



THE FIELD NATURALIST

Quarterly Bulletin of the Trinidad and Tobago Field Naturalists' Club

October – December 2021

Issue No: 4/2021



Saturday 20st - Sunday 21st November **BIOBLITZ 2021—THE 10TH ANNIVERSARY** **REVISITING OUR PAST LOCATIONS**

by Stephanie Warren-Gittens



Ten years of Bioblitz! Who would've thought that it would be another year without a physical basecamp, especially for such a special milestone? From 2012- 2019, physical Bioblitz events have been held at various locations across Trinidad and Tobago: Tucker Valley, Arima Valley, Nariva Swamp,

Charlotteville, Port Of Spain, Icacos, Toco and Tabaquite. For the 9th edition, Bioblitz was adapted to the pandemic and the event was held virtually via the iNaturalist app. With certain restrictions still in place for our 2021- limits on the numbers of people

(continued on page 3)



Brown capuchin stares at the camera in Tucker Valley– the location of the first Bioblitz in 2012.

Photo by Davis Gunn

Inside This Issue

- Cover**
- 1 **Bioblitz 2022—the 10th anniversary General Report**
- Stephanie Warren-Gittens
- 6 **Amphibian and Reptile Group Report**
- Stephanie Warren-Gittens
- 9 **Bird Group Report**
- Stephanie Warren-Gittens
- 11 **Plant Group Report**
- Stephanie Warren-Gittens
- 14 **Fungus Group Report**
- Stephanie Warren-Gittens
- 15 **Mammal Group Report**
- Stephanie Warren-Gittens
- 17 **Aquatic Group Report**
- Stephanie Warren-Gittens
- 19 **Invertebrate Group Report**
- Stephanie Warren-Gittens
- 22 **Bioblitz through the years- Group Totals**
- 23 **Blast from the past Basecamps**
- 24 **Blast from the past– groups photos**
- 26 **Blast from the past– In the field**

The Trinidad and Tobago Field Naturalists' Club
is a non-profit, non-governmental organization

Editor's note :

Many thanks to all who contributed and
assisted with articles and photographs.

Disclaimer :

The views expressed in this bulletin are those of the respective
authors and do not necessarily reflect the opinion and views
of the Trinidad and Tobago Field Naturalists' Club

THE FIELD NATURALIST

Quarterly Bulletin of the
Trinidad and Tobago Field Naturalists' Club

October - December 2021

Editor

Stephanie Warren-Gittens

Contributing Writers

Stephanie Warren-Gittens,

Photographers

Davisgunn, umarnobbee, figtree, amydeacontt, lintonarneaud,
vicki1967, dejean, yehohunter, saifudeen Muhammad, rainernd,
nicholasmohammed, brandonwoo, swgittens28, *brystrange,
nandani_bridglal, sabirali, jwongsang, zakwildlife, markhulme,
supibia, dillon20, genlog2, rashid_ali,, erictobago, vx-jameer,
rka67, camazotz95 *(iNaturalist usernames have been given)

Design and Layout

Mike G. Rutherford, Eddison Baptiste

Management Committee 2021 - 2022

President	Renoir Auguste	761-9197
Vice-President	Kris Sookdeo	647-5556
Treasurer.....	Selwyn Gomes	624-8017
Secretary	Danielle Morong	768-7666
Assist-Secretary	Laura Babolal	705-8716
Committee members ...	Nicholas Moham- med	723-6693
	Dan Jaggernaut	659-2795
	Stephanie Warren- Gittens	766-2681
	Elizabeth Seebaran	710-6978

Contact us!

Email: admin@ttfnc.org

Website: www.ttfnc.org

Facebook: www.facebook.com/ttfieldnaturalistsclub

YouTube: [www.youtube.com/channel/
UCCNMeE7ulAbRPV6DCHSeEjA](https://www.youtube.com/channel/UCCNMeE7ulAbRPV6DCHSeEjA)

Postal: The Secretary, TTFNC, c/o P.O. Box 642,
Port of Spain, Trinidad and Tobago

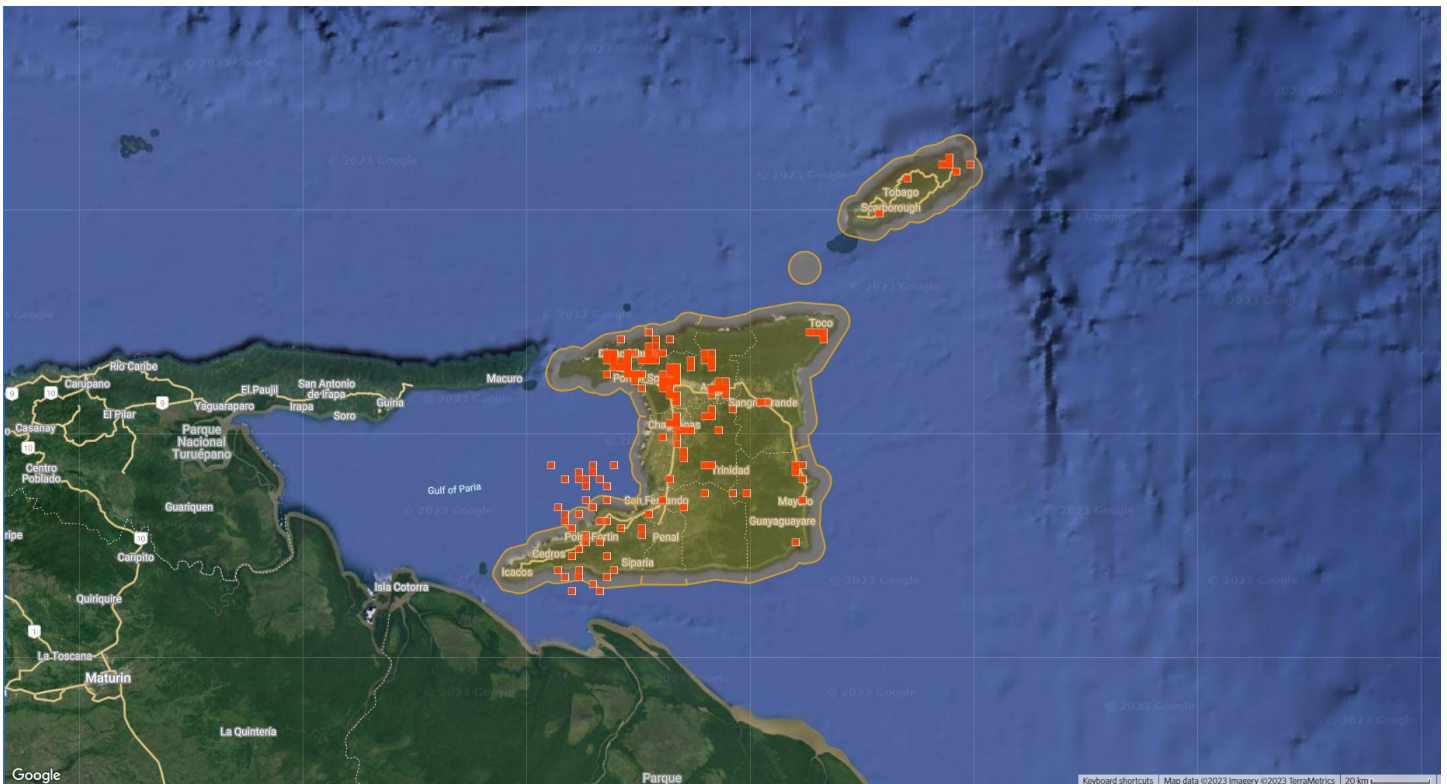


Figure 1: Map of observations made during Bioblitz 2021. Source: iNaturalist

(continued from Page 1)

that could be gathered in public spaces, closures of rivers and beaches (and thankfully curfew hours were lifted just before the event) - it certainly did put a damper on any grand celebrations we would have liked to celebrate for the 10th Bioblitz.

