



Manu Biodiversity Expedition 2018

Gallito de las Rocas, Peruvian Andes-Amazon

July 30—Aug 13, 2018

Expedition Report

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Overview

At a glance...

Dates:

July 30 – August 16, 2018

Location:

Gallito de las Rocas conservation area, Cusco Dept., Peru

Team members:

18

Kilometers hiked with all our gear:

13.2

New species records for Gallito de las Rocas:

289



Armed with butterfly nets and mist nets for birds, flashlights with lots of extra batteries for finding herps, and all of the food and gear we'd need to camp in the jungle for two weeks we set out to Gallito de las Rocas, a conservation area near Peru's Manu Biosphere Reserve, where the towering Andes Mountains meet the sprawling Amazon basin. Gallito de las Rocas is situated in the heart of one of the world's most important biodiversity hotspots, yet most of the region's plant and animal groups remain poorly studied, hindering efforts to design effective conservation strategies that maximize biodiversity conservation using limited resources. Before we arrived, not a single biologist had ever set foot anywhere near our campsite, and it was exciting to know that everything we would find—every butterfly, every bird, every reptile or amphibian—would be a new record for science! Keep reading to learn more about our discoveries, and what it all means for biological research and conservation in southeastern Peru.



Butterfly team

Overview

Butterfly team members:

Geoff Gallice, Ph.D. (team leader)

Angela Brierly

Maria Cahuana

Lepidoptera families surveyed:

8 (Geometridae, Hesperidae, Lycaenidae, Notodontidae, Nymphalidae, Papilionidae, Pieridae, Riodinidae)

New butterfly records for Gallito de las Rocas:

145 species



Despite some pretty bad weather—it was unseasonably rainy at Gallito de las Rocas during the expedition—our team made some amazing discoveries. We collected a total of 145 butterfly species within an hour's walk from our base camp, in habitats ranging from ridge-top forest, riparian forest, and outside along the river's edge. This latter habitat was one of the most stunning in terms of butterfly abundance—species representing every family were out in droves puddling for salts and minerals (i.e., sweat and pee!) left on the riverside rocks by the expedition team. Everyone was impressed by the spectacle.

One of our most exciting discoveries was the abundance of euptychiine butterflies (Nymphalidae: Satyrinae: Satyrini: Euptychiina) present near the expedition base camp, especially in the forest on the ridge. Southeastern Peru is the world center for diversity of this group, and we hope to make even more interesting finds in subsequent years—stay tuned for lots of new distributional records and likely even new species!



Bird team

Overview & highlights

Bird team members:

Micah Scholer (team leader)
Gloria Jilahuanco (team leader)
Angela Brierly
Renee Albrecht
Sami Anderson
Anthony Scholer

Mist net hours:

335

Bird species registered at Gallito de las Rocas:

111

Birds banded at Gallito de las Rocas (species):

107 (45)

Total bird species observed during expedition (all sites):

135

Notable records:

Solitary eagle
Torrent duck (at 800 masl)
Andean cock-of-the-rock (common)
Sunbittern (nesting)
Hummingbirds (15 species)



Peru is a 'mega-diverse' country—due to its location at the equator and at the juxtaposition of the Andes mountain with lowland Amazonia, more species of plants and animals can be found here than almost anywhere else on earth. And Gallito de las Rocas is right at the heart of this diversity! Our inaugural bird survey was a great success, with 111 bird species recorded for the area, and 107 individual birds representing 45 species fitted with bands.

In addition to conducting a baseline inventory of the birds found within the reserve, another major goal of this expedition (and of future expeditions) is to monitor individual birds and population trends. For example, how long do birds live? Surprisingly very little is known about this, especially in the poorly-studied tropics. Banding birds, coupled with surveys conducted along a micro-elevational gradient, will also allow us to monitor changes in bird elevational distributions as the local climate changes, thus allowing us to monitor the effects of climate change on Andean-Amazonian biodiversity.



