

INTRODUCTION TO TROPICAL BIODIVERSITY

September 28 - October 6, 2024



Workshop Participants and Guest Scientists
Photo by Alex Sanchez

Sponsored by the Canopy Family and Naturalist Journeys

Participants: Ken, Paula, Beth, Marie, Mike, Tom, Cathy, Stan, Trish, Richard, Marianne, Rudy, Julianne, Don, Donna, Al and Elaine

Guest Scientists: Drs. Carol Simon and Howard Topoff

Canopy Guides: Iguá Jimenez, Alex Sanchez, Jorge Pineda, Tino Sanchez and Danilo Rodriguez. With a special guest appearance by Canopy Biologist Rosannette Quesada

Prepared by Carol Simon and Howard Topoff



Canopy Tower
Photos by Carol Simon

A whopping 17 participants arrived at the Canopy Tower, eager to learn everything they could about the biodiversity of the region. Our two scientists and local Canopy guides quickly made everyone feel welcomed.

We were a most enthusiastic group and everyone, including some very accomplished birders, were more than willing to look at whatever appeared, in the sky, on the ground or in between. We saw a lot! We spent four nights at the Canopy Tower in the old Canal Zone lowlands, and then another four at the Canopy Lodge, just below cloud forest. With very different habitats, and at different elevations, conditions were optimal to see a great variety of insects and arachnids, plants, frogs, lizards, birds and mammals. We even saw a few snakes. Although we concentrated on every creature we saw, the dedicated birders were very happy with their avian viewing thanks to our talented Canopy guides. We were usually in the field in the mornings, with other activities in the afternoons. We also added several optional night excursions.

We visited scientific and cultural centers such as the El Valle Market, the Miraflores Locks on the Panama Canal, the BioMuseo in Panama City, herpetologist Mario Urriola's collections and the Amphibian Conservation Center, housing the Panamanian

Golden Frog, which exists only in captivity. Each morning participants could spend time atop the Tower, viewing a great variety of birds, mammals and even some iguanas. And while at the lodge there were also feeders that attracted the early morning crowd each day.

A highlight of the trip was the almost daily presentations by our scientists.



Canopy Scientist Dr. Rosette Quesada talks about spiders.
Photos by Carol Simon

Itinerary

September 28: Arrival and Orientation at Canopy Tower, Tower Grounds, Semaphore Hill

September 29: Canopy Tower, Summit Ponds, Old Gamboa Road, BioMuseo



BioMuseo, Amador Causeway
Photos by Howard Topoff

September 30: Canopy Tower, Gatun Lake Boat Ride, Summit Gardens



The boat ride on Gatun Lake typically yields White-faced Capuchin Monkeys and American Crocodiles.
Note that sex determination in crocodiles is determined by the temperature of the incubating eggs.
Photos by Stan Smith

October 1: Canopy Tower, Pipeline Road, Panama Canal Miraflores Locks, Night Walk on Plantation Road.



Typical Transport
Photo by Howard Topoff



Great Potoo, resembling a tree stump.
Carol's favorite tropical bird.
Photo by Carol Simon

October 2: Plantation Road, Old Gamboa Resort Sloth/Butterfly/Frog Conservation Center, Transfer to Canopy Lodge, Lodge Grounds, including night walk.



The lovely Plantation Road is on the left. (Photo by Carol Simon) We saw these Gladiator Tree Frogs mating (Photo by Stan Smith) on a night walk and the next morning found their eggs in a small, encircled depression that males make. Gladiator Tree Frogs are usually found in the treetops but they descend to the ground for mating. The term “gladiator” refers to the fighting males will do with sharp spines on their hands.

October 3: Lodge Grounds, Canopy Adventure, Las Minas Road, Mario Urriola Rescue Center and Herpetarium or Frog Conservation Center, Night Walk at Lodge

October 4: Lodge Grounds, Altos del Maria



At Altos del Maria we all had good looks at the iconic Red-eyed Tree Frog.

October 5: Lodge Grounds, Cerro Gaital Natural Monument, Candelario Trail, Mario Urriola Rescue Center and Herpetarium or Frog Conservation Center, El Valle Market



The Candelario Trail sported this Orange and Blue Eighty-eight Butterfly. (Photo by Carol Simon) The hard-to-see Dunn's Spiny-tailed Lizard was found at Cerro Gaital. (Photo by Stan Smith)

October 6: Lodge Grounds, Departures

Presentations by our Guest Scientists

Introduction to Tropical Rainforests
Tropical Botany
Social Insects of the Rainforest
100 Years of the Panama Canal
Poisonous Amphibians and Venomous Reptiles
Bird Brains
Ten Things You Didn't Know About Spiders

BIRDS



Keel-billed Toucan

We learned that toucan bills are filled with capillaries that can help the birds thermoregulate.