We had to put our thinking caps on again and come up with a way of honouring such an occasion and thought it quite fitting to 're-visit' the past Bioblitz locations – inclusive of our backyards to identify and highlight our biodiversity. We encouraged our Bioblitzers to still get back out, safely, or if they preferred remain in the comfort of their homes and left their location up to them while adhering to restrictions in place.

While the participation this year was a bit lower than 2020 – both in participants and number of observations and species, there was a still a fantastic showing with over 1021 species recorded in 2920

observation, by 81 observers and 344 identifiers in the 24 hours of the event from November 20-21, 2021. Observations were recorded at all our past locations, with the exception of Icacos. Compared to the rainy conditions of the previous year, there was hot and sunny day conditions for Bioblitz 2021.

The overall species breakdown* observed for Bioblitz, as per the iNaturalist app:

- Plants: 430 species
- Molluscs: 19 species
- Insects: 311 species
- Arachnids: 47 species
- Amphibians: 13 species
- Reptiles: 24 species
- Birds: 110 species
- Mammals: 9 species
- Fungi 25 species
- Other animals: 21 species

*(as at December 20, 2022)

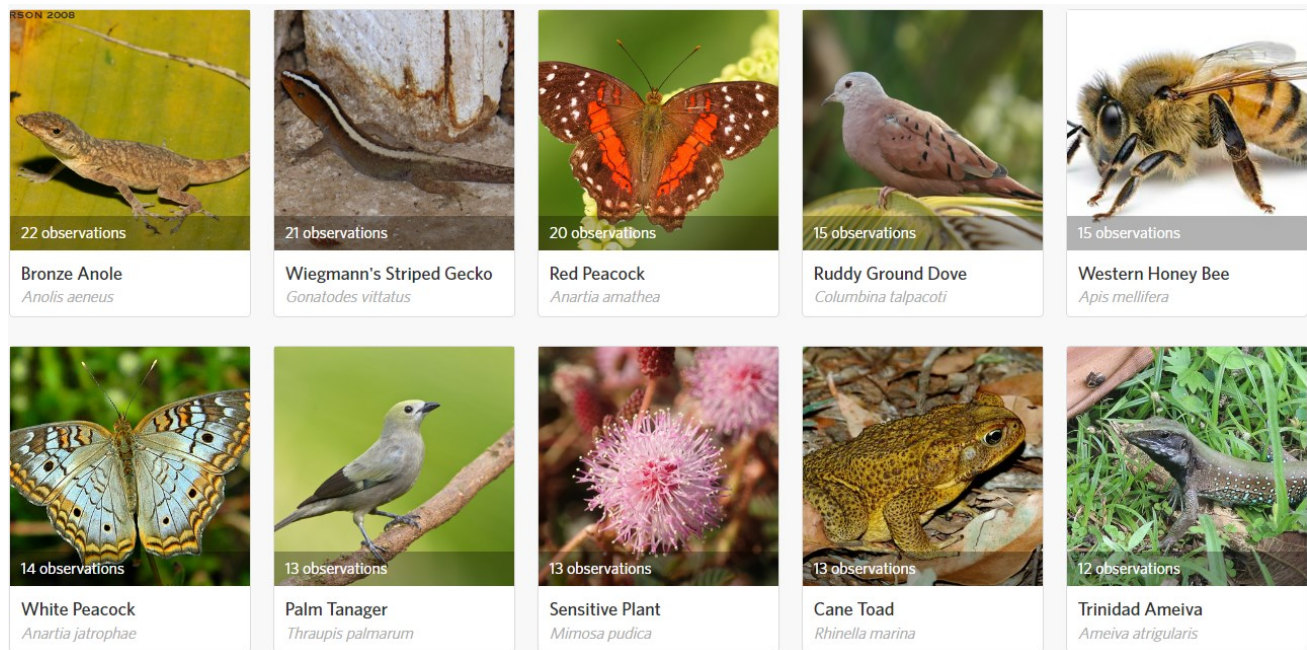


Figure 2. The ten most commonly observed and uploaded species during the 2021 Trinidad & Tobago Bioblitz. Compilation courtesy iNaturalist

Some of the top ten organisms from the 2020 event made an appearance again in 2021. The top 10 organisms observed for the 2021 Bioblitz is as follows:

1. Bronze Anole (*Anolis aeneus*)
2. Wiegmann's Striped Gecko (*Gonatodes vittatus*)
3. Red Peacock (*Anartia amathea*)
4. Ruddy ground dove (*Columbina talpacoti*)
5. Western honey Bee (*Apis mellifera*)
6. White peacock (*Anartia jatrophae*)
7. Palm tanager (*Thraupis palmarum*)
8. Sensitive plant (*Mimosa pudica*)
9. Cane toad (*Rhinella marina*)
10. Trinidad ameiva (*Ameiva atrigularis*)

A special thanks to all the participants, whether as an observer or an identifier or a well-wisher, for helping to keep the Bioblitz event alive and well through the uncertainty of the pandemic. Many thanks as well to the Trinidad and Tobago Field Naturalists' Club and Life Sciences Department, the University of the West Indies, for continued support of the event, albeit in a different way than the physical events. It would be remiss not to give special thanks to Mike Rutherford for starting this event here. In this special issue, we'll look at the findings from the 2021 Bioblitz and take a look back in photos at Bioblitzes over the years since 2012- a blast from the past! 🦋

