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FLORA AND FAUNA OF THE EL VERDE FIELD STATION

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. g 3 CENTER FOR ENERGY AND ENVIRONMENT RESEARCH

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FLORA AND FAUNA OF THE EL VERDE FIELD STATION

Introduction

The El Verde Station is located on the northwest slope of the Luquillo Mountains in northeastern Puerto Rico (latitude 18°19'N, longitude 65°65'W). The 150 ha research area is located on land under federal control and is occupied under a use agreement between the U.S. Department of Energy and the U.S. Forest Service. The Station is operated for the DUE by the Center for Energy and Environment Research. The history of ecosystem research at the site goes back to 1963 and the Rain Forest Project under the direction of Howard Odum. The research area ranges from 250 to 500 m above sea level and has a mean annual rainfall of 3.5 m (138 in) and mean monthly temperatures between 21-28°C (70-77°F),

The field station is within the 11,330 ha Luquillo Experimental Forest, which is congruent with the Caribbean National Forest. The area was declared a forest reserve in 1903 and has been managed by the

U.S. Forest Service since 1917. The Luquillo Mountains reach an elevation of 1,075 m above sea level and serve as the headwaters for six major rivers. The forest contains four life zones (subtropical wet forest, subtropical rain forest, Tower montane wet forest, lower montane rain forest) under the Holéridge system of classification. In addition to its designation as an Experimental Forest, the Caribbean National Forest is also a Biosphere Reserve and contains @ Research Natural Area. A wealth of background information is available including 2 good understanding of the taxonomy of acst plant and animal groups, 80 years of clinattc observations, 30 years of data on forest growth ard composition changes, complete vegetation, soils, and geologic maps, and 20 years of intense study of the tabonuco forest around the Field sta

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Groups, 80 years of clinattc observations, 30 years of data on forest growth ard composition changes, complete vegetation, soils, and geologic maps, and 20 years of intense study of the tabonuco forest around the Field sta

Florai and Faunal Diversity

Puerto Rico stands as the fulcrum between the east-west arm of the Greater fnt ilies and the north-south arm of the Lesser Antilles. The flora arc fauna of the island contain elenents of both regions. vnile the Insular pattern of reduced richness of the biote fs evident in Puerto Rico, the island still has S47 native species of trees, 13 species of tats, 249 species of birds, 41 species of reptiles, and 22 species of amphibians. The Caribbean National Forest contains 225 tree species, 82 vertebrate species, and a wide variety of invertebrates.

During 20 years of field work at El Verde, there have been recorded &

amphibians

reptiles, 24 birds, ? mammals, and over 2,100 species of

invertebrates.

Now to Use This List.

NeJor groups are listed below in different tables because of the

complexit

of some groups compared to others. Only those species occurring within the El Verde Research Area are included. For plants, only the more commonly occurring species are given, A more complete list can be found in Odum end Pigeon (1970).

For invertebrates, we give information on the principal strata where they occur: soft (SOI), litter (LIT = dead organic matter resting on the ground), understory (UND = from the litter to the bottom of the

---Page Break---

completely closed canopy of mature trees), and canopy (CAN = the closed leaf layer made up by the crowns of mature trees). These characteriza

tions are based both on

impling data and knowledge of the general habits of different groups. The list of invertebrates is by necessity incomplete, and we anticipate that many new taxa will be added in the future. In particular, the nolosetabolous species (from Neuroptera on) are numerous and difficult to identify and should contribute more to the list as their taxonomy becomes clearer.

Information on abundance is given for the better-studied vertebrates. Classification as rare or abundant is subjective where actual densities are not listed, and these categories may reflect different

absolute abundances for different taxa.

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TABLE 1. The common plants at

Followed by? shrubs

et. al (1981).

