



## Introduction to Tropical Biodiversity

November 6-14, 2013  
Trip Report

### Day 1 – Wednesday November 6, 2013

#### Guest Arrival

Our eager participants of the first annual Canopy Family “Introduction to Tropical Biodiversity” tour arrived in good time to the Canopy Tower in Soberanía National Park, Panama. As our guest scientists, Dr. Howard Topoff and Dr. Carol Simon, and tour participants got settled in and adjusted to the heat and humidity, there were plenty of birds and other wildlife spotted from the observation deck and around the tower in the afternoon—Band-rumped and Short-tailed swifts, Bay-breasted Warbler, Plain-colored Tanager and Fulvous-vented Euphonia, and migrating raptors including Turkey Vulture and Broad-winged Hawk. While the afternoon started out rainy, some members of the group took a short walk down Semaphore Hill after the rain had slowed down, and found Eastern Wood-Pewee, Black-crowned Antshrike and Cocoa Woodcreeper in a tree fall clearing, and a Tungara Frog calling from a puddle. Another afternoon rain brought us back up to the tower, in time to freshen up for the evening.

Our guest scientists, Dr. Howard Topoff and Dr. Carol Simon, formerly of the American Museum of Natural History and the City University of New York, brought with them a wealth of knowledge about Neotropical animals and their behaviours, including those specific to Panama. Each evening of the tour, during cocktail hour, they gave an informative and entertaining multimedia presentation, covering various topics of tropical biodiversity. For the first evening, in preparation for the visit to the Miraflores Locks at the Panama Canal for the next day, they started with a presentation entitled “100 Years of Panama”, celebrating the upcoming centennial of the Panama Canal in 2014, with a great background of canal history. After the presentation, everyone enjoyed a delicious meal together at the Canopy Tower, and fell asleep to the sounds of the forest at night.

### Day 2 – Thursday November 7, 2013

#### Plantation Road, Miraflores Locks

We started the day early, on the observation deck of the Canopy Tower. While enjoying a hot drink, we observed the morning bird activity—Black-breasted Puffbird, Scaled Pigeon, Green Honeycreeper, Black Hawk-Eagle, Mealy Parrot, Blue-crowned Manakin and Collared Aracari were among many highlights from the early morning. After breakfast, a Hoffmann’s Two-toed Sloth was spotted by Felipe, tucked into a palm tree and visible from the first floor of the tower. We boarded the “rainfomobile” with our guide, Alexis, and drove to Plantation Road, at the base of Semaphore Hill, for an introduction to tropical biodiversity walk. Howard started out the walk with an interesting talk about termites at a fallen nest along the side of the road. We proceeded along the trail, observing frogs & toads (*Rhinella margaritifera*), birds including Slaty-tailed Trogon, Golden-crowned Spadebill, Olivaceous Flycatcher, Broad-billed Motmot and a



Howard talking about termites

Louisiana Waterthrush along the stream. We also had great looks at a troop of Mantled Howlers, and a lone spider monkey (*Ateles* sp.). During the walk we watched the behaviors of various species of ants (including leafcutter, army and bullet ants), structural design of leaves, buttresses of trees and much more. A Yellow-headed Gecko was spotted around the sign as we headed back to the Canopy Tower.

We enjoyed a delicious lunch, where in addition to great food we continued to watch for wildlife in the trees outside the window of the dining room. As a follow up to the presentation we had the night before, this afternoon we went to the Miraflores Locks at the Panama Canal, where we watched a 3D video, walked through the museum and watched a large container ship pass through the famous locks. In addition to viewing the Panama Canal, Great, Snowy and Cattle egrets, Southern Lapwing, Black-bellied Whistling-Duck, Spotted Sandpiper, Ringed Kingfisher, Magnificent Frigatebird, Brown Pelican, Yellow-headed Caracara and White-nosed Coati were seen in the open areas around the locks.

During cocktail hour, Howard and Carol gave us a presentation, "Introduction to the Rain Forest", a great introduction to tropical biodiversity. Dinner was served shortly after the presentation finished, and after dinner, those interested took a short walk down Semaphore Hill in search of nocturnal wildlife. While it was a quiet night, they enjoyed the tranquility of the forest during their walk.

### Day 3 – Friday November 8, 2013

Pipeline Road, Summit Municipal Park

Everyone was up early for an exciting morning along the world famous Pipeline Road. While we walked along the road, we searched for birds, lizards and other wildlife. Highlights of the morning included Rufous Motmot, Black-crowned Antshrike, Central American Whiptail and Leafcutter Ants along the road. Perhaps the sighting of the day was a Northern Tamandua, an arboreal anteater at eye level, giving us great looks at this fascinating creature. We returned back to the Canopy Tower for lunch.