Photo by Howard Topoff

Tinamous - Tinamidae

Great Tinamou, *Tinamus major*

Little Tinamou, *Crypturellus soui* (HO)

Ducks, Swans, Geese - Anatidae

Muscovy Duck, *Cairina moschata*

Curassows, Guans, Chacalacas - Cracidae

Gray-headed Chachalaca, *Ortalis cinereiceps*

Grebes - Podicipedidae

Pied-billed Grebe, *Podilymbus podiceps*

Pigeons, Doves - Columbidae

Pale-vented Pigeon, *Patagioenas cayennensis*

Scaled Pigeon, *Patagioenas speciosa*

Ruddy Ground-Dove, *Columbina talpacoti*

Blue Ground Dove, *Claravis pretiosa*

White-tipped Dove, *Leptotila verreauxi*

Cuckoos - Cuculidae

Greater Ani, *Crotophaga major*
Smooth-billed Ani, *Crotophaga ani*
Squirrel Cuckoo, *Piaya cayana*
Gray-capped Cuckoo, *Coccyzus lansbergi*

Nightjars - Caprimulgidae

Common Nighthawk, *Chordeiles minor*
Rufous Nightjar, *Antrostomus rufus*

Potoos - Nyctibiidae

Great Potoo, *Nyctibius grandis*

Swifts - Apodidae

White-collared Swift, *Streptoprocne zonaris*
Band-rumped Swift, *Chaetura spinicaudus*
Short-tailed Swift, *Chaetura brachyura*

Hummingbirds - Trochilidae

White-necked Jacobin, *Florisuga mellivora*
Rufous-breasted Hermit, *Glaucis hirsutus*
Green Hermit, *Phaethornis guy*
Long-billed Hermit, *Phaethornis longirostris*
Stripe-throated Hermit, *Phaethornis striigularis*
Purple-crowned Fairy, *Heliothryx barroti*
Garden Emerald, *Chlorostilbon assimilis*
Bronze-tailed Plumeleteer, *Chalybura urochrysis*
White-vented Plumeleteer, *Chalybura buffonii*
Crowned Woodnymph, *Thalurania colombica*
Snowcap, *Microchera albocoronata*
Snowy-bellied Hummingbird, *Saucerottia edward*
Rufous-tailed Hummingbird, *Amazilia tzacatl*
Sapphire-throated Hummingbird, *Chrysuronia coeruleogularis*
Blue-chested Hummingbird, *Polyerata amabilis*
Violet-bellied Hummingbird, *Chlorestes julie*

Rails, Gallinules, Coots - Rallidae

Gray-cowled Wood-Rail, *Aramides cajaneus*
Purple Gallinule, *Porphrio martinicus*

Limpkin - Aramidae

Limpkin, *Aramus guarauna*

Plovers, Lapwings - Charadriidae
Southern Lapwing, *Vanellus chilensis*

Jacanas - Jacanidae
Wattled Jacana, *Jacana jacana*

Sandpipers & Allies - Scolopacidae
Spotted Sandpiper, *Actitis macularius*

Gulls, Terns, Skimmers - Laridae
Caspian Tern, *Hydroprogne caspia*
Royal Tern, *Thalasseus maximus*

Frigatebirds - Fregatidae
Magnificent Frigatebird, *Fregata magnificens*

Darters - Anhingidae
Anhinga, *Anhinga anhinga*

Cormorants, Shags - Phalacrocoracidae
Neotropic Cormorant, *Nannopterum brasilianum*

Pelicans - Pelecanidae
Brown Pelican, *Pelecanus occidentalis*

Hérons, Egrets- Ardeidae
Rufescent Tiger-Heron, *Tigrisoma lineatum*
Great Egret, *Ardea alba*
Snowy Egret, *Egretta thula*
Cattle Egret, *Bubulcus ibis*
Green Heron, *Butorides virescens*
Boat-billed Heron, *Cochlearius cochlearius*

New World Vultures - Cathartidae
Black Vulture, *Coragyps atratus*
Turkey Vulture, *Cathartes aura*

