



Trinibats

Field Survey March 2012

By Daniel Hargreaves

Introduction

This trip was organised between Geoffrey Gomes and Daniel Hargreaves and was planned to survey the Central and South East regions of Trinidad. The field notes below are a summary of findings over the 8 days and further detailed information (capture data, measurements, locations) can be requested from Daniel Hargreaves.

23rd March 2011

Day 1

After a delayed flight into Port of Spain the group travelled to Talparo to stay at the Hacienda Jacana property. A few bright eyed participants chose to mist net around the lodges where we caught several species:

- 2 Seba's short tailed fruit bats (*Carollia perspicillata*)
- 2 Common long tongued bats (*Glossophaga soricina*)
- 1 Common moustached bat (*Pteronotus parnelli*)
- 1 Pale spear nosed bat (*Phyllostomus discolor*)

Day 2

In the morning we found bats roosting on some of the lodges these were identified as a group of 7 Proboscis bats (*Rynchonycteris naso*) and two groups of 4 & 5 Lesser white lined bats (*Saccopteryx leptura*). Following breakfast we visited Tabaquite to explore Knolly's tunnel; we were joined by Mike Rutherford the curator of the Zoology museum at the University of West Indies. On arrival several cars drove past us, that seconds earlier had driven through the tunnel beeping their horns and flashing their lights to ensure that all the bats were wide awake in the tunnel. We walked from one end and identified several species:



- Common long tongued bats (*Glossophaga soricina*)
- Seba's short tailed fruit bats (*Carollia perspicillata*)
- Common moustached bats (*Pteronotus parnelli*)
- Geoffroy's hairy legged bats (*Anoura geoffroyi*)

On the way back to the lodges we stopped and inspected a small bridge on Dam road which was surrounded by piper bushes. Approximately 150-200 Seba's short tailed fruit bats were present with pups around 1 to 2 weeks old.

Following lunch we visited Perseverance Estate house a dilapidated colonial house which was home to several bat species including Seba's short tailed fruit bats (*Carollia perspicillata*), common long tongued bats (*Glossophaga soricina*) and three Greater white lined bats (*Saccopteryx bilineata*).

The highlight of the day was visiting [REDACTED] [REDACTED] home to a substantial bat roost inside a large hollow silk cotton tree. Looking up inside the tree we could see several colonies including the rare white winged vampire bats (*Diaemus youngi*), clusters of Pale spear nosed bats (*Phyllostomus discolor*), common long tongued bats (*Glossophaga soricina*) and individual Greater white lined bats (*Saccopteryx bilineata*). One of the



white winged vampires was roosting low down in the tree and we decided to attempt to hand net one individual; after many attempts and being completely outwitted by several individuals one fell (possibly pushed by another) into the hand net and we managed to get a closer look (photo above). We then set a harp trap, one static 6m net and a 3m flick net which was raised and lowered and proved very effective. In total we caught:

- 9 Pale spear nosed bats (*Phyllostomus discolor*)
- 4 Greater spear nosed bats (*Phyllostomus hastatus*)
- 1 Common long tongued bat (*Glossophaga soricina*)
- 2 white winged vampire bats (*Diaemus youngi*) one in the harp trap

On return to Talparo we set a couple of mist nets close to the pond and caught 1 Jamaican fruit eating bat (*Artibeus jamaicensis*) and 3 Seba's short tailed fruit bats (*Carollia perspicillata*).

Day 3

After breakfast we headed down to the South East and our properties in Mayaro. We explored the Victoria Mayaro forest reserve (VMFR) and found several umbrella tents in palm fronds probably made by the Common tent making bat (*Uroderma bilobatum*). One hollow tree contained several Seba's short tailed fruit bats (*Carollia perspicillata*) and a group of Spix's disk winged bats were flushed from a unfurled heliconia leaf. A single apical boat tent was seen on the edge of the dam low to the ground, the style and position indicates possible use by Macconnell's bat (*Mesophylla macconnellii*). That evening we split into four teams to survey different habitats:

Team A set the 12m triple high system up on the edge of a dam in Guayaguare forest in an open area and a 6m net along one of the access roads and caught:

- Proboscis bats (*Rynchonycteris naso*)
- Lesser white lined bats (*Saccopteryx leptura*)
- Greater white lined bats (*Saccopteryx bilineata*)
- Common long tongued bats (*Glossophaga soricina*)
- Common tent making bats (*Uroderma bilobatum*)
- Seba's short tailed fruit bats (*Carollia perspicillata*)
- Little mastiff bat (*Molossus molossus*)
- Riparian myotis (*Myotis riparius*)
- Western red bat (*Lasiurus blossevillii*) photo above
- Little yellow shouldered bat (*Sturnira lilium*)



