



Trinibats Field Survey March 2014

By Daniel Hargreaves

Introduction

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

7th March 2014

In the morning we visited Caroni swamp where our guide Lester took us by boat to explore the swamp. We spotted two groups of *Rynchonycteris naso* lined up on trees in separate areas. The first group contained 6 individuals and the second 10 individuals. When leaving the swamp a group of *Saccopteryx leptura* were seen flying in front of the boat.

In the evening we netted in Caroni swamp where Luke Rostant and his students have been carrying out systematic surveys. We split into two groups with one group close to the entrance to the swamp and the other group positioned along a mango hedge away from water. The activity was slow but we caught 19 bats comprising of 7 species and a new species* for the Trinibats expeditions.

- 8 *Thomas's Yellow Bat (*Rhogeessa io*)
- 3 Seba's Short-tailed Fruit bat (*Carollia perspicillata*)
- 1 Proboscis bat (*Rhynchonycteris naso*)
- 1 Little mastiff bat (*Molossus molossus*)
- 1 Little Yellow shouldered bat (*Sturnira lilium*)
- 3 Great Fruit-eating bat (*Artibeus lituratus*)
- 2 Jamaican Fruit-eating bat (*Artibeus jamaicensis*)

6 Thomas's Yellow bats were caught in quick succession indicating a possible roost site close to the netting site.



8th March

In the morning we walked along the Marianne river in Blanchisseuse to a roost of Trinidad Lesser Dog-like bat (*Peropteryx trinitatis*). We spotted 5 individuals and caught one in a hand net and two in a 3m mist net. The roost was a series of crevices and rifts in a limestone outcrop above the river. A *Saccopteryx* bat was seen flying in forest next to the river.

1. Male, 4g, FA 41.8mm, no breeding condition
2. Male, 4.25g, FA 43.1
3. Female, 4.5g, FA 44.1, parous



In the evening we headed to Las Cuevas and netted along Rincon ridge, in the garden of Robert and Vanessa and along the river below their house. We caught 57 bats representing 14 species (and also several Oilbirds).

- 1 Lesser White-lined bat (*Saccopteryx leptura*)
- 1 Brazilian Brown bat (*Eptesicus brasiliense*)
- 10 Jamaican Fruit-eating bat (*Artibeus jamaicensis*)
- 9 Gervais's Fruit-eating bat (*Artibeus cinereus*)
- 17 Seba's Short-tailed Fruit bat (*Carollia perspicillata*)
- 4 Common Tent-making bat (*Uroderma bilobatum*)
- 1 Greater White-lined bat (*Saccopteryx bilineata*)
- 2 Tilda's Yellow shouldered bat (*Sturnira tildae*)
- 2 Common Mustached bat (*Pteronotus parnelli*)
- 4 Common Long-tongued bat (*Glossophaga soricina*)
- 1 Stripe-headed Round-eared bat (*Tonatia saurophila*)
- 1 Geoffroys Hairy-legged bat (*Anoura geoffroyi*)
- 2 Great Fruit-eating bat (*Artibeus lituratus*)
- 2 Niceforo's bat (*Trinycteris nicefori*)

9th March

In the morning we visited the University of West Indies Zoology museum and looked at their collection of bat specimens. Before we left we looked at a maternity roost of Jamaican Fruit-eating bat (*Artibeus jamaicensis*) in a tree that Mike Rutherford had found in the Campus grounds, there were 10 adults with at least 4 pups. In the evening we surveyed Mount Catherine in Chaguramas. We split into two teams one at the base and one along the ridge close to the look-out tower. We caught a total of 59 bats of 15 species:

- 2 Common Big-eared bat (*Micronycteris megalotis*)
- 1 Hairy Big-eared bat (*Micronycteris hirsuta*)
- 2 Stripe-headed Round-eared bat (*Tonatia saurophila*)
- 5 Jamaican Fruit-eating bat (*Artibeus jamaicensis*)
- 23 Seba's Short-tailed Fruit bat (*Carollia perspicillata*)
- 2 Great Fruit-eating bat (*Artibeus lituratus*)
- 3 Greater White-lined bat (*Saccopteryx bilineata*)
- 9 Gervais's Fruit-eating bat (*Artibeus cinereus*)
- 4 Common Mustached bat (*Pteronotus parnelli*)
- 1 Common Tent-making bat (*Uroderma bilobatum*)
- 1 Pale Spear-nosed bat (*Phyllostomus discolor*)
- 3 Greater Spear-nosed bat (*Phyllostomus hastatus*)
- 1 Pygmy Round-eared bat (*Lophostoma brasiliense*)
- 1 Davy's Naked-backed bats (*Pteronotus davyi*)
- 1 Little Yellow shouldered bat (*Sturnira lilium*)



10th March

We left Alicia's Palace and travelled up the North Coast to the Mount Plaisir hotel at Grande Riviere. In the afternoon we visited Crapaud cave in the North East range. We had to cut a trail to this seldom visited cave and found a new smaller cave that contained at least one Trinidadian Lesser Doglike bat (*Peropteryx trinitatus*). We were late finding Crapaud cave and bats were already flying inside the cave when we entered. The cave contained several bat species those seen roosting were:

1. Common Mustached bats (*Pteronotus parnelli*)
2. Ghost-faced bats (*Mormoops megalophylla*)

3. Davy's Naked-backed bats (*Pteronotus davyi*)
4. Lesser Mustached bats (*Pternotus personatus*)
5. Trinidadian Funnel-eared bat (*Natalus tumidirostris*)
6. Geoffroy's Hairy-legged bats (*Anoura geoffroyi*)
7. Seba's Short-tailed fruit bat (*Carollia perspicillata*)
8. Sword nosed bat (*Lonchorina aurita*)

The Sword nosed bats were roosting in a corridor heading left in the cave, they were roosting high approximately 6 metres in two groups with a total of approximately 40 individuals. We set a harp trap at the entrance and some mist nets close to the cave. The harp trap caught a large number ~700 bats of several species:

- Common Mustached bats (*Pteronotus parnellii*)
- Ghost-faced bats (*Mormoops megalophylla*)
- Davy's Naked-backed bats (*Pteronotus davyi*)
- Lesser Mustached bats (*Pternotus personatus*)
- Seba's Short-tailed fruit bat (*Carollia perspicillata*)
- 2 Sword nosed bat (*Lonchorina aurita*)

The mist nets near the cave caught some Geoffroy's Hairy-legged bats (*Anoura geoffroyi*), Hellers Broad-nosed bat (*Platyrrhinus helleri*) and some more *Carollia*.

We set mist nets along the road and the trail to the cave and caught a further 102 bats of 12 species:

- 60 Seba's Short-tailed fruit bat (*Carollia perspicillata*)
- 2 Gervais's Fruit-eating bat (*Artibeus cinereus*)
- 3 Greater Spear-nosed bat (*Phyllostomus hastatus*)
- 5 Sword nosed bat (*Lonchorina aurita*)
- 12 Common Mustached bats (*Pteronotus parnellii*)
- 12 Hellers Broad-nosed bat (*Platyrrhinus helleri*)
- 1 Great Fruit-eating bat (*Artibeus lituratus*)
- 2 Common Tent-making bat (*Uroderma bilobatum*)
- 1 Common Big-eared bat (*Micronycteris megalotis*)
- 2 Ghost-faced bats (*Mormoops megalophylla*)
- 1 Lesser Mustached bat (*Pternotus personatus*)
- 1 Davy's Naked-backed bats (*Pteronotus davyi*)



On return to Mount Plaisir a team placed two nets across the river pool in the hope of catching a Greater fishing bat (*Noctilio leporinus*) which was seen fishing over the water. The net didn't catch a fishing bat but was successful by capturing a Great Fruit-eating bat (*Artibeus lituratus*).