Phylum: Spermatophyta

Class: Nonocortledones,

Order: Paimaies

Fanily: Palmaceae

Class: Dicotytedones

Subclass: rolypeeatae

Ureieales

1: Moraceae

cece

Order: Nagnotiales

Fomily: Lauraceae

EL Verde are Listed below, with trees

Scientific nanes are from Martorell

?TREES

Order: Sapindales

Family: Sapind:

Matayba domingenais

Order: Malvales

Fanily: Elaeocarpaceae

Flacourtiaceae

ay

aria arborea

Honalium racemosun

Order: Mytales

Yanily: Combretaceae

Neceandra sintensii

Scotes Jeucoxyion ?Buchenavia capita

Deotes noschat.

Order: Leguminosae

Family: tinosaceae

Inga fapifolia

Inga vera

Paaily: Fabaceae

Ornoeia krusi{

order: Rutales

Family: Rutaceae

Zanthoxy ion

Family: Burseraceae

Dacrrodes «

Fomily: Meliaceae

Guarea guidonia

Order: Euphorbiales

Family: Euphorbiaceae

?Alchorneopsis

floribunda

Groton poecilanth

Sapiun Laurocer:

zmalee Manitkara biden

Family: Myrtaceae

?vereia splendens

Fanily: Melastonataceae

Hiconia eetrandra

Calycogoniun squa~

sulonus

Order! Unbelliflorse

Fanily: Araliaceae

Didymopanax

?morotont

Subclass: Sympetalae

Order! hnales

Family: Sapotaceae

elsa

Micropholis garcini-

folia

Order: Oleales

Family: Oleaceae

Linge

doningensis

order: Solanates

shabuin heterophyi1

---Page Break---

SHRUBS DOMINANT IN OPEN AREAS

Phylum: Spermatophyta

Class: Dicotyledones

Subclass: Sympetaiae

Order: Rubiales

Fonily: Rubiaceae

Palicourea crocea

Payehotria ber

Phylum: Peoridiphyta

Clava: Filicinae

Order: Eufsticales

Family: Cyatheaceae

?AMsophila beyophite

Cyathea arborea

heia agailina

SHRUBS DOMINANT IN SHADY AREAS (WITH A CLOSED CANOPY)

Phylum; Spermatophyta

Class: Dicotyledones

Subclass: Polypet.

?Order: Piperates

Family: Piperaceae

Piper adu

Fotlosorphe peltata

Lae

Order: triticales

Fanily! Urticaceae

Order: Sapindales

Order: Myrtales

Fanily? Melastonataceae

Miconia prasina

Miconia tetrandra

Hiconia racemosa

---Page Break---

Table 2, Foraging status of invertebrate taxa in the rain forest at El Verde.

Foraging

Taxon location

?ARACHTOR

?Anblypsi

Phrynidæ

Pheynus palnacust

ae ur, wD

Scorpionida

Buthidæ (1 sp.) ur, wD

Preudoscorpionida

?Menthidae

Menthalus \$74 ut

Meoroneidæ (1 sp.) ur

opi fones

Gonylepeidæ (1 sp.) ur

carina (about 30 spp.)*

a (about 30 spp.) sor, Lan, wD

Aranetda

?Theraphosidae

Certophelis portori

Dipluridae

?Aceale spinosa ut

Baryehelidae =p.) ut

Uloboridae

Miagranmopes ili

Phoicidae

Mictonerys dalei* xp

Modi: ?mon tanus ur xp

No signatuss

Teridiidae (about 2 opp.) LIT, TD

Araneidae

i wx, cae

Leucauge regnyi* 7

Groehler spp x0! cae

"iiizetus pertoricensis wo

Clubionidae (2 spp.) =

Anyphaenidac

Walia co

W. macropalpus ur,

cxenidee ur

OLigectenus ot tieys

sparasione

Olion antiguensis#

Skasina portoricensis®

(@ other spp.) 1%.