Herp team

Overview & highlights

Herp team members

Anton Sorokin, M.Sc. (team leader)
Ciaran Nagle
James Zhu
Andy Zhu
Evan Papst
Phillip Bowles

Nights spent herping:

Every night

Species of herpetofauna registered at Gallito de las Rocas:

Amphibians—16
Reptiles—13

Frogs swabbed for chytridiomycosis (species):

67 (19)

Notable records:

- Mussurana – *Clelia clelia*
- Bushmaster – *Lachesis muta*
- Cuzco Cochran glassfrog – *Rulyrana spiculata* (range-restricted & of conservation concern)
- *Cochranella nola* (conservation concern)
- *Oreobates granulatus* (range restricted)
- *Dendropsophus kamagarini* – (described/split from *D. parviceps* in early 2018)
- Rose whorltail iguana (*Stenocercus roseiventris*)



Mid-elevational rainforests of the eastern Andes are extremely biodiverse but poorly studied, and herpetofauna (reptiles and amphibians) is no exception. The elevational distributions of most species, for instance, are essentially unknown, and there are likely even many species awaiting discovery entirely. Gallito de las Rocas is in the epicenter of global biodiversity, and the discoveries during our inaugural survey did not disappoint! The team found a total of 29 species of reptiles and amphibians, including many notable records—range-restricted species, species of conservation concern, and charismatic species such as bushmaster, mussurana, and two species of glassfrogs were among the expedition’s highlights.

Sadly, the infectious disease Chytridiomycosis, which is caused by the chytrid fungus *Batrachochytrium dendrobatidis* (Bd) and which has affected amphibians worldwide, was present on several frog species that the team swabbed at Gallito. We will monitor the status of the disease during subsequent expeditions and also monitor additional species as they are discovered.

Photo gallery



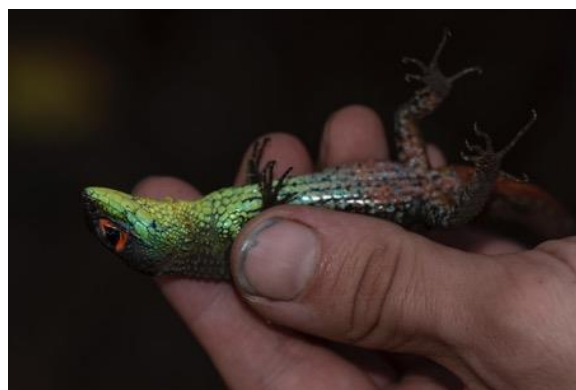
Flipping the bird! Bird team leader Micah Scholer shows off his bird banding skills with a Yellow-throated Tanager (*Iridosornis analis*).



Herp team leader Anton Sorokin happily lost in a sea of green in the cloud forest at Gallito de las Rocas.



Butterflies puddle for salts and other—in this case from the expedition team's sweat—at the Rio Waysampia Chico, near base camp.



A semiaquatic lizard, *Potamites* sp., that the herp team found in one of the area's numerous rocky streams.



The expedition leaders (from left to right): Geoff Gallice, Ph.D. (expedition leader & butterfly), Micah Scholer (bird team), Anton Sorokin (herp team), Teodocio Jilahuanco (Gallito concessionaire), Gloria Jilahuanco (bird team & Gallito concessionaire).



Butterfly team member Maria Canahua checks a baited trap in the riparian forest near base camp.

Gallito de las Rocas—Species List

S13.07235° W71.42083°

Cusco Dept., Peru

Updated 21 Oct. 2018



SUMMARY

Taxonomic group	Species/morpho-species registered to date
Amphibians	16
Birds	111
Insects	145
Lepidoptera	145
Mammals	4
Reptiles	13
TOTAL	289

Class AMPHIBIA—Amphibians

Order Anura—Frogs		
Family	Latin name	Common name
Bufonidae (True toads)	<i>Rhinella marinus</i>	Cane Toad
Centronelidae (Glass frogs)	<i>Cochranella nola</i>	Glass Frog
	<i>Rulyrana spiculata</i>	Cuzco Cochran Glass Frog
Craugastoridae (Andes frogs)	<i>Oreobates gemcare</i>	Andes Frog
	<i>Oreobates granulosus</i>	Andes Frog
Hylidae (Treefrogs)	<i>Boana sp. 1</i>	Gladiator Treefrog
	<i>Dendropsophus kamagarini</i>	Clown Treefrog
	<i>Osteocephalus helenae</i>	Helena's Treefrog