11th March

Before leaving Mount Plaisir we checked one of the abandoned lodges which contained a roost of over 30 Greater Spear-nosed bat (*Phyllostomus hastatus*), 2 Common Long-tongued bat (*Glossophaga soricina*) and at least 2 Seba's Short-tailed fruit bat (*Carollia perspicillata*).

We arrived at Hacienda Jacana, Talparo at lunchtime and we found:

- 6 Proboscis bat (*Rhynchonycteris naso*) on lodge 4.
- 5 Lesser White-lined bat (*Saccopteryx leptura*) on lodge 4.
- 4 Lesser White-lined bat (*Saccopteryx leptura*) on lodge 1
- A colony of Little Mastiff bats (*Molossus molossus*) in lodge 4.

In the afternoon we set off to La Laja in the Northern Range and set nets at the bottom, middle of the trail and along the ridge. The ridge proved an amazing passing point between the valleys and on the ridge alone we caught 218 bats of 21 species. The total for the night was 283 bats and 26 species.

- 1 Lesser White-lined bat (*Saccopteryx leptura*)
- 2 Greater White-lined bat (*Saccopteryx bilineata*)
- 45 Gervais's Fruit-eating bat (*Artibeus cinereus*)
- 54 Seba's Short-tailed Fruit bats (*Carollia perspicillata*)
- 38 Geoffroy's Hairy-legged bats (*Anoura geoffroyi*)
- 22 Great Fruit-eating bat (*Artibeus lituratus*)
- 36 Jamaican Fruit-eating bat (*Artibeus jamaicensis*)
- 7 Tilda's Yellow shouldered bat (*Sturnira tildae*)
- 32 Hellers Broad-nosed bat (*Platyrrhinus helleri*)
- 1 Little Yellow shouldered bat (*Sturnira lilium*)
- 3 Brazilian Brown bat (*Eptesicus brasiliense*)
- 1 Trinidadian Funnel-eared bat (*Natalus tumidirostris*)
- 3 Hairy-legged myotis (*Myotis keaysi*)
- 3 Common Mustached bats (*Pteronotus parnellii*)
- 2 Tiny big-eared bats (*Micronycteris minuta*)
- 4 Great Stripe-faced bat (*Vampyrodes caraccioli*)
- 3 Stripe-headed Round-eared bat (*Tonatia saurophila*)
- 1 Greater Spear-nosed bat (*Phyllostomus hastatus*)

- 1 Pale Spear-nosed bat (*Phyllostomus discolor*)
- 6 Common Long-tongued bat (*Glossophaga soricina*)
- 6 Hairy Big-eyed bat (*Chiroderma villosum*)
- 1 Riparian Myotis (*Myotis riparius*)
- 5 Davy's Naked-backed bats (*Pteronotus davyi*)
- 2 Hairy Big-eared bat (*Micronycteris hirsuta*)
- 1 Common vampire bat (*Desmodus rotundus*)
- 3 Common Tent-making bats (*Uroderma bilobatum*)



12th March

We visited Maracas waterfall and set nets at the base of the trail, midway and at the waterfall. Halfway along the trail we found a roost in a limestone crevice containing two Trinidadian Lesser Doglike bat (*Peropteryx trinitatis*). We caught 192 bats of 14 species:

- 43 Seba's Short-tailed Fruit bats (*Carollia perspicillata*)
- 112 Common Tent-making bat (*Uroderma bilobatum*)
- 2 Tilda's Yellow shouldered bat (*Sturnira tildae*)
- 15 Gervais's Fruit-eating bat (*Artibeus cinereus*)
- 2 Trinidadian Funnel-eared bat (*Natalus tumidirostris*)
- 3 Greater White-lined bat (*Saccopteryx bilineata*)
- 4 Lesser White-lined bat (*Saccopteryx leptura*)
- 1 Little mastiff bat (*Molossus molossus*)
- 1 Hairy Big-eared bat (*Micronycteris hirsuta*)
- 2 Common Mustached bats (*Pteronotus parnellii*)
- 1 Great Fruit-eating bat (*Artibeus lituratus*)
- 1 Jamaican Fruit-eating bat (*Artibeus jamaicensis*)
- 1 Geoffroy's Hairy-legged bats (*Anoura geoffroyi*)
- 4 Heller's Broad-nosed bat (*Platyrrhinus helleri*)

