gaubine

GYMNOTIDAE (knife-eel or naked-backed fishes)

Gymnotus carapo Linnaeus, banded knife-fish

CALLICHTHYIDAE (callichthyid armored catfishes)

Callichthys callichthys (Linnaeus), chato

Corydoras aeneus (Gill), bronze catfish, pui-pui

CYPRINODONTIDAE (killifishes or toothcarps)

Rivulus hartii (Boulenger), Hart's rivulus

POECILIIDAE (livebearers)

Poecilia vivipara Bloch; Schneider

CICHLIDAE (cichlids)

Cichlasoma bimaculatum (Linnaeus), cascarob

SYNBRANCHIDAE

Synbranchus marmoratus Bloch, zange, eel

Amphibia

LEPTODACTYLIDAE (leptodactylids)

Leptodactylus wagneri (Peters), whistling frog

BUFONIDAE (true toads)

Bufo granulosus beebei Gallardo, granular toad

Bufo marinus (Linnaeus), marine toad, crapaud

MICROHYLIDAE

Elachistocleis surinamensis (Daudin)

Elachistocleis ovalis (Schneider)

Hyla minuta Peters

Hyla misera Werner

Hyla rubra (Daudin)

Flectonotus fitzgeraldi (Parker)

Reptilia

KINOSTERNIDAE (musk and mud turtles)

Kinosternon scorpioides (Linnaeus), South
American mud turtle

EMYDIDAE (common freshwater turtles)

Rhinoclemmys p. punctularia (Daudin), galap

CHELIDAE (snake-necked turtles)

Phrynops gibba (Schweigger), side-necked galap

TESTUDINIDAE

Geochelone denticulata (Linnaeus), yellow leg
morocoy

IGUANIDAE (iguanids)

Anolis chrysolepis planiceps Troschel, anole

Iguana iguana iguana (Linnaeus), iguana

Polychrus marmoratus (Linnaeus), 24-hr. lizard

SCINCIDAE

Mabuya mabouya (Lacépède), bronze stink

TEIIDAE (whiptail lizards)

Ameiva ameiva atrigularis Garman, zandolie,
giant ameiva

Tupinambis tequixin (Linnaeus), matte.

(See Presch 1973).

Cnemidophorus lemniscatus lemniscatus (Linn.),
whiptail, strand racerunner

BOIDAE (boas and pythons)

Boa constrictor constrictor Linnaeus, macajuel

Corallus enydris cookii Gray

Eunectes murinus gigas (Latreille), anaconda

COLUBRIDAE (common snakes)

Chironius carinatus (Linnaeus), golden-tree snake, machete savanne
Clelia clelia clelia (Daudin), black cribo
Helicops angulatus (Linnaeus), water mapepire
Leptophis ahaetulla coeruleodorsus Oliver, green horse-whip
Mastigodryas boddaerti boddaerti (Senzen), machete couesse
Oxybelis aeneus (Wagler), horse-whip
Pseudoboa newiedii (Duméril, Bibron and Duméril), ratonel
Pseustes poecilonotus polylepis (Peters), dos-cocrite
Spilotes pullatus pullatus (Linnaeus), tigre

CROTALIDAE (pit-vipers)

Bothrops atrox (Linnaeus), mapepire balsin, fer-de-lance
Lachesis muta muta (Linnaeus), mapepire z'anana, bushmater

CROCODYLIDAE (alligators and caimans)

Caiman crocodilus (Linnaeus), spectacled caiman

Aves

TINAMIDAE (tinamous)

Crypturellus soui andrei (Brabourne & Chubb) little tinamou

ARDEIDAE (bitterns and herons)

Bubulcus ibis (Linnaeus), cattle egret
Butorides striatus (Linnaeus), green-backed heron
Egretta caerulea (Linnaeus), little blue heron

CATHARTIDAE (American vultures)

Cathartes aura (Linnaeus), turkey vulture
Coragyps atratus (Bechstein), black vulture, corbeau

ACCIPITRIDAE (hawks, osprey, and eagles)