"Panama" the Harpy Eagle

After lunch, there was some time to relax, take a short siesta, and bird-watch on the observation deck. At 2:30 we departed again for Summit Municipal Park. Our first stop was to admire the beauty of Panama's national bird, the Harpy Eagle. This individual in particular, named "Panama", was born in captivity at Zoo Miami, and arrived in her new home at Summit Park earlier this year. She was quite charismatic and gave us all her attention! Howard, Carol & Jenn talked about Harpy Eagles and their conservation. We carried on to the tapir and jaguar enclosures, scanning for birds and other wildlife along the way. Giant Cowbird, Chestnut-headed Oropendola, Blue-gray Tanager, Boat-billed Flycatcher, Turkey Vultures (lots!), Thick-billed Euphonia were spotted around these enclosures. We carried on to the entrance, where we saw Common Tent-making Bats roosting under large palm leaves. Elena Castejon, a dedicated staff member of Summit Park, brought over "Samba", a young Northern Tamandua for a quick meet-and-greet. After seeing the Tamandua this morning along Pipeline Road, an up-close encounter with Samba at Summit allowed us to see some of this unique creature's adaptations, including

a prehensile tail, powerful claws and tapered snout for feeding on termites and ants.

Back at the tower, Carol and Howard gave us an interesting presentation about the social behaviors of monkeys, with a particular focus on the monkeys of Panama, their unique adaptations and complex social lifestyles. After enjoying a delicious dinner, everyone retired early for the night after a long yet exciting day.

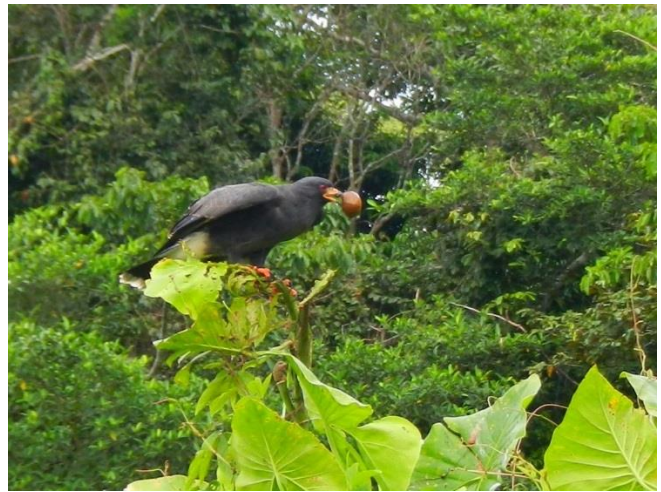
## Day 4 – Saturday November 9, 2013

### Jungle Boat Tour & Village Visit, transfer to Canopy Lodge

Just as our mornings have been thus far into the tour, we had an early breakfast at the Canopy Tower and departed for our jungle boat tour shortly after. We arrived at the Gamboa public dock and met our driver for our boat tour. The morning tour was divided into two parts; first, we spent a lovely two hours on the Panama Canal and Lake Gatun, where sightings of predatory birds including Snail Kites and Osprey were common. We also had a quick look at an American Crocodile along the Canal, and a Green Iguana basking in a tree. Three species of monkeys were seen – Mantled Howler, White-faced Capuchin and Geoffroy's Tamarin, the latter two offering up-close views and great photo opportunities! For the second half of the morning, we visited Ella Puru Embera Village, along the banks of the Chagres River. Here, with help from our local village guide Moises, we learned about the Embera culture, history of the village, their use of natural products, clothing, Artisan crafts, a taste of traditional food (fried fish and patacones) and enjoyed (and participated in) a dance presentation. Just before leaving, we had the opportunity to purchase handmade crafts from members of the community. It was a very enjoyable experience.



*White-faced Capuchin*



*Snail Kite with snail*

We arrived back at the Canopy Tower in time for lunch. We had some time to get in some final time on the observation deck and around the hummingbird feeders after lunch. That afternoon we headed up to El Valle, in the western foothills of Panama, to the Canopy Lodge. We settled into our rooms and spent the rest of the afternoon watching the bird feeders at the lodge. Chestnut-headed Oropendola, Flame-rumped Tanager, Blue-gray Tanager, Crimson-backed Tanager, Thick-billed Euphonia, Collared Aracari and Rufous-tailed Hummingbird were actively feeding among the fruit and nectar feeders.

Carol and Howard presented a presentation about social insects, opening our eyes up to the fascinating world of ants and termites. We enjoyed our first delicious dinner at the lodge, and enjoyed the tranquility of the surroundings after dark.

## Day 5 – Sunday November 10, 2013

Las Minas Road, Cara Iguana Road



*Black-bordered Crescent*

Our day started a little earlier this morning, with breakfast at 6:30 am. Shortly after, we departed the lodge for a morning along Las Minas Road. During our casual walk along the road, we spotted a great diversity of plants and animals along the roadside, including Scarlet Centropogon (bellflower), Sensitive Mimosa, Urania moths, Black-bordered Crescent, orchids, Orange-bellied Trogon, Thick-billed Euphonia, Golden-hooded Tanager and Wedge-tailed Grass-Finch. As we walked along the road, a Black-crowned Antpitta called from a dark patch of forest, but we could not manage to get a look at this bird. On the way back, our guide Danilo, Cindy and Jenn stepped off the road into the forest and had great looks at a pair of antpittas, just meters from the road. We returned back to the Canopy Lodge for lunch.