Thoaiseidae

"Epicadus putchleri* wm, case

e (or

Tyssonanidae (1p. me

WW

ae ui, wo

wi

wp

wD

UND

---Page Break---

Foraging

Taxon ocation

curtopopa

Geophilonorpha

Wenicopidae (1 ep.) ur

Oryidae (1 sp.) ur

Scolopendrenorpha

Ceyptopidse (1 sp.) ur

Scolopendridae

Scolopendra alter

DIPLOPODA

Clomeridesnida

Glomeridesmis marmoreus* ut

Polydeseida

cryptodesmide

Liomus obseurus

Docodessis maldon

Leptodesaidse

Ricodesous stejneri* ur

Spirobolids

Spirobolellidae

Microspirobodus richmondi LIT

Cambalids

Epinannolenidae

Epinannolene trinidadensig LIT

Chordeunidi

Stemilidae

Prostenniulus heatwolus* ut

Polyzonic

?Siphonophoridae

Siphonophora port

?CRUSTACEA

LIT, UND, CAN

ur, wD

ut?

ut

Podocopa (1 sp?)* sor, iT

Subclass Copopoda(l sp.?)* SOT, LIT

Isopoda

Oniscidse

ut

ur

Epilobocera situati fron; ur

iszcTa

Colleabola

Seinthuridae

?Peanothrix sp. sor, ur

Sphyratheca sp. sor, LIT

G other sp. Sor, Lit

Entoaobryid

---Page Break---

Foraging

location

sot, Lit

ut, wo

(& other spp.) ur

ieotomidae (2' spp.) ur

Poduridae (2 sp.) ur

Microcoryphio

Machilidae (1 sp.) wo

odonata

Coenagrionidae (1 sp.) wo

Aeshnidae (3 spp.) USD, CaN

Libelluligae (2 spp.) UND, CAN

Blattodea

Biattelligae

?Aghaopteryx facies* ur, (ND

Caribiacea hebardi* mat, wD

uit, WD

hheeleri LIT) wb

?Doringuensis Lit, wp

x UT, wD

Plectopters intulatat Lit, UND

Paeudosvaploce pe Lar, wo

Pon. sp. LT, wo

(about 6 other spp.) ur, wo

Orthoptera

?Tettigoniidae

vner ND, cat

Mictocentrus triangulatum UND, CAN

Turpilia rogorosa* UND, CaN

G other app.) UND, CaN

Gryllacrididae

elena ap. Lar, wNp

oryltaiae

?Azphiacusta caraibeus ur

Anaxipha sp * wn, cay

Snurogryllus muticus* ut

Certoxypha gundlachi UND, aN

Laurepa krugii* UND, CaN

Grocharis tere UND, CAN

9. vaginal: UND, CAN

Orocharis spp.

(at Least 4 others)* Lr, utp

GE Least 3 other spp.) LIT, UND

Phassatodea

Phasmatidae

Lanponius portoricensis* ND, cas

Gbour @ other spp.) UND, CaN

---Page Break---

Foraging

Taxon Jocatson

Mantodea

Mantidae (1 sp.) sD, caN

Isoptera

Termitidae

Wasutiterges costalict ep, caN

rrmes (2 other spp UND, CAN

Clyptoternes pubescens UND, CaN

Dermaptera

Careinophoridae (1 sp.) LIT, UND, cant

Labiidae (1 sp.) EXT, UND, CAN?

Enbioptera

Terateabiidae (1 sp.) UND, CAN

Psocoptera

Polypsocidae (1 sp.)* LIT, wD, CAN

Epipsoeidae (3 spp.)* LIT, UND, CAN

Procidae (2 spp.) can

Peeudocaeci 1iigae (2 spp.)