Buteo albonotatus Kaup, zone-tailed hawk
Buteo nitidus (Latham), gray hawk
Heterospizias meridionalis (Latham), savanna hawk
Leptodon cayanensis (Latham), grey-headed kite
Leucopternis albicollis (Latham), white hawk

FALCONIDAE (falcons and caracaras)

Falco femoralis Temminck, aplomado falcon
Falco rufigularis Daudin, bat falcon
Falco peregrinus Tunstall, peregrine falcon

CHARADRIIDAE (lapwings and plovers)

Charadrius semipalmatus Bonaparte, semipalmated plover
Pluvialis squatarola (Linnaeus), black-bellied plover
Vanellus chilensis Molina, southern lapwing

SCOLOPACIDAE (sandpipers and allies)

Actitis macularia (Linnaeus), spotted sandpiper
Bartramia longicauda (Bechstein), upland

sandpiper

Calidris melanotos (Vielillot), pectoral sandpiper
Calidris pusilla (Linnaeus), semipalmated sandpiper
Gallinago gallinago Linnaeus, common snipe
Limnodromus griseus (Gmelin), short-tailed dowitcher
Tringa flavipes (Gmelin), lesser yellowlegs
Tringa melanoleuca (Gmelin), greater yellowlegs
Tringa solitaria Wilson, solitary sandpiper

COLUMBIDAE (pigeons and doves)

Claravis pretiosa (Ferrari-Perez), blue ground-dove
Columba cayennensis Bonnaterre, pale-vented pigeon
Columba speciosa Gmelin, scaled pigeon
Columbina talpacoti rufipennis (Bonaparte), ruddy ground-dove
Columbina passerina albivitta (Bonaparte), common ground-dove
Geotrygon montana (Linnaeus), ruddy quail dove
Leptotila rufaxilla Richard & Bernard, gray-fronted dove
Leptotila verreauxi Tobagensis Hellm & Seilern, white-tipped dove
Zenaida auriculata stenura (Bonaparte), eared dove

PSITTACIDAE

Amazona amazonica (Linnaeus), orange-winged parrot
Ara manilata (Boddaert), red-bellied macaw
Forpus passerinus viridissimus (Laf.), green-rumped parrotlet
Touit batavica (Boddaert), lilac-tailed parrotlet
Touit heutilii (Temminck), scarlet-shouldered parrotlet

CUCULIDAE

Crotophaga ani Linnaeus, smooth-billed ani
Piaya cayana Linnaeus, squirrel cuckoo

STIGIDAE (owls)

Glaucidium brasilianum phaloenoides (Daudin), ferruginous pygmy owl

CAPRIMULGIDAE

Lurocalis semitorquatus (Gmelin), semicollared nighthawk
Nyctidromus albicollis (Gmelin), pauraque

APODIDAE (swifts)

Chaetura brachyura (Jardine), short-tailed swift
Reinarda squamata (Cassin), fork-tailed palmswift

TROCHILIDAE (hummingbirds)

Amazilia chionopectus (Gould), white-chested emerald
Amazilia tobaci (Gmelin), copper-rumped hummingbird
Anthracothorax nigricollis (Vieillot), black-throated mango