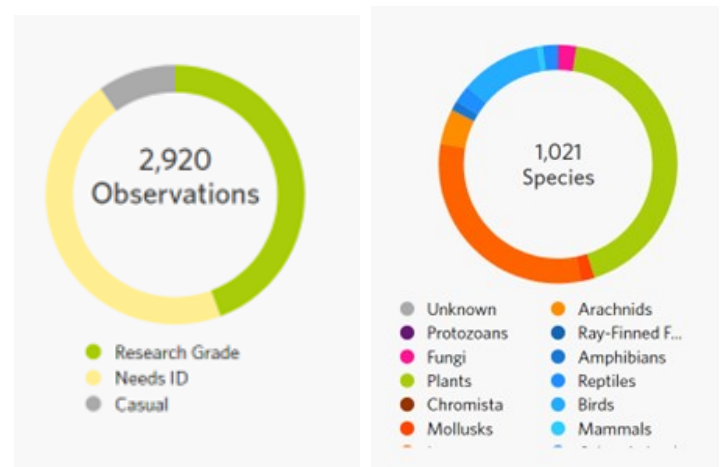
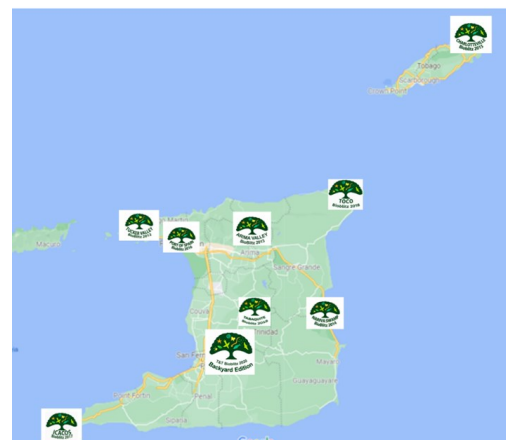


Figure 3: Breakdown of observations by identification status, and breakdown of species identified by taxa Source: iNaturalist.



Past locations of the various Bioblitz events from 2012—2020 in Trinidad & Tobago



Mike Rutherford at the Bioblitz Port of Spain in 2016. *Photo by:*



Compilation of past Bioblitz logos

The TTFNC and the Bioblitz organisers thank you Bioblitzers and the following organisations for partnering with us for Bioblitz 2021 Trinidad & Tobago!

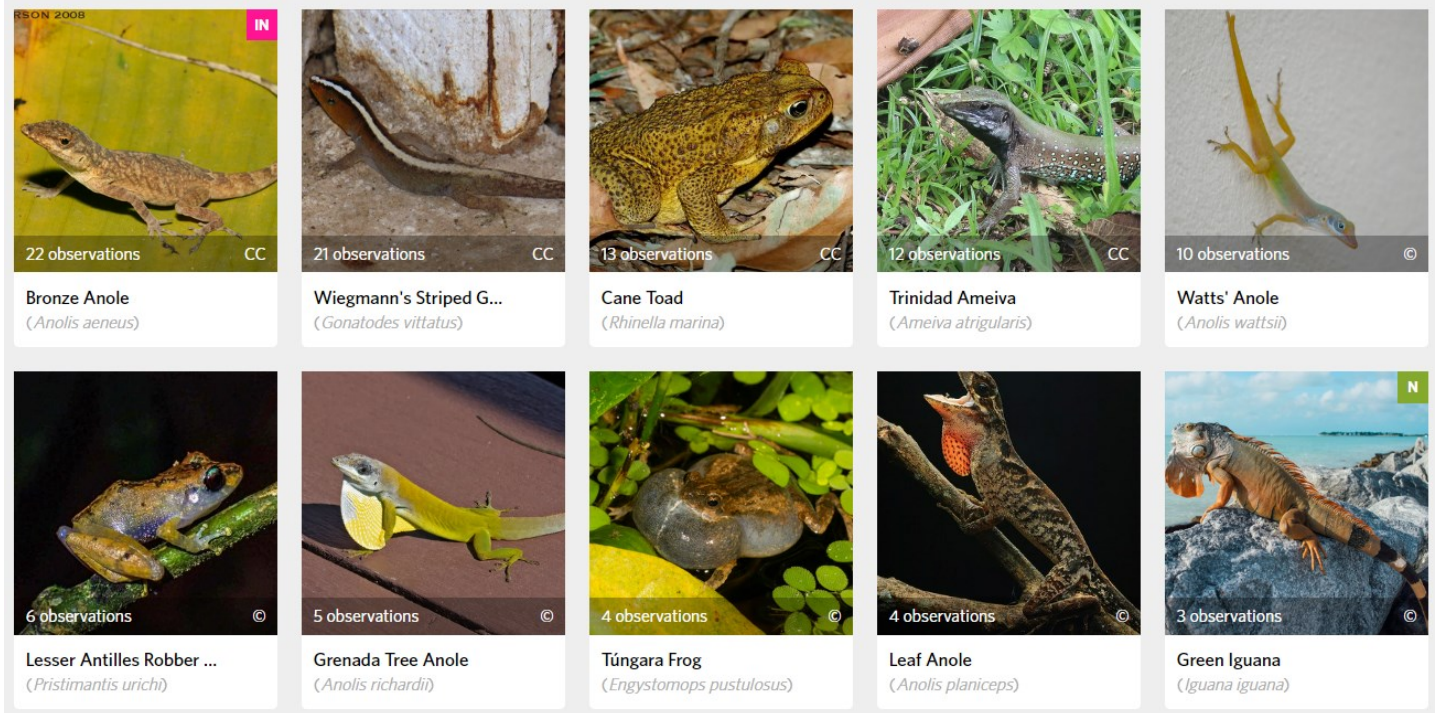
Bioblitz Trinidad & Tobago 2021 Committee:

Dr. Amy Deacon, Dr. Mark Hulme, Dr. Ryan Mohammed, Dr. Linton Arneaud, Stephanie Warren-Gittens, Renoir Auguste, Laura Baboolal and Kareshma Rampersad



AMPHIBIAN AND REPTILE GROUP REPORT

by Stephanie Warren-Gittens



The 2021 Bioblitz's Top 10 amphibians & reptiles. Compilation courtesy iNaturalist

There were 37 species of amphibians and reptiles recorded throughout Trinidad and Tobago for this year's Bioblitz. This represents a slight increase over last years findings, in which 35 species were recorded for the 2020 Backyard Bioblitz. The most common herp observed was the bronze anole (*Anolis aeneus*) and this was also coincidentally, the most common organism observed for this year's event.

Most of the recordings appeared to be in backyards however, there were a few observations from our past Bioblitz locations in Toco, Tabaguite, Arima Valley and Tucker Valley.

In Toco, there were observations of the Lesser Antilles robber frog (*Pristimantis urichi*), common lancehead or mapepire balsain/fer-de-lance (*Bothrops atrox*) and the cane toad (*Rhinella marina*) and the Tungara frog (*Engystomops pustulosus*). There were sightings of yellow-throated frog (*Mannophryne trinitatis*), northern turniptail gecko (*Thecadactylus*

rapicauda), leaf anole (*Anolis planiceps*), Wiegmann's striped gecko (*Gonatodes vittatus*) in Arima.

In Tabaguite, the Tungara frog (*Engystomops pustulosus*) was spotted. While in Tucker Valley quite a few herps were spotted these included the Caribbean Treerunner (*Plica caribaeana*), Trinidad Ameiva (*Ameiva atrigularis*), a dead worm lizard (*Amphisbaena alba*), greater Windward skink (*Copeoglossum aurae*) and the Tungara frog.

Of the 37 herp species observed, thirteen species were amphibians, while twenty-four were reptiles—among that five were snakes, four turtle species, one crocodilian and fourteen lizards. There were 34 identifiers and 42 observers with eesebaran having the most reptile observations.