Psyllopscocidae (1 sp.) LIT, UND, cay

Lepidopaoridae (1 sp) LIT, UND, CaN

Pachytroctidae (1 sp.) LIT, UND, CAN

Liposcelidae (1 sp.)* ut

Hyopsocidee (1 sp.) LIT, UND, caNT

Thysanopeera

Phioeothripidae

(at least 2 epp.)* LIT, UND, CAN

Thripidae (8 species?) Lat, wp, can

Neniptera

Veliidae (2 spp.) nr, water surface

Schizopteridae (1 sp.) ut

Dipsocoridae ur

Enteocephalidae (1 =p.) LIT, wi

Phymatidae (1 sp.) wip

Miridae (16 spp.) usp, CaN

Reduviidae

2 Ploaria sp.* wo

other spp.) usp

Nabidae (1 sp.) wD

Lygaeidse (4 spp.) ND, caX

Coreidae (1 sp.) sD, CaN

Aradidae Q sp.) ut

Saldidae (1 sp.) shores of streane

Cydnidae (1 sp.) uit

Pentatomidae (6 spp.) wD, CaN

Horoptera

Ciendidae

Borencona aguadilla® can

---Page Break---

Foraging

Tao osatson

Menbracidae (2 spp.) can

Cieadelligae

Sibovea coffeacols® ww,

Xestocephalus sacu ut, wo

Ge Teast 15 othe Lat, wip

cixtsae

?Bothesocer wi, can

Puitalie alt ND, cat

F. supratta® wD, CaN

Besaculatat wD, CaN

sartorelli ND, CaN

P. gabornt np) cae

G other spp.) ND, cat

Delphacidce

Ugvops oscidentalish wm, crx

Ge other spp: ND, aN

verbidae

wp, car

wn, caN

ND, can

ww, cas

ND, ca

© arias ww, caX

other sp.) wi; cas

Tropiduchidae

Ladella stali* ww, cas

(ether =pp.) wD, cas

Fatidae

Pecrusa torus ww, cay

Kelorsesis nagnas xD, cas

(other spp) UND, cas

Acanalonidae (2 spp.) wD, cat

Kinnaridae (1 ap.) wD, cat

Peyllidae (5 spp.) wD) ca

Diagpididae Cl spp.) ut,

Aphididae (2 sp.) wo,

Neuroptera

Coniopterygidae (1 sp.) wo

Mantispidae (2 spp.) 1D

Menerodiidee (1'sp.) wD

Chrysopidae (4 spp.) wD

Ascalaphidae (1 sp.) wx

Coleoptera

Carabidae (1 sp.) ut

Nisteridse (1p) ur

Silphidae (1 aps) sor tit

Peiliidae (at least 2 spp) LIT, UND, CAN

-10-

---Page Break---

Taxon

Staphylinidse

(about 7 spp.)*

Pselaphidae

(about 4 spp.)*

Scydeaenidae (1 sp.)

Cantharidae (1 sp.)

Lanpyridae

Phot in

(about 6 ether epp-)

Lycidae (about 4 pp.)

Dermestidae (1 sp.)

Ostomatidae (p.)

Cleridae (1 sp.)

Elateridae

Dyrophorus Luninosus

Go other spp.)

Throseidae (1'sp.)

Daseillidae (at least 3 spp.

Prilodactylidae (at least

5 spp.)

Rhizophagidae (1 sp.)

Cevprophagidae (1 sp.)

Cucujidae (at least 3 spp.)

Phalacridae (1 5p.)

Coccinellidae (at least

3 spp.)

Fuglenidee (at least 2 spp.

Colydiidae (1 sp.)

Oedeneridae (1 sp.)

Mordellidae (1

Tenebrioniéae (1 ap.)

Melandryidae (2 sp.)

Anobiidae (2 spp.)

Pasealidae (1 sp.)

Scarabaeidae (10 spp.)

Geranbycidae (14 spp.)

Chrysomelidae (at least

3 spp.)

Brentidge (1 sp.)

spt

2

)

Curculionidae (at Least 9 spp.)

Platypodidae (1 sp.)

Scolytidae (at least 8 spp.)