After a chance to relax and enjoy the bird feeders, Danilo took us back into the town of El Valle, to Cara Iguana Trail, where we walked the quiet road in search for wildlife. While driving to our afternoon destination, Danilo spotted a Roadside Hawk perched in a bare tree not far from the road. When we arrived at Cara Iguana trail, we visited a small finca, where Spectacled Owls roost and after a short walk off the road, Danilo quickly had the scope on one of the owls. In total, three Spectacled Owls were roosting in the trees, two adults and one juvenile. We also had great looks a well-camouflaged Common Pauraque resting quietly on the ground underneath a patch of Heliconia plants. Back on the road, we stopped by a dark ravine, the preferred habitat of the rare Tody Motmot. Danilo called briefly for the bird, and within a minute, it came in close and sat for several minutes, offering us great views. Other highlights from our afternoon along Car Iguana trail include Blue-crowned Motmot, Barred Antshrike, Lesser Elaenia, Rufous-and-white Wren, a family group of Rufous-breasted Wrens and a Hoffmann's Two-toed Sloth. We headed back to the lodge in good time in order to freshen up before the talk during cocktail hour. Howard and Carol's entertaining presentation focused on courtship and mating strategies of animals.

After dinner, Cindy, Mary Ellen, Liz and Jenn explored the grounds after dark and found many frogs and insects, including Brilliant Forest Frog (*Lithobates warszewitschii*), various rain frogs (*Pristimantis* spp.), Red-webbed Tree Frog (*Hypsiboas rufitelus*), Blue-spotted Tree Frog (*Smilisca sila*), Cane Toad (*Rhinella marina*), mating mantis, leaf katydid, a rather large stick insect and a crab in the natural swimming pool.



*Brilliant Forest Frog*

## Day 6 – Monday November 11, 2013

Altos del Maria, reptile presentation

We gathered in the dining room for our usual breakfast at 6:30 am, giving us lots of energy for our full day to Altos del Maria! We departed the lodge in three 4x4 pick-up trucks to handle the steep roads through this highland area. Just before we arrived at the entrance into the gated community, we stopped to scan the epiphyte-laden trees along the roadsides for morning bird activity. We all had great looks at a cute Tufted Flycatcher, which was sallying from a branch at eye level, and a dozen Brown-hooded Parrots flew into a dead tree above us. The cool, misty air of the early morning created a pleasant ambiance, and we carried on beyond the gates. After a short drive through the upper roads of Altos del Maria, we stopped as Danilo spotted a Black Guan above the road, which flew off, out of sight. At this spot, we had good sightings of Brown Violet-ear, Tawny-crested Tanager, and a fleeting glimpse of a female Snowcap. On the ground, a tiny anole (*Norops* sp.) and small

rain frog (*Pristimantis* sp.) caught our attention, as well as a millipede which offered great photo opportunities. We spent most of our time around the lake trail, where we enjoyed sightings of Orange-bellied Trogon, Black-tailed Trogon, Green Kingfisher, White-throated Spadebill, Sulphur-rumped Flycatcher, Brilliant Forest Frog, Central American Whiptail Lizard, and many butterflies and insects. The weather could not have been better, and the light was perfect for photography. We enjoyed a picnic lunch at the pavilion beside the lake.

After lunch, we continued to explore the area. We walked a short trail where leafcutter ants were abundant, and found a large nest with little “skyscrapers”, presumably used for ventilation. Chestnut-backed Antbird called from the trail edges, but was reluctant to offer good views. As we slowly made our way through Altos del Maria, we stopped along the road various times, where we had great views of Snowcap (two males), Spotted Woodcreeper,



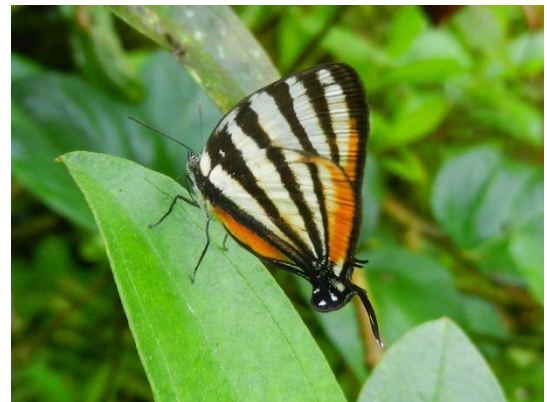
*Hans, Alison and Cindy with snakes*

Ochraceous Wren and a small group of Green-crowned Brilliants. We returned back to the lodge by 4:30 pm, giving us some time to freshen up and enjoy the feeders. Howard and Carol’s talk during cocktail hour focused on the poisonous reptiles and amphibians of the rainforest, and was a great introduction to this evening’s special program—Mario Urriola, owner of the El Valle Serpentarium, visited and talked to us about the area’s reptiles and amphibians, with a focus on venomous snakes. He also brought some of the animals from his facility—a beautiful Rainbow Boa, Ball Python, Fer-de-Lance, Toad-headed Pit-viper and Red-rumped Tarantula. He spoke very passionately about what he does, the importance of environmental education and conservation in Panama. The evening was enjoyed by all.