- Chlorestes notatus* (Reichenbach), blue-chinned sapphire
Chrysolampis mosquitus (Linnaeus), ruby-topaz hummingbird
Florisuga mellivora (Linnaeus), white-necked jacobin
Glaucis hirsuta insularum Hellmayr & Seilern, rufous-breasted hermit
Phaethornis guy (Lesson), green hermit
Phaethornis longuemareus (Lesson), little hermit
Polytmus guainumbi (Pallas), white-tailed goldenthrout
- TROGONIDAE (trogons)
Trogon violaceus (Gmelin), violaceous trogon
- ALCEDINIDAE (kingfishers)
Ceryle alcyon (Linnaeus) belted kingfisher
Chloroceryle aenea (Pallas) pygmy kingfisher
- MOMOTIDAE (momots)
Momotus momota bahamensis (Swainson), blue-crowned motmot
- GALBULIDAE (jacamars)
Galbula ruficauda Cuvier, rufous-tailed jacamar
- RAMPHASTIDAE (toucans)
Ramphastos vitellinus Lichtenstein, channel-billed toucan
- PICIDAE (woodpeckers)
Dryocopus lineatus (Linnaeus), lineated woodpecker
Picus rubiginosus trinitatis (Ridgway), golden-olive woodpecker
- DENDROCOLAPTIDAE (woodcreepers)
Dendrocincla fuliginosa meruloides (Lafresnaye), plain-brown woodcreeper
Xiphorhynchus guttatus susurrans (Jardine), buff-throated woodcreeper
- FURNARIIDAE (spinetails and allies)
Synallaxis albescens trinitatis Zimmer, pale-breasted spinetail
- FORMICARIIDAE (antbirds)
Myrmeciza longipes (Swainson), white-bellied antbird
Myrmotherula axillaris (Vieillot), white-flanked antwren
Thamnophilus doliatus fraterculus Berl. & Hart., barred antshrike
- COTINGIDAE (cotingas)
Procnias averano carnobarba (Cuvier), bearded bellbird
- PIPRIDAE (manakins)
Manacus manacus trinitatis (Hartert), white-bearded manakin
Pipra erythrocephala flavissima Junge & Mees, golden-headed manakin
- TYRANNIDAE (tyrant-flycatchers)
Arundinicola leucocephala (Linnaeus), white-headed marshtyrant
Camptostoma obsoletum venezuelae Zimmer, southern beardless tyrannulet
Elaenia chiriquensis albivertex Pelzeln, lesser elaenia
Elaenia flavogaster (Thunberg), yellow-bellied elaenia
Fluvicola pica (Boddaert), pied water-tyrant
Megarhynchus pitangua (Linnaeus), boat-billed flycatcher
Muscivora tyrannus monachus (Hartlaub), fork-tailed flycatcher
Myiodynastes maculatus tobagensis Zimmer, streaked flycatcher
Pipromorpha oleagina pallidiventris (Hellm.), ochre-bellied flycatcher
Pitangus sulphuratus trinitatis (Hellmayr), great kiskadee
Platyrinchus mystaceus insularis Allen, white-throated spadebill
Tolmomyias flaviventris collingwoodi (Chubb), yellow-breasted flycatcher
Tyrannopsis sulphurea (Spix), sulphury flycatcher
Tyrannus dominicensis (Gmelin), gray flycatcher
Tyrannus melancholicus chloronotus Berlepsch, tropical kingbird
- HIRUNDINIDAE (swallows)
Hirundo rustica erythrogaster Boddaert, barn swallow
Progne chalybea (Gmelin), gray-breasted martin
- TROGLODYTIDAE (wrens)
Thryothorus rutilus Vieillot, rufous-breasted wren
Troglodytes aedon albicans Berl. & Tacz., house wren
- MIMIDAE (mockingbirds)
Mimus gilvis tobagensis Dalmas, tropical mockingbird
- TURDIDAE (thrushes)
Turdus albicollis phaeopygoides Seebohm, white-necked thrush
Turdus fumigatus aquilonalis (Cherrie), cocoa thrush
Turdus nudigensis Lafresnaye, bare-eyed thrush
- SYLVIIDAE (gnatcatchers)
Ramphocaenus melanurus trinitatis Lesson, long-billed gnat wren
- VIREONIDAE (vireos)
Cyclarhis gujanensis flavipectus Sclater, rufous-browed peppershrike
- ICTERIDAE (American orioles)
Cacicus cela (Linnaeus), yellow-rumped cacique
Icterus chryscephalus (Linnaeus), moriche oriole
Icterus nigrogularis trinitatis Hartert, yellow

oriole
Leistes militaris (Linnaeus), red-breasted
blackbird
Molothrus bonariensis minimus Dalmas, shiny
cowbird
Psarocolius decumanus insularis (Dalmas),
crested oropendola
Quiscalus lugubris Swainson, carib grackle

PARULIDAE (wood warblers)