Hawks, Eagles, Kites - Accipridae
Black Hawk-Eagle, *Spizaetus tyrannus*
Tiny Hawk, *Accipiter superciliosus*
Crane Hawk, *Geranospiza caerulescens*
Snail Kite, *Rostrhamus sociabilis*

Roadside Hawk, *Rupornis magnirostris*
Semi-plumbeous Hawk, *Leucopternis semiplumbeus*
Short-tailed Hawk, *Buteo brachyurus*
Zone-tailed Hawk, *Buteo albonotatus*

Typical Owls - Strigidae

Tropical Screech Owl, *Megascops choliba*
Spectacled Owl, *Pulsatrix perspicillata*
Mottled Owl, *Cicada virgata* (HO)

Trogons - Trogonidae

Slaty-tailed Trogon, *Trogon massena*
Black-tailed Trogon, *Trogon melanurus*
Gartered Trogon, *Trogon caligatus*
Black-throated Trogon, *Trogon rufus*
Collared Trogon, *Trogon collaris*

Motmots - Momotidae

Lesson's Motmot, *Momotus lessonii*
Whooping Motmot, *Momotus subrufescens*
Rufous Motmot, *Baryphthengus martii*
Broad-billed Motmot, *Electron platyrhynchum*

Kingfishers - Alcedinidae

Ringed Kingfisher, *Megasceryle torquata*
Amazon Kingfisher, *Chloroceryle amazona*
Green Kingfisher, *Chloroceryle americana*

Puffbirds - Bucconidae

White-necked Puffbird, *Notharchus hyperrhynchus*
Black-breasted Puffbird, *Notharchus pectoralis*
White-whiskered Puffbird, *Malacoptila panamensis*

Jacamars - Galbulidae

Great Jacamar, *Jacamerops aureus*

New World Barbets - Capitonidae

Spot-crowned Barbet, *Capito maculicoronatus*

Toucans - Ramphastidae

Northern Emerald-Toucanet, *Aulacorhynchus prasinus*
Collared Aracari, *Pteroglossus torquatus*
Keel-billed Toucan, *Ramphastos sulfuratus*

Woodpeckers - Picidae

Olivaceous Piculet, *Picumnus olivaceus*
Black-cheeked Woodpecker, *Melanerpes pucherani*
Red-crowned Woodpecker, *Melanerpes rubricapillus*
Cinnamon Woodpecker, *Celeus loricatus*
Lineated Woodpecker, *Dryocopus lineatus*

Falcons, Caracaras - Falconidae

Laughing Falcon, *Herpetotheres cachinnans* (HO)
Crested Caracara, *Caracara plancus*
Yellow-headed Caracara, *Milvago chimachima*

Parrots - Psittacidae

Orange-chinned Parakeet, *Brotogeris jugularis*
Brown-hooded Parrot, *Pyrilia haematotis*
Blue-headed Parrot, *Pionus menstruus*
Red-lore Amazon, *Amazona autumnalis*
Mealy Parrot, *Amazona farinosa*

Manakins - Pipridae

White-ruffed Manakin, *Corapipo altera*
Velvety Manakin, *Lepidothrix velutina*
Golden-collared Manakin, *Manacus vitellinus*
Red-capped Manakin, *Ceratopipra mentalis*

Cotingas - Cotingidae

Purple-throated Fruit Crow, *Querula purpurata* (HO)
Blue Cotinga, *Cotinga nattererii*

Becards, Tityras & Allies - Tityridae

Masked Tityra, *Tityra semifasciata*

Royal Flycatchers - Tityridae

Sulphur-rumped Flycatcher, *Myobius sulphureipygius*

Tyrant Flycatchers - Tyrannidae

White-throated Spadebill, *Platyrinchus mystaceus*
Scale-crested Pygmy-Tyrant, *Lophotriccus pileatus*
Southern Bentbill, *Oncostoma olivaceum*
Black-headed Tody-Flycatcher, *Todirostrum nigriceps*
Yellow-winged Flatbill, *Tolmomyias flavotectus*
Brown-capped Tyrannulet, *Ornithion brunneicapillus*