## **Day 7 – Tuesday November 12, 2013**

### **Cerro Gaital Trail, Canopy Adventure & Zipline**

This morning we had an enjoyable breakfast at 7:00, then left the lodge shortly after for Gaital Hill, in search of butterflies. The butterfly diversity in tropical regions is needless to say impressive, and within minutes of arrival at the trail, even though it was still cloudy and misty, forest butterflies were quite active even early in the morning. Our first butterfly of the morning was a pair of large Yellow-edged Owl-Butterfly. We spotted them just as they were finding their roost for the day, and had great looks through the scope, admiring their size and large eye spot! Blue-patched Eyemarks were also flying around the wide trail as we arrived. We explored an open, grassy patch, where Togarna Stripestreak, Fine-lined Stripestreak, Trailside Skipper, Lyrcaea Eyed-Skipper, Common Ur-Satyr and Variegated Longwing were seen. Once in the trail, we were dazzled by Pink-tipped and Helvina satyrs, Deep Blue Eyemark and other forest species. Other wildlife encountered on this morning included Plain Antvireo, White-throated Spadebill, White-ruffed Manakin, White-tipped Sicklebill and Dunn’s Spinytail Lizard, a little-known species from the foothills. We returned back to the lodge by lunchtime.



*Togarna Stripestreak*

There were a few people who were interested in doing the zip-line at the Canopy Adventure, so we worked it into the plan for the afternoon. We were delayed by a heavy rainstorm after lunch, in which Howard and Carol took advantage of the downtime at the lodge to give their presentation for the day, the “Evolution of Animal Coloration”.

Just as their presentation finished, the rain stopped as well, leaving us enough time to visit the Canopy Adventure. As Howard, Cindy, Alison and Jenn sailed through the canopy on the zip-line, the rest of the group watched from the trail below. Buff-rumped Warbler and a roosting Mottled Owl were found among the trails. Later, we enjoyed dinner together at the lodge, and settled in for the night, dozing off to the chorus of frogs from the nearby ponds.

### Day 8 – Wednesday November 13, 2013

Candelario Trail, Market



*Southern Lapwing, photo by Alison Rilling*

species! Danilo knew of a good place and sure enough, not far from the entrance to Candelario Trail, was a three-toed sloth hanging in a short tree. Everyone was pleased and we headed back to the lodge. We planned to arrive a bit earlier, so Carol and Howard could do their final talk before lunch, entitled “Evolution of Animal Communication”.

After lunch, we visited the market in El Valle, for some souvenir shopping. Carol bought a large toucan mask, to go along with her small monkey mask she bought at the Embera village days before – very impressive! Back at the lodge, we enjoyed our final dinner together. After dinner, Howard shared with us a photo presentation, a reminder of great memories for all! To take advantage of our last night at the lodge, Carol, Howard, Cindy and Jenn explored the grounds of the lodge one final time in search of frogs and other nocturnal creatures. Red-webbed Tree Frog, Blue-spotted Tree Frog, Small-headed Tree Frog and Cane Toad were found this evening.

### Day 9 – Thursday November 14, 2013

Departure

We gathered once again for breakfast and enjoyed the morning activity at the bird feeders one last time. Shortly after breakfast, we said our farewells and headed back to Panama City to catch our return flights home, taking with us new knowledge and memories which came to be during the tour.

During this 9-day tour, we saw (and heard) 191 species of birds, 14 mammals, 20 reptiles and amphibians and 40 species of butterflies and moths.

After breakfast, we headed up the hill once again to Candelario Trail, a well-maintained finca with a trail that cuts through a dense thicket. We spent the morning exploring the forest edges, finca fields and the trail. Keel-billed Toucan, Broad-winged Hawk, Rufous-capped Warbler, Mourning Warbler, Pale-vented Pigeon, Blue-gray and Palm tanagers, Rufous-tailed Hummingbird, Crowned Woodnymph, Killdeer and a large flock of Southern Lapwings, so close we could see the spurs on their wings, were among highlights in the open areas. Once in the trail, Dull-mantled Antbird was singing from the valley below and we got great looks at Song Wren and Chestnut-capped Brush-Finch, foraging along the forest floor. Rusty-tipped Page, Variegated Clearwing and many migrating Urania Moths were also seen. Just before heading back to the lodge, we were on the search for one more animal that we had not yet seen, a Brown-throated Three-toed Sloth. We had seen many two-toed sloths during the tour, but were still missing this more common