Lepidoptera

Pieridae

Disnorphia spio*

(other spp)

ye

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LIT, wo

ur

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Laz, wD,

Lit, xD,

LIT, uD,

ur

LIT, wo

LIT, wo

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LT, wo

Llr, wD

1a; wD)

ut, wo

uit, wp

LIT, wD

LIT, ND,

ut, wp,

ut, wD,

Lit, wD,

wO,

?????____leization____

g 2 2282 2

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---Page Break---

Foraging

Taxon Location

Papitionidae (1 sp.) UND, aN

Satyridae (1 sp.) wD

Weliconiidae (1 sp.) wo

Nymphalidae (abost 10 spp.) UND, CAN

Lycaenidae (about 2 spp.) can

Hesperiidae (about 5 spp.) ND, CAN

Sphingidae (9 spp.) UND, CAN

Ctenuchidae (7 spp.) usp?

Nolidae (1 sp.) vx

Arctiidae C8 spp.) sp

Noctuidae (60 spp.)* wD

Pericopidae (2 spp.) ?ND

Notodoncidae (4 spp.) wD

Geosetridae (23 spp.) wD

Negalopynidae

Megalopyre krugish wx

Pyralidse

Desmia tages* wx

Nargaronia elegans* wx

*Sparagmio gigantalis** wx

(et least 60 other spp.) wD

Thyrididae (3 spp.) wD

Prerophoridae (5 spp.) UND

Alucitidae (1 sp.) wD

Olethrevesdac (2 spp.) ND

Tortricidae (2 spp.) xD

Cossidae (1 sp)" wx

Gelechiidae (at least 1 sp.) UND, CaN

Ethniidse (at least 1 sp.) xo?

Gracillaridae (at least 1 sp.) UND, CAN

Acrolophidae (9 spp.)* wo?

Tineidae (at least 1 <p.) UND

Dipeera

Tipulidae (38 spp.)* LT, ws

Psychodidae (27 spp.)* Lit, wo

Culicidae (9 spp.) UND, CaN

Ceratopogonidae(34 spp.)

LIT, UND, ca

Chironoaidae (51 spp.) *# LOT, exp) cav

Simuliiéae (2 spp.) wo

Mycetophilidae (28 spp.)* Lin, UND, cay

Seiaridae (33 spp.)* LT, UND, CaN

Scatopeidae (2 spp.) UIT, UND, CAN

Cecidoayiidae (30 spp.) LIT, UND, CaN

mde

---Page Break---

Foraging

Taxon

ut, wD

wo

Eapididae (6 spp.) wD

Dolichopodidae (16 spp.)* wx

Phoridae (65 spp.)* Lat, UND, CaN

Pipunculidae (1 sp.) can

Syephidac (5 spp.)

wD, CaN

Micropezidae (4 spp.) Lit, wD

Otitidae (2 spp.) Lit, wD

?Tephritidae (1 sp.) wD

Sepaidac (1 ep.) xo

Tauxaniidae (app) UND, CAN

Lonchacidae (2 spp.) wo!

Sphaeroceridae (2 app.) ut, wD

Milichiidae C spp.) ND

Curtonotidae (1 sp.) UND, CAN

Drosophilidae (8 spp.)* Ltr, wp)

Chtoropidae (2 spp.) UND, can

Osaniidae (1 sp.) LAT, wD, cant

Agromyzidae (1 sp.) wo

Clusiidae (3 spp.) Lin, wo

Neriidae (3 spp.) wp

?Anthomyiidae (12 spp.) uit, usp

Streblidae (1 sp.) sD, cam

Sarcophagidae (1é spp.) Lar, wD)

Calliphoridae (1 9p.)# Lit, wo

Tachinidae (at least 20 spp)

UND, ca

Hymenoptera

Tehneunanidse (4 spp.) sp, aN

Brachonidae (8 spp.) wD, CaN

vymaridae (13 spp.) UND, CAN

Trichogrammatidae (3 spp.) ND, CaN

Eulophidae (4 spp.)* wD, CAN

Eneyrtidae (7 spp.) WND, CAN

Eupelnidae CL sp.) cas

Agaonidae (2 sp.) can

?Torymidae (1 6p.) cas

Cynipidae (4 spp.) can

Geraphronidae (1i spp.) ND, CAN

Diapriidae (12 spp.) ND, CAN

Scelionidae (17 =pp.)* Lar, UND) ca

---Page Break---

Taxon

Platypastigae (9 spp.)