Leptodactylidae (Southern frogs)	<i>Leptodactylus knudseni/pentadactylus</i>	Smoky Jungle Frog
	<i>Leptodactylus rhodonotus</i>	Peru White-lipped Frog
Strabomantidae (Terrestrial-breeding frogs)	<i>Pristimantis danae</i>	Cusco Robber Frog
	<i>Pristimantis diadematus</i>	Robber Frog
	<i>Pristimantis fenestratus</i>	Robber Frog
	<i>Pristimantis lindae</i>	Robber Frog
	<i>Pristimantis platydactylus</i>	Robber Frog
	<i>Pristimantis reichlei</i>	Robber Frog
	<i>Pristimantis</i> sp. 1	Unknown Robber Frog

Class AVES—Birds

Order Accipitriformes—Diurnal birds of prey		
Family	Latin name	Common name
Accipitridae (Hawks, eagles, kites, & allies)	<i>Harpyhaliaetus solitarius</i>	Eagle, Solitary
	<i>Ictinia plumbea</i>	Kite, Plumbeous
Cathartidae (New World vultures & condors)	<i>Cathartes aura</i>	Vulture, Turkey
Anseriformes—Waterfowl		
Anatidae (Ducks, geese, & swans)	<i>Merganetta armata</i>	Duck, Torrent
Apodiformes—Swifts, treeswifts, & hummingbirds		
Apodidae (Swifts)	<i>Chaetura brachyura</i>	Swift, Short-tailed
	<i>Streptoprocne zonalis</i>	Swift, White-collared
Trochilidae (Hummingbirds)	<i>Campylopterus largipennis</i>	Saberwing, Gray-breasted
	<i>Chrysuronia oenone</i>	Sapphire, Golden-tailed
	<i>Doryfera johannae</i>	Lancebill, Blue-fronted
	<i>Doryfera ludovicae</i>	Lancebill, Green-fronted

	<i>Eutoxeres condamini</i>	Sicklebill, Buff-tailed
	<i>Ocreatus underwoodii</i>	Racket-tail, Booted
	<i>Phaethornis guy</i>	Hermit, Green
	<i>Phaethornis superciliosus</i>	Hermit, Long-tailed
	<i>Phlogophilus harterti</i>	Piedbill, Peruvian
	<i>Schistes geoffroyi</i>	Hummingbird, Wedge-billed
	<i>Taphrospilus hypostictus</i>	Hummingbird, Many-spotted
	<i>Thalurania furcate</i>	Wood-nymph, Fork-tailed
	<i>Threnetes leucurus</i>	Barbthroat, Pale-tailed
Caprimulgiformes —Nightjars & allies		
Caprimulgidae (Nightjars or nighthawks)	<i>Nyctidromus albicollis</i>	Pauraque, Common
Columbiformes —Pigeons & doves		
Columbidae (Pigeons & doves)	<i>Geotrygon frenata</i>	Quail-dove, White-throated
	<i>Patagioenas fasciata</i>	Pigeon, Band-tailed
	<i>Patagioenas plumbea</i>	Pigeon, Plumbeous
Coraciformes —Kingfishers, motmots, & todies		
Alcedinidae (Kingfishers)	<i>Chloroceryle amazona</i>	Kingfisher, Amazon
	<i>Chloroceryle americana</i>	Kingfisher, Green
Momotidae (Motmots)	<i>Baryphthengus martii</i>	Motmot, Rufous
	<i>Momotus aequatorialis</i>	Motmot, Andean
Cuculiformes —Cuckoos, anis, & allies		
Cuculidae (Cuckoos & anis)	<i>Coccyzua minuta</i>	Cuckoo, Little
	<i>Dromococcyx phasianellus</i>	Cuckoo, Pheasant
	<i>Piaya cayana</i>	Cuckoo, Squirrel
Eurypygiformes —Kagus & sunbittern		
Eurypygidae (Sunbittern)	<i>Eurypyga helias</i>	Sunbittern
Galliformes —Gamefowl		
Cracidae	<i>Mitu tuberosum</i>	Curassow, Razor-billed
	<i>Ortalis guttata</i>	Chachalaca, Speckled