## Species Lists

### Birds

*\*H indicates heard only*

1	Great Tinamou	<i>Tinamus major</i>
2	Black-bellied Whistling-Duck	<i>Dendrocygna autumnalis</i>
3	Gray-headed Chachalaca	<i>Ortalis cinericeps</i>
4	Black Guan	<i>Chamaeptes unicolor</i>
5	Magnificent Frigatebird	<i>Fregata magnificens</i>
6	Brown Pelican	<i>Pelecanus occidentalis</i>
7	Rufescent Tiger-Heron	<i>Tigrisoma lineatum</i>
8	Great Blue Heron	<i>Ardea herodias</i>
9	Great Egret	<i>Ardea alba</i>
10	Snowy Egret	<i>Egretta thula</i>
11	Little Blue Heron	<i>Egretta caerulea</i>
12	Cattle Egret	<i>Bubulcus ibis</i>
13	Green Heron	<i>Butorides virescens</i>
14	Black Vulture	<i>Coragyps atratus</i>
15	Turkey Vulture	<i>Cathartes aura</i>
16	Osprey	<i>Pandion haliaetus</i>
17	White-tailed Kite	<i>Elanus leucurus</i>
18	Snail Kite	<i>Rostrhamus sociabilis</i>
19	Barred Hawk	<i>Morphnarchus princeps</i>
20	Roadside Hawk	<i>Buteo magnirostris</i>
21	Broad-winged Hawk	<i>Buteo platypterus</i>
22	Short-tailed Hawk	<i>Buteo brachyurus</i>
23	Black Hawk-Eagle	<i>Spizaetus tyrannus</i>
24	White-throated Crake	<i>Laterallus albigularis</i>
25	Common Gallinule	<i>Gallinula galeata</i>
26	Southern Lapwing	<i>Vanellus chilensis</i>
27	Killdeer	<i>Charadrius vociferus</i>
28	Wattled Jacana	<i>Jacana jacana</i>
29	Spotted Sandpiper	<i>Actitis macularius</i>
30	Laughing Gull	<i>Leucophaeus atricilla</i>
31	Royal Tern	<i>Thalasseus maximus</i>
32	Pale-vented Pigeon	<i>Patagioenas cayennensis</i>
33	Scaled Pigeon	<i>Patagioenas speciosa</i>
34	Ruddy Ground-Dove	<i>Columbina talpacoti</i>
35	White-tipped Dove	<i>Leptotila verreauxi</i>
36	Squirrel Cuckoo	<i>Piaya cayana</i>
37	Smooth-billed Ani	<i>Crotophaga ani</i>
38	Spectacled Owl	<i>Pulsatrix perspicillata</i>
39	Mottled Owl	<i>Ciccaba virgate</i>
40	Common Pauraque	<i>Nyctidromus albicollis</i>
41	White-collared Swift	<i>Streptoprocne zonaris</i>
42	Short-tailed Swift	<i>Chaetura brachyura</i>
43	Band-rumped Swift	<i>Chaetura spinicaudus</i>
44	Lesser Swallow-tailed Swift	<i>Panyptila cayennensis</i>
45	White-necked Jacobin	<i>Florisuga mellivora</i>
46	White-tipped Sicklebill	<i>Eutoxeres Aquila</i>