Clockwise from top:

A Wiegmann's striped gecko wedged in a backyard space. *Photo by umarnobbee*; **a Charlottesville finding:**

Grenada tree anole. *Photo by figtree*

Northern turniptail gecko spotted in the Arima Valley. *Photo by amydeacontt*; **a scorpion mud turtle in a backyard.**

Photo by lintonarneaud; **a Caribbean treerunner in Tucker Valley.** *Photo by vicki1967*; **a brown vinesnake spotted in a backyard .** *Photo by dejean*



(Top L-R): Whistling grass frog seen in a backyard. Photo by yehohunter;
 three-lined ground snake spotted in a backyard. Photo by saifudeen muhammad;
(Middle: L-R): a túngara frog observed in Tabaquite. Photo by karishmarampersad; another backyard
 organism wedged in a tight space, this time a cane toad. Photo by umarnobbee;
(Bottom L-R): Lesser Antilles robber frogs spotted in Toco and in a backyard. Photos by rainernd &
 nicholasmohammed respectively.



BIRD GROUP REPORT

by Stephanie Warren-Gittens



15 observations

CC

Ruddy Ground Dove
(*Columbina talpacoti*)



13 observations

CC

Palm Tanager
(*Thraupis palmarum*)



11 observations

CC

Banaquit
(*Coereba flaveola*)



11 observations

CC

Great Kiskadee
(*Pitangus sulphuratus*)



10 observations

CC

Copper-rumped Hum...
(*Saucerottia tobaci*)



9 observations

CC

Tropical Mockingbird
(*Mimus gilvus*)



8 observations

CC

Black Vulture
(*Coragyps atratus*)



8 observations

CC

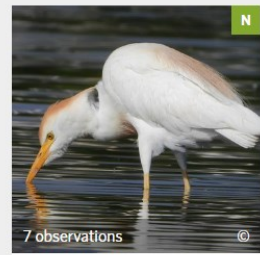
Carib Grackle
(*Quiscalus lugubris*)



8 observations

CC

Blue-gray Tanager
(*Thraupis episcopus*)



7 observations

©

Cattle Egret
(*Bubulcus ibis*)

Top 10 birds found during the 2021 Trinidad & Tobago Boblitz. Compilation courtesy iNaturalist

This year, 110 species of birds were observed from 332 observations and 49 observers, a marked increase from 2020, where fewer species (88) observed from a higher number of observations and observers 507 & 96 respectively). The difference in weather experienced on these comparative weekends could've contributed to this. It was sunnier for this year's Bioblitz in comparison to the rainy conditions experienced last year. Also, observations were expanded to include not just backyards, but also the past locations.

In Toco, species observed included green honeycreeper (*Chlorophanes spiza*), purple honeycreeper (*Cyanerpes caeruleus*), black-tailed tityra *Tityra cayana*, crimson-crested woodpecker (*Campephilus melanoleucos*), northern waterthrush (*Parkesia noveboracensis*), yellow-rumped cacique (*Cacicus cela*), southern lapwing (*Vanellus chilensis*), little blue heron (*Egretta caerulea*) and a white hawk (*Pseudastur albicollis*).


In Arima, species included channel-billed toucan (*Ramphastos vitellinus* ssp. *Vitellinus*), golden-olive woodpecker (*Colaptes rubiginosus*), little

hermit (*Phaethornis longuemareus*), collared trogon (*Trogon collaris*), silver-beaked tanager (*Ramphocelus carbo*), rufous-tailed jacamar (*Galbula ruficauda*), forest elaenia (*Myiopagis gaimardii*), great antshrike (*Taraba major*), rufous-breasted hermit (*Glaucis hirsutus*), violaceous euphonia (*Euphonia violacea*), bay-headed tanager (*Tangara gyrola*) and white-bearded manakin (*Manacus manacus*).

In Tabaguite, a ruddy ground dove was observed. While in Nariva, a gray lined hawk (*Buteo nitidus*), yellow headed caracara (*Milvago chimachima*), wattled jacana (*Jacana jacana*) and a cattle egret were observed.

Some common backyard birds were observed in the past Port of Spain location, banaquit (*Coereba flaveola*), Tropical Mockingbird (*Mimus gilvus*), carib grackle (*Quiscalus lugubris*), blue-black grassquit (*Volatinia jacarina*), blue-gray tanager (*Thraupis episcopus*). Some notables for the area Cocoa Woodcreeper (*Xiphorhynchus susurrans*) and a Pearl kite (*Gampsonyx swainsonii*).

In Tucker Valley there were sightings of an olive-gray saltator (*Saltator olivascens*), golden-crowned warbler (*Basileuterus culicivorus*), Euler's flycatcher (*Lathrotriccus euleri*), golden-headed manakin (*Ceratopipra erythrocephala*), white-flanked antwren (*Myrmotherula axillaris*), magnificent frigatebird (*Fregata magnificens*). The rufous-browed peppershrike (*Cyclarhis gujanensis*) was also heard.

Across in Tobago observations were made of a spotted sandpiper (*Actitis macularius*), Trinidad motmot (*Momotus bahamensis*), orange-winged parrot (*Amazona amazonica*), white-lined tanager (*Tachyphonus rufus*), anhinga (*Anhinga anhinga*), smooth-billed ani (*Crotophaga ani*) and a tri-colored heron (*Egretta tricolor*). 



(Top L-R): a blue-tailed emerald in Port of Spain. Photo by brandon_woo; a yellow-headed caracara in Nariva. Photo by swgittens28; a magnificent frigatebird observed in Charlotteville. Photo by figtree;

