

## Editorial

In 2020 our transition of Living World to an online journal with continuous publication was finally accomplished. This process has been made possible by a strengthening of the editorial team to include joint editors, four associate editors and three assistant editors in addition to our online editor. Bios of the editorial team will be available on the journal's website. Continuous publication is facilitated by our Early View of each article or Nature Note published before November of the current year.

The 2020 issue includes six Research Papers, eight Nature Notes and one Report. The LW team is greatly saddened by the passing of Jo-Anne Sewlal, one of our regular contributors and friend of the TTFNC. A survey of the spiders of Dominica is published here posthumously along with a tribute in her memory.

This issue is somewhat dominated by papers or nature notes on Lepidoptera which are written or supported by observations made by non-specialists. Indeed the TTFNC has a long tradition of bringing together and benefiting from the association of specialists and amateur enthusiasts. This is reflected in the current issue of Living World. Among the research papers we have an account of the Witch Moths of Trinidad & Tobago, new records of moths which were attracted to lights in Tobago and additional moths observed during night walks in Trinidad. The Nature Notes include records of a new Skipper butterfly, the life cycle of the Pierid butterfly *Ascia monuste* and records of the Brassolid genus *Dynastor*. These papers all highlight the value of citizen science and the on-line opportunities to share observations and contribute to our knowledge of our biota (more on this below). Two additional Nature Notes on methods for field identification of Bark Butterflies and species of Postmen Butterflies enable non-specialists to identify and record their observations without having to capture the butterfly.

In addition to those papers supported by citizen science we have an account of ticks infesting Cane Toads in northern Trinidad, a preliminary list of Spiders from Dominica and a case-study of two sea turtles successfully treated and released after exhibiting 'floating syndrome'- a buoyancy disorder often associated with the presence of excess gas in the body. Nature Notes also include a description of colour morphs of Streak Lizards in Northeastern Trinidad and observations of Moriche Palms at Erin Savannah. The final Nature Note describes the first sighting of a Stygian Owl in Trinidad.

Our regular report of the Trinidad and Tobago Birds Status and Distribution Committee describes 95 records submitted to the Committee including six new species for the country and one new species for Tobago.

Citizen science is scientific research conducted by volunteer amateur scientists. It is an aspect of research that has expanded greatly in recent years as online portals, such as Zooniverse.org or Scistarter.org, allow scientists to share their projects and recruit volunteers. It can take many forms, such as recording the weather, identifying types of stars, deciphering handwritten labels on old museum specimens and more, but as far as Living World/TTFNC is concerned it is the observations of wildlife that are of most interest.

It has never been easier to share wildlife sightings with a wider audience than at the present time. A host of websites have been developed that allow users to upload photographs, sound clips, and/or data concerning species they have encountered. Two of the biggest, in terms of numbers of users and numbers of records submitted, are eBird and iNaturalist.

eBird has long been a favoured platform for birdwatchers in Trinidad & Tobago with both local users and many visitors uploading checklists after a day's birding. At the time of writing 440 species from over 30,000 checklists made by 1961 birders have been recorded on the website. Although the hotspots of the Asa Wright Nature Centre, Caroni Bird Sanctuary and Nariva Swamp account for many of the records there are observations from all over the islands. Preceding this has been one of the longest running citizen scientists projects in the world, the Audubon Society's Christmas Bird Count, which started in 1900. People have been undertaking this annual event on these islands since 1969 with the results being published in Living World.

iNaturalist is a social networking service that allows users to record and identify all types of wildlife. It is accessed via its website or on mobile apps and has more than one million registered users worldwide. It has been growing in popularity in Trinidad & Tobago over the last few years with more than 27,000 observations of wildlife from over 1,000 observers. Around 6,700 of these records were made in just one weekend as part of the 2020 Trinidad & Tobago Backyard Bioblitz. This was an almost entirely citizen science based project, relying on members of the public to make and submit records through iNaturalist. Although many of the regular

bioblitz experts, some of whom are professionals in their fields, did their own backyard surveys their main job over the weekend of the event was to identify the observations on-line. By all measures this bioblitz was a great success, with more recorded observations, more species, more observers and more international participation (through the identifiers) than any previous Trinidad & Tobago bioblitz. Many of the observers were first time users of iNaturalist, but despite a few teething troubles they documented a wonderful array of species with over 1,370 identified to some level. More detailed analysis is still underway and there are already possibilities of new species records for the islands, including two types of terrestrial flatworms, a moth that hasn't been recorded from Tobago in over 80 years and a possible second record of a twig anole.

Current plans for monitoring of diversity within protected areas of Trinidad & Tobago are to a large extent dependent

on citizen science. The Trinidad and Tobago Biodiversity Information System (TTBIS), an output of a FAO project on Improving Forest and Protected Area Management in Trinidad and Tobago, identifies as its goal, to provide access to GIS information and datasets collected on the Protected Areas from Trinidad and Tobago. We encourage readers to visit the site at <https://ttbis.planning.gov.tt/ttbis/about>

2020 was also a year in which we grappled with the challenges and sorrows of COVID-19. Sharing of experiences or catching up on eBird, iNaturalist and other platforms no doubt helped some cope with the isolation brought on by restrictions.

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## Cover Photograph

This year's cover shows a female *Acontista multicolor* mantid photographed by Rossie Dookei in Preysal on 21 November during the 2020 Backyard Bioblitz. This image won a competition held by the organisers of the event and was selected from a range of observations submitted to iNaturalist. See [www.inaturalist.org/observations/65352155](http://www.inaturalist.org/observations/65352155).