47	Green Hermit	<i>Phaethornis guy</i>
48	Stripe-throated Hermit	<i>Phaethornis striigularis</i>
49	Brown Violet-ear	<i>Colibri delphinae</i>
50	Green Thorntail	<i>Discosura conversii</i>
51	Green-crowned Brilliant	<i>Heliodoxa jacula</i>
52	Long-billed Starthroat	<i>Helimaster longirostris</i>
53	Violet-headed Hummingbird	<i>Klais guimeti</i>
54	Snowcap	<i>Microchera albocoronata</i>
55	White-vented Plumeleteer	<i>Chalybura buffonii</i>
56	Bronze-tailed Plumeleteer	<i>Chalybura urochrysis</i>
57	Crowned Woodnymph	<i>Thalurania colombica</i>
58	Blue-chested Hummingbird	<i>Amazilia amabilis</i>
59	Rufous-tailed Hummingbird	<i>Amazilia tzacatl</i>
60	Slaty-tailed Trogon	<i>Trogon massena</i>
61	Black-throated Trogon	<i>Trogon rufus</i>
62	Orange-bellied Trogon	<i>Trogon aurantiiventris</i>
63	Tody Motmot	<i>Hylomanes momotula</i>
64	Whooping Motmot	<i>Momotus subrufescens</i>
65	Rufous Motmot	<i>Baryphthengus martii</i>
66	Broad-billed Motmot	<i>Electron platyrhynchum</i>
67	Ringed Kingfisher	<i>Megaceryle torquata</i>
68	Belted Kingfisher	<i>Megaceryle alcyon</i>
69	Green Kingfisher	<i>Chloroceryle americana</i>
60	Black-breasted Puffbird	<i>Notharchus pectoralis</i>
71	Collared Aracari	<i>Pteroglossus torquatus</i>
72	Keel-billed Toucan	<i>Ramphastos sulfuratus</i>
73	Red-crowned Woodpecker	<i>Melanerpes rubricapillus</i>
74	Cinnamon Woodpecker *H	<i>Celeus loricatus</i>
75	Collared Forest-Falcon *H	<i>Micrastur semitorquatus</i>
76	Yellow-headed Caracara	<i>Milvago chimachima</i>
77	Orange-chinned Parakeet	<i>Brotogeris jugularis</i>
78	Brown-hooded Parrot	<i>Pionopsitta haematotis</i>
79	Blue-headed Parrot	<i>Pionus menstruus</i>
80	Red-lored Parrot	<i>Amazona autumnalis</i>
81	Mealy Parrot	<i>Amazona farinosa</i>
82	Barred Antshrike	<i>Thamnophilus doliatus</i>
83	Black-crowned Antshrike	<i>Thamnophilus atrinucha</i>
84	Plain Antwre	<i>Dystithamnus mentalis</i>
85	Slaty Antwren	<i>Myrmotherula schisticolor</i>
86	Dot-winged Antwren	<i>Microrhophias quixensis</i>
87	Dusky Antbird	<i>Cercomacra tyrannina</i>
88	Chestnut-backed Antbird	<i>Myrmeciza exsul</i>
89	Dull-mantled Antbird *H	<i>Myrmeciza laemosticta</i>
90	Black-crowned Antpitta	<i>Pittasoma michleri</i>
91	Cocoa Woodcreeper	<i>Xiphorhynchus susurrans</i>
92	Spotted Woodcreeper	<i>Xiphorhynchus erythropygius</i>
93	Brown-capped Tyrannulet	<i>Ornithion brunneicapillus</i>
94	Lesser Elaenia	<i>Elaenia chiriquensis</i>
95	Ochre-bellied Flycatcher	<i>Mionectes oleagineus</i>
96	Paltry Tyrannulet	<i>Zimmereus vilissimus</i>
97	Scale-crested Pygmy-Tyrant	<i>Lophotriccus pileatus</i>



98	Black-headed Tody-Flycatcher	<i>Todirostrum nigriceps</i>
99	Olivaceous Flatbill	<i>Rhynchocyclus olivaceus</i>
100	Yellow-margined Flycatcher	<i>Tolmomyias assimilis</i>
101	White-throated Spadebill	<i>Platyrinchus mystaceus</i>
102	Golden-crowned Spadebill	<i>Platyrinchus coronatus</i>
103	Sulphur-rumped Warbler	<i>Myiobius sulphureipygius</i>
104	Tufted Flycatcher	<i>Mitriphanes phaeocercus</i>
105	Eastern Wood-Pewee	<i>Contopus virens</i>
106	Dusky-capped Flycatcher	<i>Myiarchus tuberculifer</i>
107	Great Crested Flycatcher	<i>Myiarchus crinitus</i>
108	Lesser Kiskadee	<i>Pitangus lictor</i>
109	Great Kiskadee	<i>Pitangus sulphuratus</i>
110	Boat-billed Flycatcher	<i>Megarynchus pitangua</i>
111	Rusty-margined Flycatcher	<i>Myiozetetes cayanensis</i>
112	Social Flycatcher	<i>Myiozetetes similis</i>
113	Streaked Flycatcher	<i>Myiodynastes maculatus</i>
114	Tropical Kingbird	<i>Tyrannus melancholicus</i>
115	White-ruffed Manakin	<i>Corapipo altera</i>
116	Red-capped Manakin	<i>Ceratopipra mentalis</i>
117	Blue-crowned Manakin	<i>Lepidothrix coronate</i>
118	Lesser Greenlet	<i>Hylophilus decurtatus</i>
119	Black-chested Jay	<i>Cyanocorax affinis</i>
120	Gray-breasted Martin	<i>Progne chalybea</i>
121	Mangrove Swallow	<i>Tachycineta albilinea</i>
122	Blue-and-white Swallow	<i>Pygochelidon cyanoleuca</i>
123	Southern Rough-winged Swallow	<i>Stelgidopteryx ruficollis</i>
124	Barn Swallow	<i>Hirundo rustica</i>
125	Scaly-breasted Wren *H	<i>Microcerculus marginatus</i>
126	House Wren	<i>Troglodytes aedon</i>
127	Ochraceous Wren	<i>Troglodytes ochraceus</i>
128	Rufous-breasted Wren	<i>Pheugopedius rutilus</i>
129	Rufous-and-white Wren	<i>Thryophilus rufalbus</i>
130	Bay Wren	<i>Cantorchilus leucotis</i>
131	White-breasted Wood-Wren	<i>Henicorhina leucosticta</i>
132	Gray-breasted Wood-Wren	<i>Henicorhina leucophrys</i>
133	Song Wren	<i>Cyphorhinus phaeocephalus</i>
134	Tawny-faced Gnatwren	<i>Microbates cinereiventris</i>
135	Long-billed Gnatwren	<i>Ramphocaenus melanurus</i>
136	Tropical Gnatcatcher	<i>Polioptila plumbea</i>
137	Pale-vented Thrush	<i>Turdus obsoletus</i>
138	Clay-colored Thrush	<i>Turdus grayi</i>
139	Tropical Mockingbird	<i>Mimus gilvus</i>
140	Louisiana Waterthrush	<i>Parkesia motacilla</i>
141	Northern Waterthrush	<i>Parkesia noveboracensis</i>
142	Golden-winged Warbler	<i>Vermivora chrysoptera</i>
143	Black-and-white Warbler	<i>Mniotilta varia</i>
144	Tennessee Warbler	<i>Oreothlypis peregrina</i>
145	Mourning Warbler	<i>Geothlypis philadelphia</i>
146	Magnolia Warbler	<i>Setophaga magnolia</i>
147	Bay-breasted Warbler	<i>Setophaga castanea</i>
148	Yellow Warbler	<i>Setophaga petechia</i>