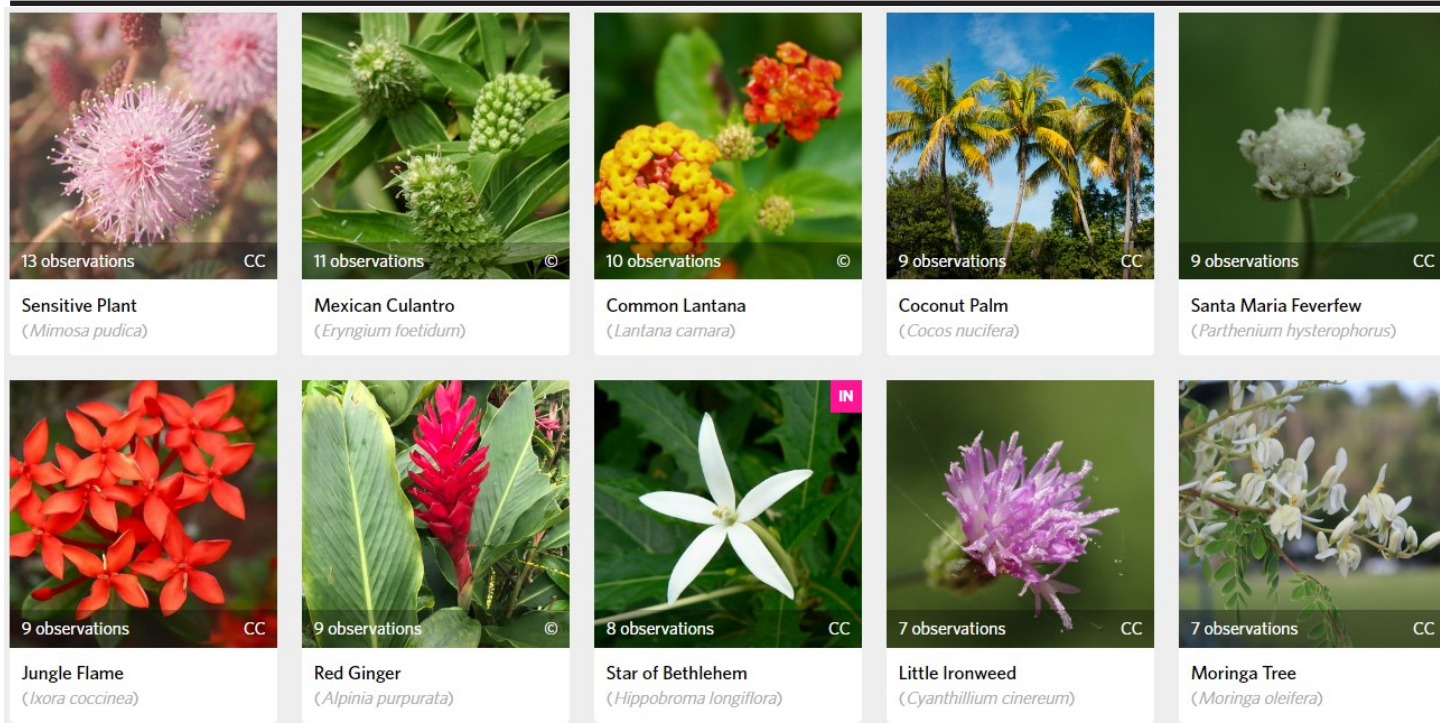
(Middle L-R): a golden-olive woodpecker in the Arima Valley. Photo by brandon_woo; a golden-headed manakin in Tucker Valley. Photo by bystrange;

(Bottom L-R): a striated heron observed in a backyard. Photo by nandani_bridglal; a common black hawk in Toco. Photo by sabirali



PLANT GROUP REPORT

by Stephanie Warren-Gittens



Top 10 plants/trees identified over the Bioblitz weekend. Compilation courtesy iNaturalist

During the 24 hours, a total of 1,316 botanical observations out of 2920 (total observations) were made, of which 429 species were tentatively identified by 128 persons from 61 observers. Species diversity in relation to the biodiversity of Trinidad and Tobago backyards in 2020 was almost similar 1:1 (i.e., 676 floral species compared to 707 faunal species) and for the 2021 remained almost the same with a ratio of 1:1 (429 plant species vs x 591 faunal species).

The number one plant/tree identified based on photo observations uploaded, was the sensitive plant (*Mimosa pudica*). the Chadon Beni (*Eryngium foetidum*) was the 2nd most common plant uploaded. Last year's most common plant the coconut tree (*Cocos nucifera*—Arecoideae), dropped to the 4th most common observation. However this doesn't necessarily mean that there are less individuals of this tree compared to 2020, instead simply that fewer photos were taken of it as persons are possibly 'blind' to it—such a common sight that you wouldn't even think of taking a photo

of it. Many of the plant observations were casual observations of exotic or introduced species or garden florals and less native observations—a somewhat accurate reflection of a typical backyard.

Observations however came from throughout Trinidad and Tobago, inclusive of most of our past physical locations: Tucker Valley, Arima Valley, Nariva Swamp, Port of Spain, Toco, Tabaquite and Charlotteville.

In Port of Spain, two mangrove species *Anacardiaceae* and *Rhizophoraceae* were observed on the outskirts of Movietowne. While in Toco, some of the observations included a sandbox tree (*Hura crepitans*), a trumpet tree (*Cecropia peltata*), attorney trees, a palm — preliminary identification was given as *Saribus rotundifolius* and a balsa tree (*Ochroma pyramidale*) - a native tree to Trinidad.


In Arima Valley, observations included a cacao tree (*Theobroma cacao*), pink vervine or porterweed (Genus *Stachytarpheta*), spiral gingers, star of

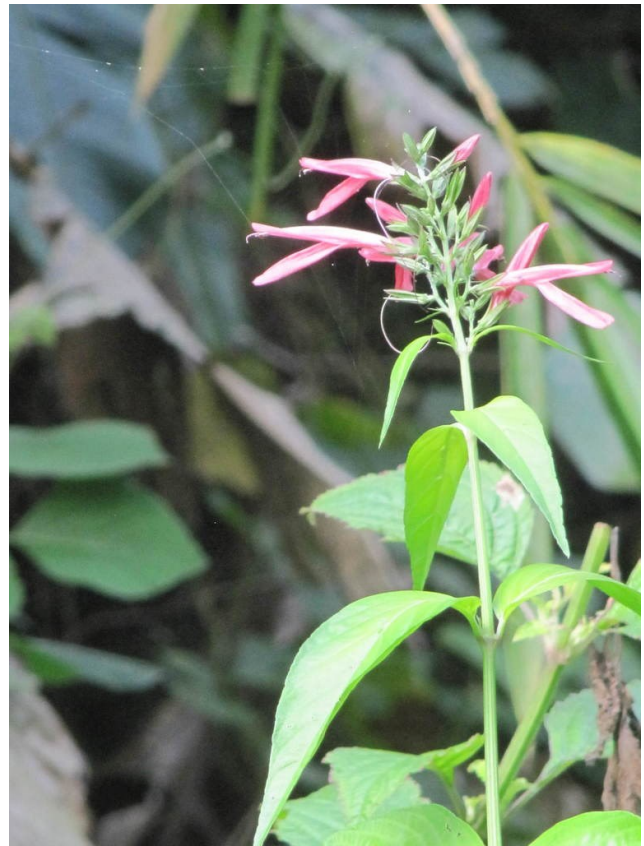
Bethlehem (*Hippobroma longiflora*), sensitive plant (*Mimosa pudica*), *Tilesia baccata*, *Centropogon cornutus* and Tropical Milkweed (*Asclepias curassavica*).

Some coastal species were observed in Nariva Swamp, which included of course the coconut palms which famously line the Manzanilla-Mayaro Road. Red mangrove (*Rhizophora mangle*), beach bean (*Canavalia rosea*), parrot's beak (*Heliconia psittacorum*), sea-purslanes (Genus *Sesuvium*). In Kernahan, Sacred Lotus (*Nelumbo nucifera*), golden canna (*Canna flaccida*) and waterlilies of the genus *Nymphaea* were observed.

Meanwhile in Tabaquite, some of the plants observed included: Taro *Colocasia esculenta*, lipsticktree (*Bixa Orellana*), lobster claw heliconia (*Heliconia bihai*), *Solanum stramonifolium*, Mahogany (Family *Meliaceae*), beggarticks (Genus *Bidens*), water pennyworts (Genus *Hydrocotyle*).