(Chachalacas, guans, & curassows)		
Passeriformes—Passerines		
Cinclidae (Dippers)	<i>Cinclus leucocephalus</i>	Dipper, White-capped
Cotingidae (Cotingas)	<i>Rupicola peruvianus</i>	Cock-of-the-rock, Andean
Corvidae (Crows, ravens, jays, & magpies)	<i>Cyanocorax violaceus</i>	Jay, Violaceous
Formicariidae (Antthrushes)	<i>Formicarius analis</i>	Antthrush, Black-faced
Fringillidae (True finches)	<i>Euphonia xanthogaster</i>	Euphonia, Orange-bellied
Furnariidae (Ovenbirds: foliage-gleaners, spinetails, woodcreepers, & allies)	<i>Automolus ochrolaemus</i>	Foliage-gleaner, Buff-throated
	<i>Campylorhamphus trochilirostris</i>	Scythebill, Red-billed
	<i>Glyphorhynchus spirurus</i>	Woodcreeper, Wedge-billed
	<i>Philydor rufum</i>	Foliage-gleaner, Buff-fronted
	<i>Simoxenops ucayalae</i>	Recurvebill, Peruvian
	<i>Xiphocolaptes promeropirhynchus</i>	Woodcreeper, Strong-billed
	<i>Xiphorhynchus triangularis</i>	Woodcreeper, Olive-backed
Hirundinidae (Swallows & martins)	<i>Pygochelidon cyanoleuca</i>	Swallow, Blue-and-white
Icteridae (Blackbirds, orioles, grackles, cowbirds, oropendolas, & caciques)	<i>Icterus cayanensis</i>	Oriole, Epaulet
	<i>Psarocolius angustifrons</i>	Oropendola, Russet-backed
	<i>Psarocolius bifasciatus</i>	Oropendola, Olive
Parulidae (New World warblers)	<i>Myioborus miniatus</i>	Redstart, Slate-throated
	<i>Myiothlypis bivittate</i>	Warbler, Two-banded
Pipridae (Manakins)	<i>Chiroxiphia boliviana</i>	Manakin, Yungas
	<i>Lepidothrix coeruleocapilla</i>	Manakin, Cerulean-capped
Thamnophilidae (Antbirds)	<i>Cercomacra nigrescens</i>	Antbird, Blackish
	<i>Cymbilaimus sanctaemariae</i>	Antshrike, Bamboo
	<i>Dysithamnus mentalis</i>	Antvireo, Plain
	<i>Epinecophylla ornate</i>	Antwren, Ornate

	<i>Hylophylax naevius</i>	Antbird, Spot-backed
	<i>Hypocnemis subflava</i>	Antbird, Yellow-breasted Warbling
	<i>Myrmeciza hemimelaena</i>	Antbird, Chestnut-tailed
	<i>Myrmoborus leucophrys</i>	Antbird, White-browed
	<i>Myrmoborus myotherinus</i>	Antbird, Black-faced
	<i>Pyriglena leuconota</i>	Fire-eye, White-backed
	<i>Thamnistes anabatinus</i>	Antshrike, Russet
	<i>Thamnophilus schistaceus</i>	Antshrike, Plain-winged
Thraupidae (Tanagers)	<i>Chlorospingus flavigularis</i>	Bush-tanager, Yellow-throated
	<i>Chlorothraupis carmioli</i>	Tanager, Carmiol's
	<i>Dacnis cyana</i>	Dacnis, Blue
	<i>Dacnis lineata</i>	Dacnis, Black-faced
	<i>Iridosornis analis</i>	Tanager, Yellow-throated
	<i>Lanio versicolor</i>	Shrike-tanager, White-winged
	<i>Oryzoborus angolensis</i>	Seed-finch, Chestnut-bellied
	<i>Paroaria gularis</i>	Cardinal, Red-capped
	<i>Saltator maximus</i>	Slator, Buff-throated
	<i>Tangara arthus</i>	Tanager, Golden
	<i>Tangara chilensis</i>	Tanager, Paradise
	<i>Tangara schrankii</i>	Tanager, Green-and-gold
	<i>Trichothraupis melanops</i>	Tanager, Black-goggled
Tityridae (Tityras & allies)	<i>Tityra semifasciata</i>	Tityra, Masked
Troglodytidae (Wrens)	<i>Cyphorhinus thoracicus</i>	Wren, Chestnut-breasted
	<i>Microcerculus marginatus</i>	Wren, Scaly-breasted
	<i>Odontochilus branickii</i>	Wren, Gray-mantled
Turdidae (Thrushes)	<i>Myadestes ralloides</i>	Solitaire, Andean
	<i>Turdus nigriceps</i>	Thrush, Slaty
Tyrannidae (Tyrant flycatchers)	<i>Leptopogon amaurocephalus</i>	Flycatcher, Sepia-capped
	<i>Leptopogon superciliaris</i>	Flycatcher, Slaty-capped
	<i>Lophotriccus pileatus</i>	Tyrant, Scale-crested Pygmy
	<i>Mionectes olivaceus</i>	Flycatcher, Olive-streaked