149	Chestnut-sided Warbler	<i>Setophaga pensylvanica</i>
150	Black-throated Green Warbler	<i>Setophaga virens</i>
151	Buff-rumped Warbler	<i>Myiothlypis fulvicauda</i>
152	Rufous-capped Warbler	<i>Basileuterus rufifrons</i>
153	Bananaquit	<i>Coereba flaveola</i>
154	Rosy Thrush-Tanager *H	<i>Rhodinocichla rosea</i>
155	Dusky-faced Tanager	<i>Mitrospingus cassinii</i>
156	Gray-headed Tanager	<i>Eucometis penicillata</i>
157	White-shouldered Tanager	<i>Tachyphonus luctuosus</i>
158	Tawny-crested Tanager	<i>Tachyphonus delatrii</i>
159	Crimson-backed Tanager	<i>Ramphocelus dimidiatus</i>
160	Flame-rumped Tanager	<i>Ramphocelus flammigerus</i>
161	Blue-gray Tanager	<i>Thraupis episcopus</i>
162	Palm Tanager	<i>Thraupis palmarum</i>
163	Golden-hooded Tanager	<i>Tangara larvata</i>
164	Plain-colored Tanager	<i>Tangara inornata</i>
165	Bay-headed Tanager	<i>Tangara gyrola</i>
166	Silver-throated Tanager	<i>Tangara icterocephala</i>
167	Blue Dacnis	<i>Dacnis cayana</i>
168	Green Honeycreeper	<i>Chlorophanes spiza</i>
169	Buff-throated Saltator	<i>Saltator maximus</i>
170	Variable Seedeater	<i>Sporophila americana</i>
171	Yellow-faced Grassquit	<i>Tiaris olivaceus</i>
172	Wedge-tailed Grass-Finch	<i>Emberizoides herbicola</i>
173	Orange-billed Sparrow	<i>Arremon aurantirostris</i>
174	Chestnut-capped Brush-Finch	<i>Arremon brunneinucha</i>
175	Black-striped Sparrow	<i>Arremonops conirostris</i>
176	Common Bush-Tanager	<i>Chlorospingus flavopectus</i>
177	Hepatic Tanager	<i>Piranga flava</i>
178	Summer Tanager	<i>Piranga rubra</i>
179	Scarlet Tanager	<i>Piranga olivacea</i>
180	Red-throated Ant-Tanager	<i>Habia rubica</i>
181	Rose-breasted Grosbeak	<i>Pheucticus ludovicianus</i>
182	Eastern Meadowlark	<i>Sturnella magna</i>
183	Great-tailed Grackle	<i>Quiscalus mexicanus</i>
184	Giant Cowbird	<i>Molothrus oryzivorus</i>
185	Baltimore Oriole	<i>Icterus galbula</i>
186	Yellow-billed Cacique	<i>Amblycercus holosericeus</i>
187	Scarlet-rumped Cacique	<i>Cacicus uropygialis</i>
188	Chestnut-headed Oropendola	<i>Psarocolius wagleri</i>
189	Thick-billed Euphonia	<i>Euphonia laniirostris</i>
190	Fulvous-vented Euphonia	<i>Euphonia fulvicrissa</i>
191	Tawny-capped Euphonia	<i>Euphonia anae</i>