Yellow Tyrannulet, *Capsiempis flaveola*
Yellow-bellied Elaenia, *Elaenia flavogaster*
Mistletoe Tyrannulet, *Zimmerius parvus*
Dusky Capped Flycatcher, *Myiarchus tuberculifer*
Great Crested Flycatcher, *Myiarchus crinitus*
Great Kiskadee, *Pitangus sulphuratus*
Boat-billed Flycatcher, *Megarynchus pitangua*
Rusty-margined Flycatcher, *Myiozetetes cayanensis*
Social Flycatcher, *Myiozetetes similis*
Streaked Flycatcher, *Myiodynastes maculatus*
Suphur-bellied Flycatcher, *Myiodynastes luteiventris*
Tropical Kingbird, *Tyrannus melancholicus*
Eastern Kingbird, *Tyrannus tyrannus*
Fork-tailed Flycatcher, *Tyrannus savana*
Tufted flycatcher, *Mitrephanes phaeocercus*
Olive-sided Flycatcher, *Contopus cooperi*
Eastern Wood Pewee, *Contopus virens*
Long-tailed Tyrant, *Colonia colonus*

Typical Antbirds - Thamnophilidae

Fasciated Antbird, *Cymbilaimus lineatus*
Great Antshrike, *Taraba major*
Barred Antshrike, *Thamnophilus doliatus*
Black-crowned Antshrike, *Thamnophilus atrinucha*
Plain Antwreio, *Dysithamnus mentalis*
Spot-crowned Antwreio, *Dysithamnus puncticeps* (HO)
White-flanked Antwren, *Myrmotherula axilaris*
Checker-throated Stipplethroat, *Epinecrophylla fulviventris*
Dot-winged Antwren, *Microrhoptias quixensis*
Dusty Antbird, *Cercomacroides tyrannina*
White-bellied Antbird, *Myrmeciza longipes*
Spotted Antbird, *Hylophylax naevioides*
Bicolored Antbird, *Gymnopithys bicolor*

Antthrushes - Formicariidae

Black-faced Antthrush, *Formicarius analis*

Ovenbirds, Woodcreepers - Furnariidae

Plain-brown Woodcreeper, *Dendrocincia fuliginosa*
Wedge-billed Woodcreeper, *Glyphorhynchus spirurus*
Cocoa Woodcreeper, *Xiphorhynchus susurrans*
Spotted Woodcreeper, *Xiphorhynchus erythropygius*
Plain Xenops, *Xenops minutus*

Vireos - Vireonidae

Green Strike-Vireo, *Vireolanius pulchellus* (HO)
Golden-fronted Greenlet, *Pachysylvia decurtata*
Yellow-throated Vireo, *Vireo flavifrons*
Red-eyed Vireo, *Vireo olivaceus*

Crows, Jays - Corvidae

Black-chested Jay, *Cyanocorax affinis*

Swallows - Hirundinidae

Bank Swallow, *Riparia riparia*
Mangrove Swallow, *Tachycineta albilinea*
Southern Rough-winged Swallow, *Stelgidopteryx ruficollis*
Gray-breasted Martin, *Progne chalybea*
Barn Swallow, *Hirundo rustica*

Gnatwrens, Gnatcatchers - Polioptilidae

Long-billed Gnatwren, *Ramphocaenus metanurus*
Tawny-faced Gnatwren, *Microbates cinereiventris*
White-browed Gnatcatcher, *Polioptila bilineata*

Wrens - Troglodytidae

House Wren, *Troglodytes aedon*
Ochraceous Wren, *Troglodytes ochraceus* (HO)
Rufous-breasted Wren, *Pheugopedius rutilus*
Rufous-and-white Wren, *Thryophilus rufalbus* (HO)
Bay Wren, *Cantorchilus nigricapillus*
Buff-crested Wren, *Cantorchilus leucotis* (HO)
White-breasted Wood-Wren, *Henicorhina leucosticta*
Gray-breasted Wood-Wren, *Henicorhina leucophrys* (HO)

Mockingbirds & Allies - Mimidae

Tropical Mockingbird, *Mimus gilvus*

Thrushes - Turdidae

Swainson's Thrush, *Catharus ustulatus*
Pale-vented Thrush, *Catharus obsoletus*
Clay-colored Thrush, *Turdus grayi*

Goldfinches & Euphonias - Fringillidae

Thick-billed Euphonia, *Euphonia laniirostris*
Fulvous-vented Euphonia, *Euphonia fulvicrissa*