	<i>Mionectes striaticollis</i>	Flycatcher, Streak-necked
	<i>Myiarchus tuberculifer</i>	Flycatcher, Dusky-capped
	<i>Myiodynastes chrysocephalus</i>	Flycatcher, Golden-crowned
	<i>Myiodynastes maculatus</i>	Flycatcher, Streaked
	<i>Myiozetes similis</i>	Flycatcher, Social
	<i>Platyrinchus coronatus</i>	Spadebill, Golden-crowned
	<i>Sayornis nigricans</i>	Phoebe, Black
	<i>Tyrannus melancholicus</i>	Kingbird, Tropical
Pelicaniformes —Hérons, pelicans, ibises, spoonbills, & allies		
Ardeidae (Hérons)	<i>Tigrisoma fasciatum</i>	Heron, Fasciated Tiger
Piciformes —Woodpeckers & allies		
Capitonidae (New World barbets)	<i>Eubucco versicolor</i>	Barbet, Versicolored
Picidae (Woodpeckers)	<i>Veniliornis affinis</i>	Woodpecker, Red-stained
Ramphastidae (Toucans)	<i>Aulacorhynchus derbianus</i>	Toucanet, Chestnut-tipped
	<i>Selenidera reinwardtii</i>	Toucanet, Golden-collared
Psittaciformes —Parrots		
Psittacidae (True parrots)	<i>Amazona mercenaria</i>	Parrot, Scaly-naped
	<i>Ara severus</i>	Macaw, Chestnut-fronted
Strigiformes --Owls		
Strigidae (True owls)	<i>Glaucidium brasilianum</i>	Pygmy-owl, Ferruginous
	<i>Megascops napensis</i>	Owl, Napo Screech
	<i>Pulsatrix melanota</i>	Owl, Band-bellied
Tinamiformes —Tinamous		
Tinamidae (Tinamous)	<i>Crypturellus obsoletus</i>	Tinamou, Brown
	<i>Tinamus osgoodi</i>	Tinamou, Black
	<i>Tinamus tao</i>	Tinamou, Gray
Trogoniformes —Trogons & quetzals		
Trogonidae	<i>Trogon collaris</i>	Trogon, Collared

(Trogons & quetzals)	<i>Trogon curucui</i>	Trogon, Blue-crowned
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Class INSECTA—Insects

Order Lepidoptera—Butterflies & moths		
Family	Subfamily	Latin name
Hesperiidae (Skippers)		<i>Dalla</i> sp.
		<i>Spargyreus</i> sp.
		<i>Hesperiidae</i> sp. 1
		<i>Hesperiidae</i> sp. 2
		<i>Milanion</i> sp.
		<i>Mimardaris sela</i>
		<i>Phocides</i> sp. 1
		<i>Phocides</i> sp. 2
		<i>Pyrrhopyge</i> sp. 1
		<i>Pyrrhopyge</i> sp. 2
		<i>Theagenes albiplaga</i>
Lycaenidae (Hairstreaks)		<i>Lycaenidae</i> sp. 1
Nymphalidae (Brush-footed butterflies)	Apaturinae (Emperors)	<i>Doxocopa cyane</i>
		<i>Doxocopa elis</i>
		<i>Doxocopa laurentia</i>
	Biblidinae (Tropical brushfoots)	<i>Callicore lyca</i>
		<i>Diaethria (clymena)</i>
		<i>Diaethria (neglecta)</i>
		<i>Epiphile lampethusa</i>
		<i>Eunica carias</i>
		<i>Perisama (comnena)</i>
		<i>Perisama (lebasii)</i>
		<i>Perisama philinus</i>
		<i>Perisama</i> sp. 1
		<i>Perisama</i> sp. 2