## Mammals

1	Gray Four-eyed Opossum	<i>Philander opossum</i>
2	Northern Tamandua	<i>Tamandua mexicana</i>
3	Hoffmann's Two-toed Sloth	<i>Choloepus hoffmanni</i>
4	Brown-throated Three-toed Sloth	<i>Bradypus variegatus</i>
5	Common Tent-making Bat	<i>Uroderma bilobatum</i>
6	Myotis Bat	<i>Myotis sp.</i>
7	Geoffroy's Tamarin	<i>Sanguinus geoffroyi</i>
8	White-faced Capuchin	<i>Cebus capucinus</i>
9	Mantled Howler	<i>Alouatta palliate</i>
10	Spider Monkey	<i>Ateles sp.</i>
11	Variegated Squirrel	<i>Sciurus variegatoides</i>
12	Red-tailed Squirrel	<i>Sciurus granatensis</i>
13	Central American Agouti	<i>Dasyprocta punctate</i>
14	White-nosed Coati	<i>Nasua narica</i>

## Reptiles & Amphibians

1	American Crocodile	<i>Crocodylus acutus</i>
2	Spectacled Caiman	<i>Caiman crocodilus</i>
3	Common Basilisk	<i>Basiliscus basiliscus</i>
4	Yellow-headed Gecko	<i>Gonatodes albogularis</i>
5	Common House Gecko	<i>Hemidactylus frenatus</i>
6	Dunn's Spinytail Lizard	<i>Morunasaurus groi</i>
7	Green Iguana	<i>Iguana iguana</i>
8	Slender Anole	<i>Anolis (Norops) limifrons</i>
9	Central American Whiptail	<i>Ameiva festiva</i>
10	Red-eared Slider	<i>Trachemys scripta</i>
11	Scorpion Mud Turtle	<i>Kinosternon scorpioides</i>
12	South American Common Toad	<i>Rhinella margaritifera</i>
13	Cane (Marine) Toad	<i>Rhinella marina</i>
14	Striped Rocket Frog	<i>Allobates talamancae</i>
15	Yellow (Small-headed) Tree Frog	<i>Dendrosophus microcephalus</i>
16	Red-webbed Tree Frog	<i>Hypsiboas rufitelus</i>
17	Pug-nosed (Blue-spotted) Tree Frog	<i>Smilisca sila</i>
18	Common Rain Frog	<i>Craugaster fitzingeri</i>
19	Tungara Frog	<i>Engystomops pustulosus</i>
20	Brilliant Forest Frog	<i>Lithobates warszewitschii</i>

## Butterflies & Moths

1	Thoas Swallowtail	<i>Papilio thoas</i>
2	Cattleheart White	<i>Archonias brassolis tereas</i>
3	Togarna Stripestreak	<i>Arawacus togarna</i>
4	Fine-lined Stripestreak	<i>Arawacus sito</i>
5	Blue-patched Eyemark	<i>Mesosemia carissima</i>
6	Deep Blue Eyemark	<i>Mesosemia asa</i>
7	Azure-winged Sheenmark	<i>Eurybia unxia</i>
8	Clearwing Butterfly	<i>Ithomia sp.</i>

9	Variegated Clearwing	<i>Godyris zavaleta zygia</i>
10	Julia	<i>Dryas julia</i>
11	Sara Heliconian	<i>Heliconius sara</i>
12	Blue-and-white Heliconian	<i>Heliconius sapho</i>
13	Heart-spotted Heliconian	<i>Heliconius hecale</i>
14	Smooth-banded Sister	<i>Adelpha cytherea</i>
15	Dirce Beauty	<i>Colobura dirce</i>
16	Banded Peacock	<i>Antartia fatima</i>
17	Malachite	<i>Siproeta stelenes</i>
18	Rusty-tipped Page	<i>Siproeta epaphus</i>
19	Black-bordered Crescent	<i>Tegosa anieta anieta</i>
20	Orange-patched Crescent	<i>Phyciodes Drusilla</i>
21	Northern Antirrhea	<i>Antirrhea philoctetes lindigii</i>
22	Common Morpho	<i>Morpho helenor peleides</i>
23	Blue Morpho	<i>Morpho menelaus amathonte</i>
24	Stub-tailed Morpho	<i>Morpho theseus</i>
25	Yellow-bordered Owl-Butterfly	<i>Caligo uranus</i>
26	Pale Owl-Butterfly	<i>Caligo memnon</i>
27	Scalloped Owlet	<i>Opsiphanes quiteria</i>
28	Helvina Satyr	<i>Pirella helvina</i>
29	Pink-tipped Satyr	<i>Cithaerias pireta</i>
30	Insolata Satyr	<i>Euptychia insolata</i>
31	Common Ur-Satyr	<i>Taygetis thamyra</i>
32	Lyrcaea Eyed-Skipper	<i>Cyclosemia lyrcaea</i>
33	Gilbert's Flasher	<i>Astrartes alector</i>
34	Narrow-banded Skipper	<i>Autochton longipennis</i>
35	Trailside Skipper	<i>Anthoptus epictetus</i>
36	Brown Skipper	<i>Parphorus sp.</i>
37	Radiant Skipper	<i>Callimorphus radiola</i>
38	Stalling's Flat	<i>Celaenorrhinus stallingsi</i>
39	Black Witch	<i>Ascalapha odorata</i>
40	Urania Moth (Swallowtail Moth)	<i>Urania fulgens</i>