At the site of the first Bioblitz in Tucker Valley, observations included golden bamboo (*Bambusa vulgaris*), monkey pod tree (*Samanea saman*), whitemouth dayflower (*Commelina erecta*), *Centropogon cornutus*, common lantana (*Lantana camara*), some ferns: maidenhair ferns (Genus *Adiantum*), monarch climbing fern (*Lygodium venustum*), Leptosporangiate ferns; African oil palm (*Elaeis guineensis*), wild hops (*Flemingia strobilifera*), elm-leaf begonia (*Begonia ulmifolia*) and *Dianthera secunda*— native to Trinidad and Tobago.

Across in our sister isle at the Charlotteville location, species such as sea grape (*Coccoloba uvifera*), common guava (*Psidium guajava*), Asthma Plant (*Euphorbia hirta*), crêpe ginger (*Hellenia speciosa*), golden pothos (*Epipremnum aureum*), mistletoe cactus (*Rhipsalis baccifera*), coral bells (*Antigonon leptopus*), Guamúchil (*Pithecellobium dulce*), *Pilosocereus lanuginosus* were observed. 



Top: *Dianthera secunda*. Photo by jwongsang in Tucker Valley; **Bottom: *Pilosocereus lanuginosus***_photo by figtree_charlotteville



(Clockwise from top left): golden bamboo in Tucker Valley. Photo by jwongsang; waterlilies in Nariva. Photo by swgittens28; a member of the heliconia family in Tucker Valley. Photo by brystrange; a trumpet tree observed in Toco. Photo by zakwildlife; *Centropogon cornutus* in Arima Valley. Photo by markhulme; a passion fruit flower observed in a backyard. Photo by supebia



FUNGUS GROUP REPORT

by Stephanie Warren-Gittens



(Top L-R): a common conecap observed in a backyard. Photo by umarnobee; Subfamily Hygrocyboideae in Toco. Photo by rainernd;


(Bottom L-R): mushrooms observed from beneath in Tucker Valley. Photo by jwongsang; shelf fungi with bag for size. Photo by jwongsang; a member of the Genus Phallus, another backyard finding. Photo by dillon20.

From 107 observations, 30 observers and 26 identifiers, there were 25 confirmed species of fungi observed for the 2021 Bioblitz, with many still unidentified to the species level. Compared to last year's total of 45 species, the decrease observed this year is not that unexpected considering that the Bioblitz 2021 weekend was quite hot and sunny as compared to the rainy conditions of 2020.

The most common fungi observation this year was that of the cinnabar bracket (*trametes sanguinea*), found around both Trinidad and Tobago. Some other common observations were the splitgill mushroom (*Schizophyllum commune*), common greenshield lichen (*Flavoparmelia caperata*),

Whitewash Lichen (*Phlyctis argena*), pleated inkcap (*Parasola plicatilis*).

There was also an observation of a large shelf fungi by jwongsang in the north-western part of Trinidad, where a camera pouch was placed for comparison to demonstrate its size.

Observations were recorded across the country and in the past locations Tucker Valley, Arima Valley, Toco and Charlotteville. 



MAMMAL GROUP REPORT

by Stephanie Warren-Gittens



A red howler monkey apart from the rest of his troop in the Bamboo Cathedral, Tucker Valley.


Photo by swgittens28

Bioblitz 2021 proved to be another challenging year for the Mammal group, as Covid restrictions would have reduced persons venturing out and without camera traps, it becomes that much harder to observe mammals naturally—especially during the day. As such, only nine species of mammals were recorded for the 2021 Bioblitz, which included domestic observations of dogs and cats and interestingly enough— a human (*Homo sapiens*)- who would've thought. Nonetheless, there were observations of squirrels, bats and monkeys and an agouti.

In Tucker Valley, a small troop of red howler monkeys (*Alouatta macconnelli*) was observed in the Bamboo Cathedral and there were also

observations of the brown capuchin (*Sapajus apella*) in Tucker Valley and Point Gourde.

There were two confirmed species of bats recorded, the Jamaican fruit eating bat (*Artibeus jamaicensis*) and the greater sac wing bat (*Saccopteryx bilineata*) and some other observations one in the genus *Saccopteryx*, Neotropical fruit bats and another in Tabaguite (Knolly's Tunnel) of a new world leaf-nosed bat.

In Tobago, a red-rumped agouti (*Dasyprocta leporine*) was observed in the daylight. While there were two sightings of a red-tailed squirrel (*Sciurus granatensis*) in the Charlotteville area. 



(Top L-R): a red-rumped agouti spotted in Tobago. Photo by genlog2; a red-tailed squirrel observed in a backyard. Photo by rashid_ali;
(Bottom L-R: backyard bat sightings of a Jamaican fruit-eating bat and neo-tropical fruit bats (Genus Artibeus). Photos by rashid_ali.



AQUATIC GROUP REPORT

by Stephanie Warren-Gittens



Jumping guabine (*Anablepsoides hartii*).

Photo by: rainernd

For another year, the aquatic group was affected by Covid restrictions, as rivers and beaches were off limits. Again, thankfully some persons were able to capture some photo observations of fish due to maybe small backyard streams and observations from the shoreline. As such, only 11 species of fish were recorded from 16 observations from seven observers. For the 2020 Backyard Bioblitz, the most commonly observed fish was the Zangee or marbled swamp eel (*Synbranchus marmoratus*), however this was not observed at all this year. For the other aquatic organisms, six crustaceans and seven aquatic molluscs were observed.

Most of the recordings were observed in Charlotteville, thanks to figtree (iNaturalist username) and Environmental Research Institute of Charlotteville (ERIC), as they observed bigmouth sleeper (*Gobiomorus dormitor*), round sardinella (*Sardinella aurita*), mountain mullet (*Dajaus*

monticola), blackbar soldierfish (*Myripristis jacobus*), grey snapper (*Lutjanus griseus*), smallmouth grunt (*Brachygenys chrysargyrea*), sharknose goby (*Elacatinus evelynae*) and Spanish hogfish (*Bodianus rufus*).

In Trinidad, jumping guabine (*Anablepsoides hartii*) was observed in Toco and Arima, while there was a sighting of some guppies in a backyard in the Central area. This was the most observed fish species.

ERIC Tobago and iNaturalist user figtree, and included Fire corals, zonathids, Atlantic sea plumes, knobby sea rods, rock boring urchins among others. Some crustaceans observed elsewhere included Mangrove tree crabs *Aratus pisonii*, mudflat fiddler crabs: *Minuca rapax*, manicou crab (*Rodriguezus garmani*), Trinidad Freshwater crab (*Poppiana dentata*) and *Macrobrachium crenulatum*.