Tawny-capped Euphonia, *Euphonia anneae*

New World Sparrows - Passerellidae

Common Chlorospingus, *Chlorospingus flavopectus*

Black-striped Sparrow, *Arremonops conirostris*

Orange-billed Sparrow, *Arremon aurantiirostris*

New World Orioles & Blackbirds - Icteridae

Yellow-billed Cacique, *Amblycercus holosericeus* (HO)

Chestnut-headed Oropendula, *Psarocolius wagleri*

Scarlet-rumped Cacique, *Cacicus uropygialis*

Yellow-rumped Cacique, *Cacicus cela*

Yellow-backed Oriole, *Icterus chrysater* (HO)

Shiny Cowbird, *Molothrus bonariensis*

Great-tailed Grackle, *Quiscalus mexicanus*

Wood Warblers - Parulidae

Louisiana Waterthrush, *Parkesia motacilla*

Northern Waterthrush, *Parkesia noveboracensis*

Black-and-white Warbler, *Mniotilta varia*

Prothonotary Warbler, *Protonotaria citrea*

Common Yellowthroat, *Geothlypis trichas*

Blackburnian Warbler, *Setophaga fusca*

Yellow Warbler, *Setophaga fusca*

Buff-rumped Warbler, *Myiothlypis fulvicauda*

Chestnut-capped Warbler, *Basileuterus delatirii*

Canada Warbler, *Cardeliina canadensis*

Grosbeaks, Buntings & Allies - Cardinalidae

Hepatic Tanager, *Piranga flava*

Summer Tanager, *Piranga rubra*

Scarlet Tanager, *Piranga olivacea*

Red-crowned Ant-Tanager, *Habia rubica*

Red-throated Ant-Tanager, *Habia fuscicauda*

Black-faced Grosbeak, *Caryothaustes poliogaster*

Mitrospringid Tanagers - Mitrospringidae

Dusky-faced Tanager, *Mitrospringus cassinii*

Tanagers - Thraupidae

Blue-gray Tanager, *Thraupis episcopus*

Palm Tanager, *Thraupis palmarum*

Golden-hooded Tanager, *Stilpnia larvata*

Plain-colored Tanager, *Tangara inornata*
Bay-headed Tanager, *Tangara gyroia*
Silver-throated Tanager, *Tangara icterocephala*
Green Honeycreeper, *Chlorophanes spiza*
White-shouldered Tanager, *Loriotus luctuosus*
Tawny-crested Tanager, *Tachyphonus delatrii*
Flame-rumped Tanager, *Ramphocelus flammigerus*
Crimson-backed Tanager, *Ramphocelus dimidiatus*
Scarlet-thighed Dacnis, *Dacnis venusta*
Blue Dacnis, *Dacnis cayana*
Bananaquit, *Coereba flaveola*
Yellow-faced Grassquit, *Tiaris olivaceous*
Variable Seedeater, *Sporophila corvina*
Yellow-bellied Seedeater, *Sporophila nigricollis*
Buff-throated Saltator, *Saltator maximus*
Slate-colored Grosbeak, *Saltator grossus*
Streaked Saltator, *Saltator striatipectus*

MAMMALS



Nocturnal Proboscis Bats have the Unusual habit of Sleeping in a Line on Tree Trunks
Photo by Stan Smith