		<i>Perisama</i> sp. 3
		<i>Pyrrhogyra edocla</i>
		<i>Temenis laothoe</i>
	Charaxinae (Leafwings)	<i>Fountainea nessus</i>
		<i>Memphis (arginussa)</i>
		<i>Prepona dexamenus</i>
	Cyrestinae	<i>Marpesia chiron</i>
		<i>Marpesia corinna</i>
		<i>Marpesia furcula</i>
		<i>Marpesia zerynthia</i>
	Danainae (Milkweed butterflies)	<i>Brevioleria arzalia</i>
		<i>Godyrus zavaleta</i>
		<i>Greta libethris</i>
		<i>Hyalyris</i> sp.
		<i>Hypoleria sarepta</i>
		<i>Hyposcada illinissa</i>
		<i>Hypothyris</i> sp.
		<i>Ithomia (salapia)</i>
		<i>Oleria (didymaea)</i>
		<i>Oleria</i> sp.
		<i>Pteronymia</i> sp.
	Heliconiinae (Longwings)	<i>Altinote alcione</i>
		<i>Altinote dicaeus</i>
		<i>Altinote</i> sp. 1
		<i>Altinote</i> sp. 2
		<i>Altinote</i> sp. 3
		<i>Dione juno</i>
		<i>Eueides heliconioides</i>
		<i>Heliconius burneyi</i>
		<i>Heliconius cf. wallacei</i>
		<i>Heliconius numata</i>
		<i>Heliconius telesiphe</i>

		<i>Philaethria dido</i>
		<i>Podotricha telesiphe</i>
	Limentidinae (Admirals & sisters)	<i>Adelpha alala</i>
		<i>Adelpha (delinita)</i>
		<i>Adelpha irmina</i>
		<i>Adelpha thessalia</i>
	Nymphalinae	<i>Dagon pusilla</i>
		<i>Eresia pelonia</i>
		<i>Eresia polina</i>
		<i>Hypanartia cinderella</i>
		<i>Hypanartia trimaculata</i>
		<i>Nymphalidae sp. 1</i>
		<i>Siproeta epaphus</i>
		<i>Telenassa jana</i>
	Satyrinae (Satyrs)	<i>Antirrhea taygetina</i>
		<i>Caeruleptychia (aegrota)</i>
		<i>Caeruleptychia aetherialis</i>
		<i>Caeruleptychia glauca</i>
		<i>Caeruleptychia helios</i>
		<i>Caeruleptychia sp. 1</i>
		<i>Chloreuptychia (hermeis)</i>
		<i>Chloreuptychia arnaca</i>
		<i>Cithaerias (aurorina)</i>
		<i>Cithaerias (pyropina)</i>
		<i>Cithaerias sp.</i>
		<i>Forsterinaria nr. stella</i>
		<i>Forsterinaria sp.1</i>
		<i>Harjesia blanda</i>
		<i>Hermeuptychia sp.</i>
		<i>Lymanopoda acraeida</i>
		<i>Manerebia cyclopina</i>
		<i>Manerebia satura</i>

