





### **The Buzz**

Newsletter of the Biodiversity and Ecosystem Services Network Trinidad and Tobago (BES-Net TT) project April 2022
Issue #2
More
to come!

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The Buzz is the quarterly produced newsletter of the Biodiversity and Ecosystem Services Network Trinidad and Tobago project (BES-Net TT).

This newsletter reports on progress made in the implementation of the BES-Net TT project over the period, 2021-2023.

The Buzz is produced by the BES-Net TT Project Management Unit.

### Here's the Buzz

Dear readers, welcome back to "The Buzz"!

We are grateful for the wonderful reception of our first issue and we are ready to share updates on last quarter's activities.

- A lot has happened over the last three months, including the start of our outreach
   activities and research.
  - Read about our recent webinars and our participation in two exhibitions. Learn about research activity that is about to begin and upcoming workshops.



Enjoy reading **The Buzz** and remember to share with your networks!

### The mystery of seagrass pollination

Research on the pollination of local segrasses will soon begin, spearheaded by marine researcher and university lecturer, Dr. Kelly Kingon. There are five main species of seagrasses found in Trinidad and Tobago's coastal waters. Some may be surprised to learn that seagrasses are not only pollinated by moving water currents, but may also be pollinated by small marine invertebrates. The research on seagrass flowering patterns, what influences these patterns and pollinator diversity will be conducted in both islands over the course of a year and will also build local capacity for this type of research. Dr. Kingon presented at a BES-Net TT webinar in March on the topic and the recording may be viewed at this link—https://www.facebook.com/besnet.tt/videos/338757088291067/

### **Building knowledge**

A key component of the BES-Net TT project is knowledge building on pollinators, which is being addressed through a variety of public education activities.

#### **Webinar Series**

In March 2022, the Project Management Unit started a webinar series, to share information on relevant topics. The first webinar, hosted by the Project Management Unit, gave an introduction to the biology of pollination, threats to pollinators and how people can assist in pollinator conservation.

The second webinar formed part of the project's contribution to <u>Sci-TechKnoFest</u> (STKF), the local science festival staged by the National Institute for Higher Education, Research, Science and Technology (NIHERST). The team also mounted a virtual booth at the event, from March 21–27th 2022.



Design of the BES-Net TT virtual booth at STKF

The presenters in the webinar introduced three pollinators types: Prof. Christopher Starr shared on social insects; Mr. Darshan Narang presented on bats; and Dr. Kelly Kingon introduced marine pollinators.

An April webinar on the topic of pollinator garden development was presented by Mrs. Rachel Lee Young. Upcoming webinar topics will include stingless bees, iNaturalist and insect photography.

### **Outreach Activity**

The project team took part in the Forestry Division's mini exhibition hosted on the International Day of Forests (21 March).

Some interested persons joined our e-mail list to receive information on webinars and upcoming research on stingless bees. The team also tested the prototype for a game for students to learn about pollinator types.



#### Online resources and more to come

All recorded webinar <u>presentations</u> are posted on the project's <u>Facebook page</u> and webpage. The project periodically publishes articles in local newspapers, and links to the <u>articles</u> are curated on the project webpage.

A Communication Working Group started in March among representatives of key project stakeholder agencies is brainstorming on content for the development of student and teacher resources. The group will also strategize for continued public education on pollinators and pollinator management.

### **Pollinator Management Workshops**

In its effort to improve the practice of pollinator management in Trinidad and Tobago, the BES-Net TT project will offer a series of workshops geared to building capacity in hands-on .strategies. From stingless bee management, to bat house construction and pollinator garden development, these strategies will engage those already involved in some form of pollinator management as well as other stakeholders who are about to begin these practical actions in conservation.

### Surveys on needs and interests

In the first six months of the BES-Net TT project, knowledge, attitude and practices surveys were launched online. These surveys were conducted to gauge the current level of public knowledge and understanding of pollinators to guide the project's communication activities. A survey also tapped into the interests of current and potential beekeepers, including those who are interested in managing stingless bees.

Based on the feedback received from these surveys, a series of information sharing products were devised, one of which is a series of workshops geared specifically to persons engaged in or interested in initiating pollinator conservation and management action.

### **Workshop Content**

The workshops as presently designed will be delivered as a series of modules on a range of themes listed as follows:

- Establishment of a pollinator garden
- Introduction to keeping stingless bees
- Construction of bee boxes and the creation of pollinator habits
- Splitting and harvesting of stingless beehives
- Macrophotography
- Bats as pollinators and building bat boxes

The main facilitator for the workshop series will be Erle Rahaman-Noronha, who is well known for his expertise in permaculture design and Wa Samaki Ecosystems facility in Freeport.