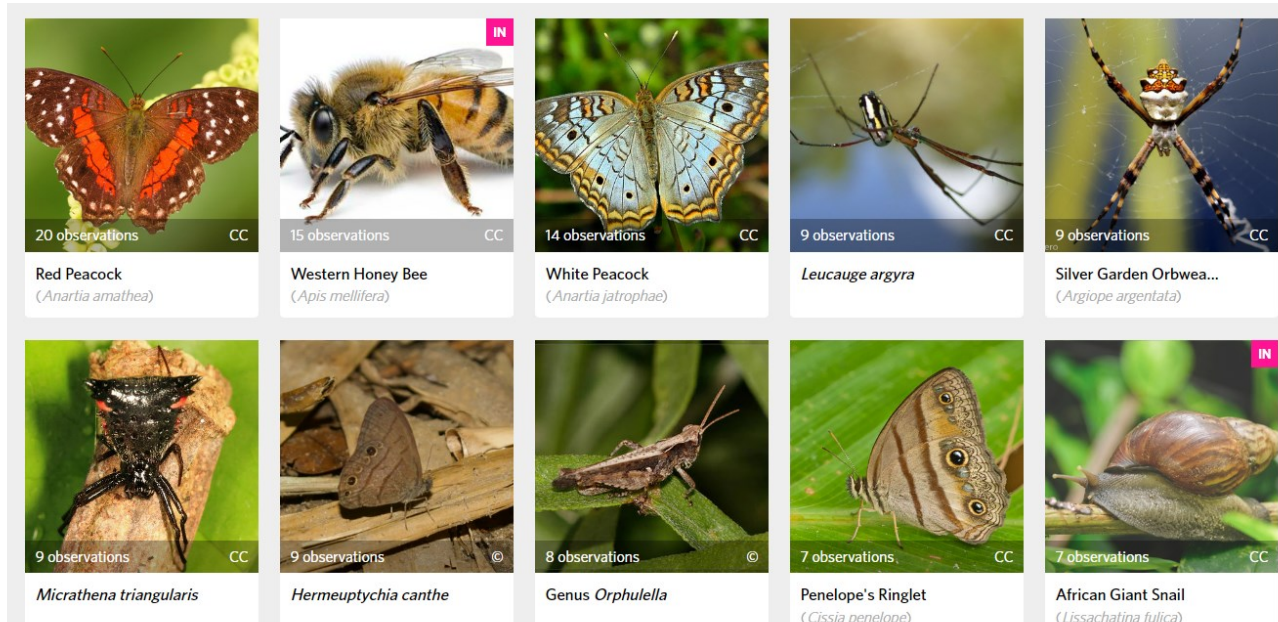


(Top row L-R): Spanish hogfish & sharknose goby. *Photos by erictobago*
(Middle row L-R): smallmouth grunt. *Photo by erictobago* & **spotted algae-eating goby.** *Photo by figtree*
(Bottom row L-R): guppies *Photo by vx-jameer*; **grey snapper.** *Photo by figtree*



TERRESTRIAL INVERTEBRATES

by Stephanie Warren-Gittens




Top 10 Bioblitz 2021 invertebrates. Compilation courtesy iNaturalist

Invertebrates are such a diverse group of organisms consisting arthropods, insects, arachnids, molluscs, crustaceans and other animalia. As such, 378 species were observed from 934 observations and 58 observers for the 2021 Bioblitz. Of the 378 species, 311 were insects, 12 terrestrial molluscs, 47 were arachnids, 20 other animal species— such as myriapods, and isopods. The 311 insects can be further broken down into 126 Lepidoptera (butterflies and moths), 40 Hymenoptera (ants, bees, wasps), 24 Diptera (flies), 30 Coleoptera (beetles), 43 Hemiptera (bugs).

The red peacock (*Anartia amathea*) was the most common invertebrate observed for the 2021 Bioblitz.

A couple marine aquatic observations were made by Environmental Research Institute of Charlotteville (ERIC) across in Tobago.

This year, the Giant African Snail made it to the top 10 invertebrates observed in backyards, with

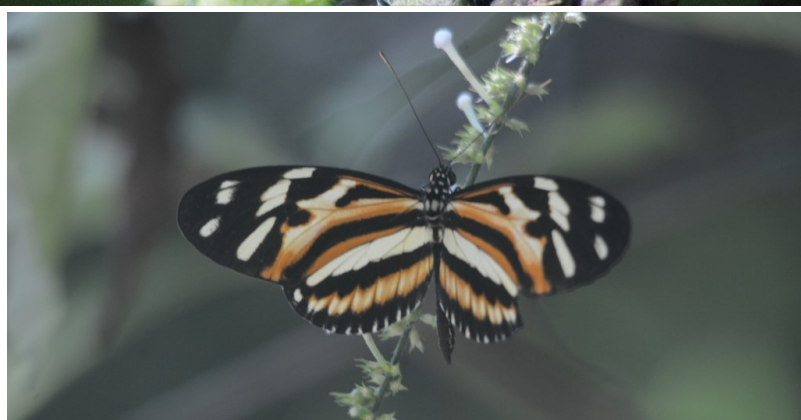
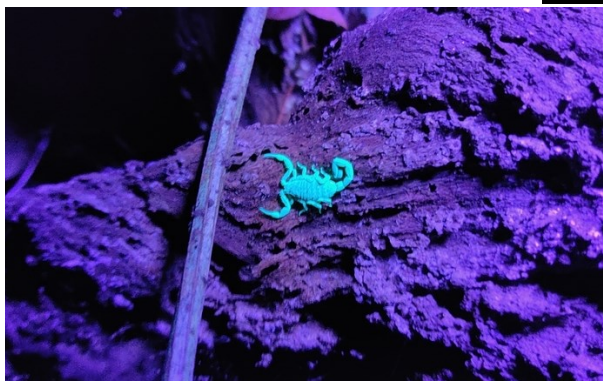
observations in north-west Trinidad, Chaguanas, Saint Augustine and Santa Cruz. 



A backyard find of a gray wall-jumping spider.

Photo by yehohunter

(Clockwise from top right):
a grass orb-web spider observed in a
backyard. Photo by yehohunter;
Eriphioides tractipenni observed in
Toco. Photo by rainernd; in Tucker
Valley an *Ethilia longwing*. Photo by
markhulme; a trailside skipper spotted
in Tucker Valley. Photo by brystrange;
Apoica pallida wasps on a branch in a
backyard. Photo by amydeacontt; a
backyard observation of a thick-
tailed scorpion. Photo by
nicholasmohammed.





(Top L-R): *Synoecca surinama* observed in backyard. Photo by davisgunn; a backyard observation of a Buffalo Treehopper. Photo by rka67;

(Middle L-R): *Plekocheilus glaber* on a backyard tree. Photo by camazotz95; a *Pomacea glauca* found on a rock in Arima Valley. Photo by amydeacontt;

(Bottom L-R): A *Coelomera cajennensis* beetle captured in Tucker Valley. Photo by markhulme; *Supplanaxis nucleus* individuals on a seaside rock in Charlotteville. Photo by figtree.



BIOBLITZ THROUGH THE YEARS — THE RESULTS



Table : Group totals over Bioblitzes 2012 - 2021.