		<i>Pierella hyceta</i>
		<i>Pierella lena</i>
		<i>Pseudodebis (valentina)</i>
		<i>Rareuptychia clio</i>
		<i>Splendeuptychia ashna</i>
		<i>Splendeuptychia aurigera</i>
		<i>Splendeuptychia boliviensis</i>
		<i>Steroma modesta</i>
		<i>Taygetis crameri</i>
		<i>Taygetis sylvia</i>
		<i>Tyagetis (cleopatra)</i>
Papilionidae (Swallowtails)		<i>Eurytides (serville)</i>
		<i>Mimoides sp.</i>
		<i>Neographium (leucaspis)</i>
		<i>Neographium agesilaus</i>
		<i>Neographium sp.</i>
		<i>Parides sp.</i>
		<i>Protesilaus sp.</i>
		<i>Pterourus menatius</i>
Pieridae (Whites, sulphurs, & orange tips)	Coliadinae (Sulphurs or yellows)	<i>Anteos menippe</i>
		<i>Eurema (salome)</i>
		<i>Eurema (xanthochlora)</i>
		<i>Phoebis neocypris</i>
	Dismorphiinae	<i>Dismorphia (lewyi)</i>
		<i>Dismorphia lygdamis</i>
		<i>Dismorphia lysis</i>
		<i>Enantia melite</i>
		<i>Lieinix nemesis</i>
		<i>Pseudopieris sp. 1</i>
		<i>Pseudopieris sp. 2</i>
	Pierinae (Whites)	<i>Hesperocharis marchalii</i>
		<i>Melete (lycimnia)</i>

		<i>Melete leucanthe</i>
		<i>Perrhybris pamela</i>
Riodinidae (Metalmarks)		<i>Adelotypa</i> sp.
		<i>Amarynthia meneria</i>
		<i>Ancyluris</i> sp. 1
		<i>Ancyluris</i> sp. 2
		<i>Baeotis</i> sp.
		<i>Baeotis staudingeri</i>
		<i>Brachyglenis esthema</i>
		<i>Detritivora</i> sp.
		<i>Emesis (mandana)</i>
		<i>Eurybia dardus</i>
		<i>Euselesia corduena</i>
		<i>Hyphilaria parthenis</i>
		<i>Isapis agyrtus</i>
		<i>Ithomeis aurantiaca</i>
		<i>Lyropteryx apollonia</i>
		<i>Mesosemia</i> sp.
		<i>Necyria bellona</i>
		<i>Nymphidium</i> sp.
		<i>Rhetus dysonii</i>
		<i>Semomesia (croesus)</i>
		<i>Siseme (neurodes)</i>
		<i>Siseme alectryo</i>

Class Mammalia—Mammals

Order Carnivora—Carnivorans		
Family	Latin name	Common name

Felidae (Felids)	<i>Panthera onca</i>	Jaguar
Procyonidae (Racoons, coatis, kinkajous, & olingos)	<i>Potus flavus</i>	Kinkajou
Order Primates—Primates		
Atelidae (Howler, spider, & wooly monkeys)	<i>Lagothrix</i> sp.	Wooly Monkey
Order Rodentia—Rodents		
Cuniculidae (Pacas)	<i>Cuniculus paca</i>	Paca

Class REPTILIA—Reptiles

Order Squamata—Scaled reptiles		
Family	Latin name	Common name
Colubridae (Colubrid snakes)	<i>Chironius fuscus</i>	Brown Sipo
	<i>Erythrolamprus aesculapii</i>	False Coral Snake
	<i>Erythrolampus taeniogaster</i>	Marsh Snake
	<i>Imantodes cenchoa</i>	Blunt-headed Tree Snake
	<i>Leptodeira annulata</i>	Cat-eyed Snake
Dactyloidae (Anoles)	<i>Anolis fuscoauratus</i>	Slender Amazon Anole
	<i>Anolis punctatus</i>	Spotted Anole
Dipsadidae (Snail eaters & allies)	<i>Atractus major</i>	Brown Ground Snake
	<i>Dipsas vermiculata</i>	Vermiculate Snail Eater
Gymnophthalmidae (Spectacled lizards)	<i>Potamites</i> sp. 1	Unidentified spectacled lizard
Teiidae (Racerunners, whiptails, & tegus)	Teiidae sp. 1	Unidentified teiid lizard
Tropoduridae	<i>Stenocercus roseiventris</i>	Rose Whortail Iguana

(Neotropical ground lizards)		
Viperidae (Vipers)	<i>Lachesis muta</i>	Bushmaster