## **Gardens for pollinators**

The BES-Net TT project acknowledges the pockets of very good work taking place locally to stimulate interest and take action on pollinator conservation. One of the very positive projects we learned of is taking place at the Brazil Secondary School in east Trinidad, where members of the GLOBE Club are managing a hummingbird garden. We liaised with Mr. Kameel Mohammed-Ali, main coordinator of the School's GLOBE Club, to share some insight on the group's project.

### A GLOBE Club project

According to the GLOBE webpage, "The Global Learning and Observations to Benefit the Environment (GLOBE) Program is an international science and education program that provides students and the public worldwide with the opportunity to participate in data collection and the scientific process, and contribute meaningfully to our understanding of the Earth system and global environment" (https://www.globe.gov/).

The Brazil Secondary School's GLOBE Club was created by Mr. Mohammed-Ali, the main coordinator, in 2006. Ms. Madoo, a teacher at the school, joined the Club in 2008 and together they oversee the weekly, student-driven Club meetings. Ms Madoo, a Biology teacher at the school, also uses relevant GLOBE protocols in the delivery of the science curriculum.

The Club's student membership has undertaken several environmental projects, both locally and internationally. A hummingbird garden was conceptualized in 2016, after the forested area that surrounded the school was cleared to accommodate a housing project. The Club noticed a dramatic decrease in the bird fauna after the forest was removed, and was moved to establish the Hummingbird Garden on the school's compound, hoping to provide a sanctuary for displaced birds.

### Working with experts

The group identified an area to set up the identified and sourced the garden, species of plants that attract hummingbirds, and garnered assistance of several local experts in establishing the garden. These experts included Ms. Johanne Ryan (Asa Wright Nature Centre), Mr. Martyn Kenefick and Prof. Floyd Hayes (co-authors of "Birds of Trinidad and Tobago" - Helm Field Guides), Ms. Wendy Lee Yuen (landscaping), Ms Rachael Lee Young (hummingbird photographer). The then Member of Parliament for the area, Mr. Maxie Cuffie also financial assistance to the installation of required physical infrastructure.



Brazil Secondary School GLOBE Club members establishing the hummingbird garden Photo credit: https://www.facebook.com/globeclubbss

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#### **Observation records**

Students recorded hummingbird sightings in the garden, using the collaborative web tool, Padlet. Padlet had previously been used by the Club to document its activities, and a new board was dedicated to the garden project. The project is quite successful: the Club has recorded resident populations of hummingbird seven This success species in the garden! allowed the Club the opportunity to participate in the GLOBE Hummingbird protocol, tailored to their local populations. When the school closed in March 2020 due to the Covid-19 pandemic, two additional padlet walls were created to enable online. students record sightings to at any time at their individual locations.



Brazil Secondary School GLOBE Club members gathered on-site at the hummingbird garden Photo credit: https://www.facebook.com/globeclubbss

#### **Sharing Success**

Buoyed by the success of this initiative, the Club is interested in sharing its experience with other schools and would like to invite surrounding schools to visit the hummingbird sanctuary to spark their interest. Club members would also like to visit primary schools to conduct workshops on building homemade hummingbird feeders and making nectar and hosting virtual sessions with teachers who are interested in establishing hummingbird sanctuaries in their schools.

The GLOBE Club established a link with the BES-Net TT project and hopes to collaborate in promoting the setting up of pollinator gardens all over the country. The group sees the BES-Net TT project as taking a lead role in information sharing among likeminded groups and in promotion of resources for pollinator conservation. The Brazil Secondary School GLOBE Club is certainly demonstrating to students the importance of networking and collaboration in the success of any project. BES-Net TT wishes the GLOBE Club continued success in all its endeavours!



### **Butterfly database**

The compilation of a comprehensive database of our local butterfly species has been undertaken by various agencies in the past, including recent work to extract information from various sources to develop a single, reference catalogue of Lepidoptera (butterflies and moths). The BES-Net TT project will build upon this work, to develop a catalogue specific to the butterfly fauna of the two islands.

The project team recently visited Angostura Limited, the local firm which owns the extensive butterfly collection developed by Mr. Malcolm Barcant (dec). The BES-Net TT team was given access to the collection's dataset and is excited about other collaborative work that was discussed.



BES-Net project team meeting with Ms Ronda Betancourt, Public Relations Officer, Angostura Limited with the Barcant butterfly collection in the background.

### **Upcoming activities this quarter!**

May 18th: "Stingless bees in T and T" - Webinar on Zoom (details on Facebook)

May 20th - World Bee Day 2022 observance

June 2022: "iNaturalist and Insect Photography—live webinar on Zoom (details on Facebook)

### The Biodiversity and Ecosystem Services Network (BES-Net) is jointly implemented by:









# We would love to hear from you and get your feedback on this issue of The Buzz! Contact us at:

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