Opposums - Didelphidae

Common Opossum, *Didelphis marsupialis*

Central American Woolly Opossum, *Caluromys derbianus*

Anteaters - Myrmecophagidae

Northern Tamandua, *Tamandua mexicana*

Three-toed Sloths - Bradypodidae

Brown-throated Three-toed Sloth, *Bradypus variegatus*

Silky Anteater - Cyclopedidae

Silky Anteater, *Cyclopes didactylus*

Two-toed Sloths - Choloepodidae

Hoffman's Two-toed Sloth, *Choloepus hoffmanni*

Three-toed Sloths - Bradypodidae

Brown-throated Three-toed Sloth, *Bradypus variegatus*

Sac-winged Bats - Emballonuridae

Proboscis Bat, *Rhynchonycteris naso*

Leaf-nosed Bats - Phyllostomidae

Orange Nectar Bat - *Lanchohylla robusta*

Seba's Short-tailed Bat - *Carollia perspicillata*

Jamaican Fruit-eating Bat - *Artibeus jamaicensis*

Common Tent-making Bat, *Uroderma bilobatum*

Tamarins, Capuchins, Squirrel Monkeys - Callitrichidae

Geoffroy's Tamarin, *Sanguinus geoffroyi*

White-faced Capuchin, *Cebus capucinus*

Howler Monkeys - Atelidae

Mantled Howler, *Alouatta palliata*

Squirrels - Sciuridae

Variagated Squirrel - *Sciurus variegatoides*

Red-tailed Squirrel, *Sciurus granatensis*

Agoutis - Dasyproctidae

Central American Agouti, *Dasyprocta punctata*

Raccoons & Allies - Procyonidae

White-nosed Coati, *Nasua narica*
Kinkajou, *Potos flavus*

Weasels, Otters & Allies - Mustelidae
Tayra, *Eira barbara*

Peccaries - Tayassuidae
Collared Peccary, *Pecari tajacu*

AMPHIBIANS AND REPTILES



We were lucky to get a glimpse of this Parrot Snake at the Gamboa Resort. This species is venomous to prey, but the venom doesn't harm humans.

Photo by Stan Smith

True Toads - Bufonidae
Forest Toad, *Rhinella alata*
South American Common Toad, *Rhinella alata*
Cane Toad, *Rhinella marina*

Glass Frogs - Centrolenidae
Plantation (Bare-hearted) Glass Frog - *Hyalinobatrachium colymbiophyllum*
Fleischmann's Glass Frog, *Hyalinobatrachium fleischmanni* (HO)

Robber Frogs - Craugastoridae

Fitzinger's Robber (Common Rain) Frog, *Craugastor fitzingeri*

Dart Poison Frogs - Dendrobatidae

Rainforest (Striped) Rocket Frog, *Silverstoneia flotator*

Green-and-black Poison Frog, *Dendrobates auratus* (CO)

Talamanca (Striped) Rocket Frog, *Allobates talamancae*

New World Rain Frogs - Eleutherodactylidae

Common Dink Frog, *Diasporus diastema* (HO)

Treefrogs - Hylidae

Red-eyed Treefrog, *Agalychnis callidryas*

Hourglass Treefrog, *Dendropsophus ebbraactus*

Rosenberg's Gladiator Treefrog, *Hypsiboas rosenbergi*

Red-webbed Treefrog, *Hypsiboas rufitelus*

Milky Treefrog, *Trachycephalus "vermiculatus"*

Tropical Grass (Foam) Frogs - Leptodactylidae

Tungara Frog, *Engystomops pustulosus*

Turbo White-lipped Frog, *Leptodactylus poecilochilus*

Savage's Thin-toed (Foam) Frog, *Leptodactylus savagei*

True Frogs - Ranidae

Brilliant Forest Frog, *Lithobates warszewitschii*

Pond Turtles - Emydidae

Meso-American Slider, *Trachemys venusta*

Casque-headed Lizards - Corytophanidae

Common Basilisk, *Basiliscus basiliscus*

Anoles - Dactyloidae

Water Anole, *Anolis aquaticus*

Green Tree Anole, *Anolis biporcatus*

Slender Anole, *Anolis limifrons*

Hoplocercidae - Clubtails, Wood Lizards

Dunn's Spiny-tailed Lizard, *Morunasaurus groi*

Iguanas - Iguanidae

Black Spiny-tailed Iguana, *Ctenosaura similis*

Common Green Iguana, *Iguana iguana*

Spectacled Geckos - Gekkonidae
Common House Gecko, *Hemidactylus frenatus*

Leaf-Toed Geckos - Phyllodactylidae
Turnip-tailed Gecko, *Thecadactylus rapicauda*

Dwarf Geckos - Sphaerodactylidae
Yellow-headed Geckos, *Gonatodes albogularis*

Whiptails, Tegus - Teiidae
Giant Ameiva, *Ameiva praesignis*
Central American Ameiva, *Holcosus festivus*

Colubrid Snakes - Colubridae
Parrot Snake, *Leptophis ahaetulla*

Vipers - Viperidae
Eyelash Viper, *Bothriechis schlegelli*
Fer-de-lance/terciopelo, *Bothrops asper*

Crocodylians - Crocodylidae
Spectacled Caiman, *Caiman crocodylius*
American Crocodile, *Crocodylus acutus*



Although we didn't record Insects and Arachnids, we saw plenty. Would you believe that this is the larva of a Slug Caterpillar Moth in the Genus *Phobetron*?

Photo by Howard Topoff



And we did have fun!
Clockwise from upper left: Harpy Eagle Beth,
Buttress Roots Elaine, Could that be Dunn's
Spiny Lizard?, Guides Alex and Igua