Dendroica petechia aestiva (Gmelin), yellow
warbler
Geothlypis aequinoctialis (Gmelin), masked
yellowthroat
Seiurus aurocapillus Linnaeus, ovenbird
Seiurus noveboracensis (Vieillot), northern
waterthrush

COEREBIDAE (honeycreepers)

Coereba flaveola luteola (Cab.), bananaquit
Chlorophanes spiza Linnaeus, green
honeycreeper
Cyanerpes caeruleus longirostris (Cab), purple
honeycreeper
Cyanerpes cyaneus (Linnaeus), red-legged
honeycreeper
Dacnis cayana (Linnaeus), blue dacnis

THRAUPIDAE (tanagers)

Tanagra violacea rodwayi Penard, violaceous
euphonia
Habia rubica (Vieillot), red-crowned ant-tanager
Ramphocelus carbo magnirostris Lafr., silver-
beaked tanager
Tachyphonus rufus (Boddaert), white-lined
tanager
Tangara gyrola viridissima (Lafr.), bay-headed
tanager
Tangara mexicana vieilloti (Sclater), turquoise
tanager
Thraupis episcopus Linnaeus, blue-gray tanager
Thraupis palmarum melanoptera (Sclater), palm
tanager

FRINGILLIDAE (finches, seedeaters, and grosbeaks)

Oryzoborus crassirostris (Gmelin), large-billed
seedfinch
Saltator coerulescens brewsteri Bangs & Penard,
grayish saltator
Sporophila lineola bouvronides (Less), lined
seedeater
Sporophila minuta (Linnaeus), ruddy-breasted
seedeater
Volatinia jacarina splendens (Vieillot), blue-
black grassquit

Mammalia

DIDELPHIDAE (American opossums)

Caluromys philander (Linnaeus), woolly opossum
Didelphis marsupialis Linnaeus, American
opossum
Marmosa fuscata Thomas, mouse-opossum
Marmosa robinsoni Bangs, murine opossum

MYRMECOPHAGIDAE

Tamandua tetradactyla (Linnaeus), yellow
tamandua

PHYLLOSTOMIDAE (American leaf-nosed bats)

Carollia perspicillata (Linnaeus), short-tailed
leaf-nosed bat, Seba's short-tailed bat
Choeroniscus intermedius (J. A. Allen &
Chapman), long-nosed bat

THYROPTERIDAE (disk-winged bats)

Thyroptera tricolor Spix, Spix's disk-winged bat

DASYPODIDAE (armadillos)

Dasyus novemcinctus Linnaeus, nine-banded
armadillo, tatoo

SCIURIDAE (squirrels)

Sciurus granatensis Humboldt, squirrel

HETEROMYIDAE (pocket mice)

Heteromys anomalus (Thompson), Trinidad spiny
pocket mouse

CRICETIDAE (mice, rats, voles, gerbils, hamsters)

Akodon urichi J. A. Allen & Chapman, grass
mouse
Nectomys squamipes (Brants), water rat
Oryzomys capito (Olfers), terrestrial rice rat
Oryzomys concolor (Wagner), arboreal rice rat
Rhipidomys sclateri (Thomas), climbing rat
Zygodontomys brevicauda (J. A. Allen &
Chapman), cane rat

ERETHIZONTIDAE (New World porcupines)

Coendou prehensilis (Linnaeus), prehensile-
tailed porcupine

DASYPROCTIDAE (pacas and agoutis)

Agouti paca (Linnaeus), lappe
Dasyprocta leporina (Linnaeus), agouti

ECHIMYIDAE (spiny rats)

Makalata armata (I. Geoffroy) arboreal spiny rat,
pilori, porcupine rat
Proechimys trinitatus (J. A. Allen & Chapman),
terrestrial spiny rat, long-tailed pilori

MUSTELIDAE (weasels)

Eira barbara trinitatis Thomas, wood-dog, tayra

HERPESTIDAE (mongooses and civets)

Herpestes auropunctatus (Hodgson), Indian
mongoose

FELIDAE (cats)

Felis pardalis Linnaeus, ocelot, tigre

CERVIDAE (deer)

Mazama americana (Erxleben), brocket deer