Team B were situated on the forest ridge and further into the forest around a valley stream:

- Niceforo's bat (*Trinycteris nicefori*)
- Pale faced bat (*Phylloderma stenops*)
- Hellers broad nosed bat (*Platyrhinus helleri*)
- Common big eared bat (*Micronycteris megalotis*)
- Seba's short tailed fruit bats (*Carollia perspicillata*)
- Proboscis bat (*Rynchonycteris naso*)

Day 4

In the morning we explored the Trinity Hills reserve and walked the trail to a mud volcano spotting several umbrella tents in palm fronds some occupied by common tent making bats (*Uroderma bilobatum*). A culvert under an access road contained a mixed roost of Seba's short tailed fruit bats (*Carollia perspicillata*) and Common long tongued bats (*Glossophaga soricina*). In the afternoon we walked a trail into the Mora Forest of the Victoria Mayaro Forest Reserve again finding several umbrella tents in palm fronds. That evening we split into two teams:

Team A netted deep into the VMFR in primary Mora rainforest; this was unique untouched habitat that deserves further survey effort. We caught:

- Hellers broad nosed bat (*Platyrrhinus helleri*)
- Seba's short tailed fruit bats (*Carollia perspicillata*)
- Common long tongued bats (*Glossophaga soricina*)
- Stripe headed round eared bats (*Tonatia saurophilia*) photo on right



Team B netted around the Mayaro properties and had a diverse range of species:

- Hellers broad nosed bats (*Platyrrhinus helleri*)
- Seba's short tailed fruit bats (*Carollia perspicillata*)
- Greater white lined bat (*Saccopteryx bilineata*)
- Common tent making bat (*Uroderma bilobatum*)
- Little mastiff bat (*Molossus molossus*)
- Pale spear nosed bat (*Phyllostomus discolor*)
- Greater spear nosed bats (*Phyllostomus hastatus*)
- Jamaican fruit eating bat (*Artibeus jamaicensis*)
- Great fruit eating bat (*Artibeus lituratus*)
- Common moustached bats (*Pteronotus parnelli*)

Close to the property we observed a group of Great fruit eating bats (*Artibeus lituratus*) night roosting in a large palm frond and a single Proboscis bat (*Rynchonycteris naso*) was found roosting on the balcony of one of the upstairs bedrooms in the forest Mayaro property.

Day 5

Started with a walk around the Nariva swamp looking for roosting bats and potential mist netting locations. We found several bat roosts including:

- MacConnell's bat (*Mesophylla macconnellii*) photo below roosting in a fallen



epiphyte about 1.5m high in an apical boat style tent. Checking our records this was the same leaf that contained a colony of the same species in May 2010; which is a remarkable length of time and surprising that the leaf has not deteriorated.

- We found two tents of Jamaican fruit eating bats (*Artibeus jamaicensis*) in umbrella tents in palm fronds containing 7 and 2 bats.
- A standing hollow tree contained a colony of at least 7 Greater white lined bats (*Saccopteryx bilineata*) and we had a great view of the males 'fanning' the females as they tried to regain harem position. The tree also contained a Seba's short tailed fruit bat (*Carollia perspicillata*). A second hollow tree contained another colony of Greater white lined bats (*Saccopteryx bilineata*).
- Inside a fallen hollow tree we found a roost of 7 Common big eared bats (*Micronycteris megalotis*) in a cluster.
- An unfurled heliconia leaf contained a single male Spix's disk winged bat (*Thyroptera tricolor*).
- Several hollowed out termite nests were spotted along the trail and it wasn't until the very last one that we found a single Pygmy round eared bat (*Lophostoma brasiliense*).

We returned to Nariva in the evening and separated into two teams.