Bethylidae (4 spp.)

Dryinidae (1 sp.)

Formicidee

iridonvrec polleust

Hymelachisea ramvlorun*

Pheidole moerens*

GS other species)

Scolisaae (1 sp.)

Poapilidae (1 3p.)

Vespidse

Mischocyttarus cubensis

Polistes crinituat

sphecidae (3 spp.)

Maliccidae (2 spp.)

Apidae

?Apis neliiferat

*Xylocops brasiliarorum**

ONYCHOPHORA (phytua)

Peripacidae

Peripatus juaensis

currents

Olsgochacta

caSTROPODA

Stylomaatophora

Fructicicolidae (2 spp.)

Canaenidae

(other pp.)

Sagdidae

Platysuccines gorto

(1 other ep.)

Bulinulidae (1 sp.)

Uroceptidae (2 spp.)

Clausiliidae

Nenia tridens*

Subutinidae C1 «p.)

Maplotrenidae (2 spp.)

Oleaciiniadae (3 spp.)

Linacidae (1 sp.)

Succineidee (1 sp.)

a

Foraging,

location

wp, CaN

?wp, CaN

LIT, UND, CAN

LIT, UND, CaN

UND, CaN

Lit, wo)

LIT, UND, CAN

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---Page Break---

Taxon

Soleolifera

Veronicellidae (1 sp.)

?Archaeogastropoda

Neritidae (1 sp.)

Helicinidae (2 spp.)

Mesogastropoda,

Cyclophoridae

Mepalostrons croceum*

(other sp.)

Ponatilidae (2 spp.)

ADENOPHORA (any species) *

SECERNENTEA (Gany apecies)*

Foraging

Loca

ut

utr

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sor, LIT,

sot, LIT,

vwo?

ux?

wp, can?

UND! CAN

?*eajor components of food veb based on abundance and/or size.

ois

---Page Break---

Table 3. Vertebrates recorded from the £1 Verde Study Area.

Name Status

Class: Acphivial

Ordor: Salientia

Fasiiy: Bufonidae

Giant Toad (*Bufo marinus*)

Family: Leptodactylidae

Coaui (leutherodectylus cogui) abundant (40,000/ha)

Mottled Coqui (E. eneidae)

Tree-hote Coaui (E. hedricki)

Forest Coqui (E. portoricensis)

Groune Cogus (E) Fiehnongy}

Krinkled Cogui (E. wightmanae)

Tipped Frog? (Leptodactylus elbilabris)

Class: Reptilia!

Order: Squarata

Suborder: Lacertilia

Family: Gekkonidae

Upland Gecko (Sphaerodactylus klauberi)

Connon Owarf Gecko (*S. macrolepis*)

rectiye nantes

Lagartijo Verde (*Anolis evernanns*)

Puerto Riean Giant anole (*A euvfert*)

Yellow-bearded Anove (*A. gundtachiy~* abundant (2,000/ha)

Pigmy Anole (*A. occultus*) rare

Lagartijo Manchedo (*A. stratutus*) abundant. (25,000/ha)

Fenily: Anguidae

Culebra de Cuatro Patas (*Diptoglossus pleei*)

Fanily: Anphisbacnidae

Culebra Ciega (*inphisbaena*)

Suborder: Serpentes

Fanily: Boidae

Puerto Rican Tree Boa (*Epicrates inornatus*)

Fanily: Colubridae

Ground Snake (*Alsophis portoricensis*)

Chass: Aves®

Order: Falconiformes

Fon: Aectpitridae)

Red-tailed Hawk (*Suteo janaicensis*)

Broad-winged Hawk (*Guteo platypterus*)

Sharp-shinned Hawk (*Kécipiter striatus*) rare

Order: Coluni formes,

Fanity: Colunbidee

Red-necked Pigeon (*Colurba squanosa*) abundant

Tenaida Dove (*Zenaide aurita*)

Ruddy Quail-Dove (*Gsotrydon montana*)

rare

a6.