Location	Tucker Valley	Arima Valley	Nariva Swamp	Charlotteville	Port of Spain	Icacos	Toco	Tabaquite	Backyard	All previous locations
Group	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Plants	210	314	246	361	239	283	230	312	670	430
Birds	98	88	123	75	101	129	108	126	101	110
Reptiles	19	23	23	28	23	24	25	31	34	24
Amphibians	12	9	16	13	9	17	13	18	13	13
Mammals	11	17	28	17	16	14	12	12	16	9
Fungi	6	34	15	30	67	40	40	30	45	25
Invertebrates	58	<i>not stated</i>	4	136	<i>not stated</i>	<i>not stated</i>	92	128	432	378
Fish	77	6	25	113	15	33	<i>*Incorporated into the other groups</i>	<i>*Incorporate-d into the other groups</i>	32	11
Molluscs	27	21	20	65	34	52	<i>*Incorporated into the other groups</i>	<i>*Incorporate-d into the other groups</i>	40	19
Arthropods	167	257	242	206	233	154	<i>*Incorporated into the other groups</i>	<i>*Incorporate-d into the other groups</i>	<i>*Incorporated into the other groups</i>	<i>*Incorporated into the other groups</i>
Other organisms	<i>Not stated</i>	3	<i>Not stated</i>	<i>Not stated</i>	25	23	<i>*Incorporated into the other groups</i>	<i>*Incorporate-d into the other groups</i>	1	1
Microbes	-	-	-	-	*60	*35	110	N/A	N/A	N/A
Marine organisms	<i>*Incorporated into the other groups</i>	N/A	<i>*Incorporated into the other groups</i>	<i>*Incorporated into the other groups</i>	<i>*Incorporated into the other groups</i>	<i>*Incorporated into the other groups</i>	121	N/A	<i>*Incorporated into the other groups</i>	<i>*Incorporated into the other groups</i>
Freshwater organisms	<i>*Incorporated into the other groups</i>	<i>*Incorporated into the other groups</i>	<i>*Incorporated into the other groups</i>	<i>*Incorporated into the other groups</i>	<i>*Incorporated into the other groups</i>	<i>*Incorporated into the other groups</i>	34	17	<i>*Incorporated into the other groups</i>	<i>*Incorporated into the other groups</i>
TOTAL	685	772	742	1044	762	769	795	674	1384	1021
Source:	<i>poster</i>	<i>poster</i>	<i>poster</i>	<i>poster</i>	<i>poster</i>	<i>poster</i>	Final report	Final report	iNaturalist	iNaturalist

NB:

- The totals stated for Microbes in 2016 & 2017 were not stated on the event posters, but were included in the final reports
- The 2020 & 2021 totals pulled from iNaturalist totals also included casual observations



BLAST FROM THE PAST — BASECAMPS



Looking back at the Bioblitz locations basecamps over the years. From left to right:

Top: Tucker Valley (2012), Arima Valley (2013), Nariva Swamp (2014)

Middle: Charlotteville (2015), Port of Spain (2016), Icacos (2017), Toco (2018)

Bottom: Tabaquite (2019).

**There was no physical basecamp in 2020, due to the COVID-19 pandemic.*

**All credits remain with the respective photographers*



Tucker Valley



Photo by E. Rutherford
In Arima Valley



Nariva Swamp



Charlotteville



Port of Spain



Toco



Icacos





BLAST FROM THE PAST– END OF EVENT GROUP PHOTOS



Looking back at the Bioblitz locations basecamps over the years. From left to right:
Top: Arima Valley (2013), Charlotteville (2015), Port of Spain (2016),
Middle: Icacos (2017),
Bottom: Toco (2018), Tabaquite (2019).

**All credits remain with the respective photographers*



Photo by M. Rutherford in Arima Valley



Photo by E. Rutherford in Charlotteville



Port of Spain



Photo by E. Rutherford in Icacos



Photo by A. Farrel in Toco



Photo by S. Manchouck in Icacos



BLAST FOM THE PAST– SUB-GROUPS



Photo by D. Phillip



Photo by N. Winter



Photo by E. Rutherford



Photo by N. Bridgall



Photo by E. Rutherford



Photo by S. Warren-Gittens



Photo by S. Warren-Gittens



Photo by S. Warren-Gittens



Photo by M. Rutherford

A photo collage of some of the various sub-groups at past Bioblitz events
**All credits go to the respective photographers.*



BLAST FROM THE PAST— FIELD ACTION



Nariva



Nariva



Photo by ES in Nariva



Photo by CS in Nariva



Photo by EB in Nariva



Charlottesville



Photo by R. Wong Sang in Charlottesville



Photo by S. Warren-Gittens in Charlottesville



Photo by L. Rostant in Charlottesville



Photo by Z. Ali in Icos



Photo by S. Stewart in Toco



Photo by S. Parasaram in Icos



Photo by T. Eastman in Icos



Photo by S. Warren-Gittens in Icos



Photo by E. Seebaren in Icos



Photo by T. Eastman by Icos



Photo by C. Crooks in Icos



Photo by S. Warren-Gittens in Toco



Photo by P. Dickson in Icacos



Photo by M. Rutherford in Icacos



Photo by E. Seebaran in Toco



Photo by S. Warren-Gittens in Tabaquite



Photo by M. Rutherford in Icacos





Road to Bush Bush



Briefing before the noon start on Saturday.- Nariva



Photo by R. Auguste- Tucker Valley



Photo by J. Murphy- Tucker Valley



Photo by S. Ali in Icos



Photo by CS in Nariva



Photo by E. Luengo in Tucker Valley



Photo by M. Rutheford in Arima Valley



Photo by M. Rutheford in Arima Valley



Photo by S. Warren-Gittens in Toco



Photo by M. Rutheford in Nariva Swamp



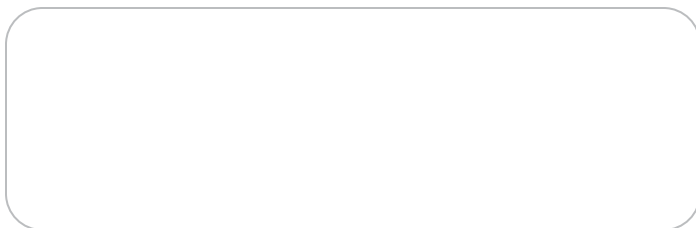
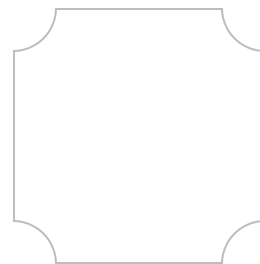
Port of Spain



Nariva



Photo by N. Bridglal in Toco



For more information about Bioblitz 2021 Trinidad & Tobago and previous Trinidad & Tobago Bioblitzes see the webpage:

<https://sta.uwi.edu/fst/lifesciences/bioblitz-events-trinidad-tobago>

For more photos and posts about the event see the Facebook page:

<https://www.facebook.com/TandTBioblitz>

NOTICE FROM THE EDITORS: *Do you have any natural history articles, anecdotes or trip reports that could be published in The Field Naturalist? We welcome contributions from members. Please email your ideas or finished pieces to admin@ttfnc.org. We look forward to hearing from you.*

Submission of articles and field trip reports:

- 1. All articles must reach the editor by the eighth week of each quarter.**
- 2. Electronic copies can be submitted to the 'Editor' at: admin@ttfnc.org or directly to the editor or any member of Management. Please include the code QB2023 in the email subject label.**