Team A were covering the forest edge with the triple high and some single mist nets and caught:

- 2 Greater white lined bats (*Saccopteryx bilineata*)
- 1 Common tent making bat (*Uroderma bilobatum*)
- 1 Riparian myotis (*Myotis riparius*)
- 2 Jamaican fruit eating bats (*Artibeus jamaicensis*)
- 2 Seba's short tailed fruit bats (*Carollia perspicillata*)
- 1 Gervais's fruit eating bat (*Artibeus cinereus*)
- 1 Southern yellow bat (*Lasiurus ega*)
- 1 Common big eared bat (*Micronycteris megalotis*)
- 1 Hellers broad nosed bat (*Platyrhinus helleri*)
- 1 Great fruit eating bat (*Artibeus lituratus*)
- 2 Davy's naked backed bats (*Pteronotus davyi*)
- 1 Stripe headed round eared bat (*Tonatia saurophilia*)
- 3 Ghost faced bats (*Mormoops megalophylla*)
- 1 Common moustached bat (*Pteronotus parnelli*)
- 2 Lesser moustached bats (*Pteronotus personatus*)
- 1 Tilda's Yellow shouldered bat (*Sturnira tildae*)

Team B netted an area close to the cannonball tree's deeper into the swamp and caught:

- 1 Riparian myotis (*Myotis riparius*)
- 2 Common tent making bats (*Uroderma bilobatum*)
- 3 Jamaican fruit eating bats (*Artibeus jamaicensis*)
- 2 Striped hairy nosed bats (*Mimon crenulatum*)
- 5 Seba's short tailed fruit bats (*Carollia perspicillata*)
- 4 Greater white lined bats (*Saccopteryx bilineata*)
- 1 Common long tongued bats (*Glossophaga soricina*)
- 2 Tiny big eared bats (*Micronycteris minuta*)
- 1 Common big eared bat (*Micronycteris megalotis*)

Day 6

We returned to our lodge properties in Talparo and after lunch one team walked the Aripo savannah where we found one umbrella tent and flushed 3 bats possibly Common tent making bats (*Uroderma bilobatum*). We surveyed the abandoned bunkers and found several mixed roosts of Common long tongued bats (*Glossophaga soricina*) and Seba's short tailed fruit bats (*Carollia perspicillata*). We then headed into the Arena Forest reserve and set mist nets along the forest trails and caught a wide range of species:

- 18 Seba's short tailed fruit bats (*Carollia perspicillata*)
- 6 Greater white lined bats (*Saccopteryx bilineata*)
- 2 Brazilian brown bats (*Eptesicus brasiliensis*) pictured below



- 7 Greater spear nosed bats (*Phyllostomus hastatus*)
- 2 Striped hairy nosed bats (*Mimon crenulatum*)
- 3 Common moustached bats (*Pteronotus parnelli*)
- 2 Pale spear nosed bats (*Phyllostomus discolor*)
- 1 Little yellow shouldered bat (*Sturnira lilium*)
- 1 white winged vampire bat (*Diaemus youngi*)

The second team were netting around the Talparo property and caught:

- 2 Seba's short tailed fruit bats (*Carollia perspicillata*)
- 2 Common moustached bats (*Pteronotus parnelli*)
- 2 Riparian myotis (*Myotis riparius*)

Day 7

After breakfast we visited [REDACTED]. We found several species roosting and with a hand net caught:

- 4 Common moustached bats (*Pteronotus parnelli*)
- 3 Ghost faced bats (*Mormoops megalophylla*)
- 1 Common vampire bat (*Desmodus rotundus*)

Roosting species observed were Seba's short tailed fruit bats (*Carollia perspicillata*) and lots of Greater spear nosed bats (*Phyllostomus hastatus*) clustered in the lift shafts.

The common vampire bat was the highlight of the morning and after looking at the features we watched as it was released on the ground before running and leaping into flight. There was a second *Desmodus rotundus* with a juvenile (picture below).



In the afternoon we trekked to the Tamana Hill bat cave and were joined by a film crew from Earthwise and Trini Eco warriors who are producing educational documentaries and raising awareness about the fauna and flora of the Islands.

We split into two groups with one team erecting the harp trap at the main chimney whilst the other team explored the cave.

Inside the walk in chamber (section 1) we found large groups of Geoffroy's hairy legged bats (*Anoura geoffroyi*); (sec. 2) was almost knee deep in water at the entrance and contained a mixture of Trinidadian funnel eared bats (*Natalus tumidirostris*) and a few individual Ghost faced bats (*Mormoops megalophylla*). Through the crawl hole to the main chimney (sec. 4, 5, 6 & 7) we found numerous groups of Greater spear-nosed bats (*Phyllostomus hastatus*) in harem groups with males defending a cluster of females. Several females had pups that were less than 1 week old and some of the bats were rung; none of these were captured to avoid disturbance. Under the main chimney we could see groups of Geoffroy's Hairy legged bats (*Anoura geoffroyi*) including one complete albino. We could see lots of Mormoopidae species roosting in the deep section.