---Page Break---

Order: Psittact formes

Fanily: Psittacidae 46

Puerto Rican Parrot (*Anszona vittata*)** rare

Order: Cuculi formes

Family: Cuculidae

Puerto Rican Lizard Cuckoo (*Saurothera vieilloti*)

Order: Strigiformes

Fanily: Strigidae

Puerto Rican Screech Ow} (*Otus nudipes*)

Order: vod formes

Fesiny: Teochitcae

Puerto Rican Emerald (*Chlorostilbon maugaeus*)

Greén tango (*Anthracothorax viridis*) rare

Order: Coracti formes

Fanily: Todidae

Puerto Rican Tody (*Todus mexicanus*) abundant

Order: Pies formes

Family: Pieidae

Puerto Rican Hoodpecker (*Melanerpes portoricensis*)

Order: Passeriformes,

Foniyy: Tyrannidae shes)

Stolié Plycetcher (*Myiarchus stolidus* rare

oogernead Kingbird {*Tyrannus caudvfasciatus*)® rare

Fantiy: Mimidae

Pesrly-eyed Thrasher (*Margaraps fuscatus*)

Farily: Turéidae

Red-legsed Thrush (*Mimocichla plunbea*)

Fanily: Vireonidae

Puerto Rican Vireo (*Vireo latineri*) rare

Bleck-whiskered Vireo {*V. aTtiToquus*}? abundant

Family: Parulidoe

Black and White Marbler (*Yiniotilta varia*)®

Parula Warbler (*Parula americana*)® §g

ae, May Warbler, (*Dendroica tigrina*)©s

Black-throated Dive warbler (*Q. caerulescens*)®

Prairie Warbler (*D. discolor*)!

E1Fin Woods warbter aay rare

Ovenbird (*Seiurus auroce;*

Louisiana aterthrush: *Gelurus noveboracensis*)®

American Redstart (*Setophaga ruticilla*

Family: Coerebidae

Bananaquit (*Coereba flaveola*) abundant

Family: Thraupiáe

Blue-hooded Euphonia (*Euphonia. musica*) rare

Stripe-headed Tanager [*Spindalis*] 7

Puerto Rican Tanager (*Nesospingus speculiferus*) abundant

Fanily: Icteridae

Black-cowled Oriole (*Icterus dominicensis*) rare

Family: Fringitlidee

Puerto Rican Bullfinch (*Loxigilla portoricensis*)

Name Status

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Nore Status

Class: Hanmatial

Order: Chiroptera

Fanily: Phyllostomatidae

Greater Antillean Long-tongued Bat

(Honophylus.rednani)

Fruit Bat *Uartibeus saraicensis*) abundant

fed Fruit fat (*Stenodema rurun*)

Brown Flower Sat (*Erophylla Barbi frons*)

Order: Rodentia

Fariiy! Muridae

?oo! Ret (*Rattus rattus*) abundant

Order Carnivora

Fanily: Viverridae

Seal Indian Hongoose (*Herpestes auropunctatus*)

"common and scientific names from Philibostan and Yntems (1977)

Zuoolbricht and Stewart (personal communication 1982)

Sturner and Gist (1970)

?Listed as endangered (U.S. and Puerto Rico)

Sconnon and scientific names from Eond (1971)

Sprecher (1970)

Tsunmer resident

Syinter resident

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