13th March

In the morning we visited two abandoned storage facilities. We were looking for vampire bats but didn't find any. Fort Reid Ice house contained:

- Greater White-lined bat (*Saccopteryx bilineata*)
- Common Long-tongued bat (*Glossophaga soricina*)
- Seba's Short-tailed Fruit bats (*Carollia perspicillata*)
- Greater Spear-nosed bat (*Phyllostomus hastatus*) some ringed
- Common Mustached bats (*Pteronotus parnellii*)
- Ghost-faced bats (*Mormoops megalophylla*)

And the abandoned, WW11 Cold Storage facility contained:

- Common Long-tongued bat (*Glossophaga soricina*)
- Seba's Short-tailed Fruit bats (*Carollia perspicillata*)
- Greater Spear-nosed bat (*Phyllostomus hastatus*) some ringed

In the evening we visited the Asa Wright Nature Centre and set nets along the main trail and close to the veranda. There was a small roost of Lesser White-lined bat (*Saccopteryx leptura*). Geoffrey and Daniel gave a presentation of our work to approximately 20 guests followed by a show and tell with some of the bats caught that evening. In total we caught 123 bats of 19 species.

- 5 Common Tent-making bat (*Uroderma bilobatum*)
- 65 Seba's Short-tailed Fruit bats (*Carollia perspicillata*)
- 2 Tilda's Yellow shouldered bat (*Sturnira tildae*)
- 4 Gervais's Fruit-eating bat (*Artibeus cinereus*)
- 3 Riparian Myotis (*Myotis riparius*)
- 3 Jamaican Fruit-eating bat (*Artibeus jamaicensis*)
- 2 Striped Hairy-nosed bat (*Mimon crenulatum*)
- 14 Common Long-tongued bat (*Glossophaga soricina*)
- 1 Greater White-lined bat (*Saccopteryx bilineata*)
- 5 Heller's Broad-nosed bat (*Platyrrhinus helleri*)
- 5 Geoffroy's Hairy-legged bats (*Anoura geoffroyi*)
- 1 Pale Spear-nosed bat (*Phyllostomus discolor*)
- 1 Niceforo's bat (*Trinycteris nicefori*)
- 5 Common Mustached bats (*Pteronotus parnellii*)
- 2 Hairy-legged myotis (*Myotis keaysi*)
- 1 Trinidadian Funnel-eared bat (*Natalus tumidirostris*)
- 1 Ghost-faced bat (*Mormoops megalophylla*)
- 2 Great Fruit-eating bat (*Artibeus lituratus*)

- 1 Stripe-headed Round-eared bat (*Tonatia saurophila*)

14th March

Shortly before dawn we netted the roost of Little mastiff bat (*Molossus molossus*) from one of the Hacienda lodges and caught 19 bats, 3 males and 16 females; none of which were showing any sign of breeding so we transferred them to a newly positioned bat box to hopefully get them accustomed to their new roost.

Following lunch we headed to Tamana Hill and explored both the wet and dry cave. The first chamber (section 1) was devoid of bats which was unusual as it's normally home to clusters of Geoffroy's hairy legged bats (*Anoura geoffroyi*); (sec. 2) was completely dry and all the Geoffroy's bats appeared to be roosting in this chamber instead; we found and caught one adult male albino Geoffroy's Hairy-legged bat (*Anoura geoffroyi*) roosting on a side wall, and we saw a second albino of this species. This chamber also contained 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 reduced numbers of Greater Spear-nosed bats (*Phyllostomus hastatus*). They seemed to be spread out much more than usual although we found 3 in harem groups with males defending individual clusters of females. Under the main chimney were a few small clusters of Geoffroy's Hairy-legged bats (*Anoura geoffroyi*) but many less than in previous years. We didn't see many Mormoopidae bats at all and presumed they were roosting in the deep sections. We then explored the dry cave where we found Ghost-faced bats (*Mormoops megalophylla*), Greater Spear-nosed bats (*Phyllostomus hastatus*), Seba's Short-tailed Fruit bats (*Carollia perspicillata*) and Geoffroy's Hairy-legged bats (*Anoura geoffroyi*). The harp trap was positioned at the main chimney and within a couple of hours had caught 912 bats of 7 species:

- 55 Common Mustached bats (*Pteronotus parnellii*)
- 288 Ghost-faced bats (*Mormoops megalophylla*)
- 494 Davy's Naked-backed bats (*Pteronotus davyi*)
- 55 Lesser Mustached bats (*Pteronotus personatus*)
- 8 Trinidadian Funnel-eared bat (*Natalus tumidirostris*)
- 10 Geoffroy's Hairy-legged bats (*Anoura geoffroyi*)
- 2 Greater Spear-nosed bat (*Phyllostomus hastatus*)

Two mist nets on the bottom trail caught:

- 19 Common Mustached bats (*Pteronotus parnellii*)
- 5 Lesser Mustached bats (*Pteronotus personatus*)
- 3 Common Tent-making bat (*Uroderma bilobatum*)

- 2 Heller's Broad-nosed bat (*Platyrrhinus helleri*)
- 14 Geoffroy's Hairy-legged bats (*Anoura geoffroyi*)
- 1 Seba's Short-tailed Fruit bat (*Carollia perspicillata*)

15th March

Again shortly before dawn we netted the roost of Little mastiff bat (*Molossus molossus*) and caught 13 bats, 2 males and 11 females, none of which were showing any sign of breeding. Again we transferred them to a newly positioned bat box and Hacienda will continue to use the one way exclusion devices that we have advised them to use to safely move the bats from the lodges to the bat house.



We then visited Knolly's Tunnel in Tabaquite and found the following 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*)
- Greater Spear-nosed bat (*Phyllostomus hastatus*) a small group of four individuals

Participant list

Organisers:

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

Luke Rostant, University of West Indies

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

Participants:

Bob Cornes

Ross Baker

Adrian Bayley

Jonathan Durward

Steven Parker

Fiona Parker

Denise Foster

David Lee

Jude Hirstwood

Lynn Whitfield

Nigel Milbourne

Linda Kergon

Stephen Davison

Claire Andrews



Trip Species List 2014

Total list of the 38 bat species identified:

Family: Emballonuridae / Sac-winged Bats

Proboscis Bat - *Rynchonycteris naso*
Greater White-lined Bat - *Saccopteryx bilineata*
Lesser White-lined Bat - *Saccopteryx leptura*
Lesser Doglike bat - *Pteropteryx trinitatis*

Family: Mormoopidae / Leaf-chinned Bats

Ghost-faced Bat - *Mormoops megalophylla*
Common Mustached Bat - *Pteronotus parnelli*
Lesser Mustached 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*
Hairy Big-eared bat *Micronycteris hirsuta*
Niceforo's Bat - *Trinycteris nicefori*
*Sword nosed bat - *Lonchorina aurita*
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*

Subfamily: Desmodontinae / vampire bats

Common Vampire bat - *Desmodus rotundus*

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 Fruit 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 - *Platyrrhinus helleri*
Great Stripe-faced bat - *Vampyrodes caraccioli*
Hairy Big-eyed bat - *Chiroderma villosus*

Family: Noctilionidae / Fishing bats

Greater Fishing bat - *Noctilio leporinus*

Family: Natalidae / Funnel-eared Bats

Trinidadian Funnel-eared Bat - *Natalus tumidirostris*

Family: Vespertilionidae / Plain-nosed Bats

Riparian Myotis - *Myotis riparius*

Hairy-legged myotis - *Myotis keaysi*

*Thomas's Yellow bat - *Rhogessa io*

Brazilian Brown bat - *Eptesicus brasiliensis*

Family: Molossidae / Free-tailed Bats

Little Mastiff Bat - *Molossus molossus*

*New species in 2014 for the Trinibats expeditions