The harp trap was positioned at the main chimney and within a couple of hours had caught:

- 32 Common moustached bats (*Pteronotus parnelli*)
- 138 Ghost faced bats (*Mormoops megalophylla*)
- 518 Davy's naked backed bats (*Pteronotus davyi*)
- 27 Lesser moustached bat (*Pteronotus personatus*)
- 3 Greater spear nosed bats (*Phyllostomus hastatus*)
- 2 Trinidadian funnel eared bats (*Natalus tumidirostris*)
- 2 Geoffroy's hairy legged bats (*Anoura geoffroyi*)



Day 8

The final morning was spent exploring the grounds of Hacienda Jacana we found a cluster of Great fruit eating bats (*Artibeus lituratus*) comprising 1 adult male, 7 adult females with 7 pups. We also found roosts of Seba's short tailed fruit bats (*Carollia perspicillata*) in an abandoned container and in two disused houses.

Participant list

Organisers:

Geoffrey & Stephenie Gomes (Trinidad) <http://trinibirding.com/index.php>

Daniel Hargreaves (UK) daniel@batdan.co.uk

Participants:

Bob Cornes

Ross Baker

Adrian Bailey

Jonathan Durward

Denise Foster

Pat Hatch

Jude Hirstwood

Lynn Whitfield

Steve Parker

Fiona Parker

David Lee



Trip Species List

Total list of the 36 bat species identified.

Family: Emballonuridae / Sac-winged Bats

Proboscis Bat - *Rynchonycteris naso*

Greater White-lined Bat - *Saccopteryx bilineata*

Lesser White-lined Bat - *Saccopteryx leptura*

Family: Mormoopidae / Leaf-chinned Bats

Ghost-faced Bat - *Mormoops megalophylla*

Common Moustached Bat - *Pteronotus parnelli*

Lesser Moustached Bat - *Pteronotus personatus*

Davy's Naked-backed Bat - *Pteronotus davyi*

Family: Phyllostomidae / Leaf-nosed Bats

Subfamily: Phyllostominae / Leaf-nosed Bats

Tiny Big-eared Bat - *Micronycteris minuta*

Common Big-eared Bat - *Micronycteris megalotis*

Niceforo's Bat - *Trinycteris nicefori*

Stripe-headed Round-eared Bat - *Tonatia saurophilia*

Pygmy Round-eared Bat - *Lophostoma brasiliense*

Striped Hairy-nosed Bat - *Mimon crenulatum*

Pale Spear-nosed Bat - *Phyllostomus discolor*

Greater Spear-nosed Bat - *Phyllostomus hastatus*

Pale faced bat - *Phylloderma stenops*

Subfamily: Desmodontinae / vampire bats

Common vampire bat - *Desmodus rotundus*

White winged vampire bat - *Diaemus youngi*

Subfamily: Glossophaginae / nectar feeding bats

Common Long-tongued Bat - *Glossophaga soricina*

Geoffroy's Hairy-legged Bat - *Anoura geoffroyi*

Subfamily: Carolliinae / Short-tailed bats

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

Subfamily: Stenodermatinae / Tailless bats

Little Yellow-shouldered Bat - *Sturnira lilium*
Trinidadian Yellow-shouldered Bat - *Sturnira tildae*
Great Fruit-eating Bat - *Artibeus lituratus*
Jamaican Fruit-eating Bat - *Artibeus jamaicensis*
Gervais's Fruit-eating Bat - *Artibeus cinereus*
Common Tent-making Bat - *Uroderma bilobatum*
Heller's Broad-nosed Bat - *Platyrhinus helleri*
MacConnell's bat - *Mesophylla macconnelli*

Family: Natalidae / Funnel-eared Bats

Trinidadian Funnel-eared Bat - *Natalus tumidirostris*

Family: Thyropteridae / Disk-winged Bats

Spix's Disk-winged Bat - *Thyroptera tricolor*

Family: Vespertilionidae / Plain-nosed Bats

Riparian Myotis - *Myotis riparius*
Southern Yellow bat - *Lasiurus ega*
Western red bat - *Lasiurus blossevillii*
Brazilian brown bat - *Eptesicus brasiliensis*

Family: Molossidae / Free-tailed Bats

Little Mastiff Bat - *Molossus molossus*