



T.R.E.E.S

TOUCAN RIDGE ECOLOGY
& EDUCATION SOCIETY

Activity Guide 2023

Turtle Radio-telemetry Workshop – 2 hours, any time of day

Join our resident Herpetologist and/or herp technician interns in Dry Creek on a hunt for the elusive White-lipped Mud Turtle! We track 10 adult turtles to determine their home range, habitat, and response to weather events which we use for scientific publication. Radio-telemetry is a technique for studying animal movement and it's fun, like playing hide and seek with your favourite species! You'll be amazed at how hard these turtles are to find even when your receiver says you are right on top of them.

Price: Minimum price \$175 USD (\$350 BZD) for up to 10 ppl, add \$7.50 USD (\$15.00 BZD) pp beyond 10.



Garden Bed Creation Workshop – 4 hours, any time of day

Welcome to the magical world of flowering plants and vegetables. These plants are both beautiful and tasty! You will spend 4 hours creating a flower/veggie bed and planting young plants, learning tips and tricks on how to maintain them as well as what plants are best to plant in close proximity and those that should be separated. The basics of botany will also be taught so that you learn different utilities of plants in a garden as well as how to distinguish their sex and different parts. Get your hands dirty while seeing the process behind how your food gets from the ground to your plate!

Price: Minimum price \$125 USD (\$250 BZD) for up to 10 ppl, add \$7.50 USD (\$15.00 BZD) pp beyond 10.



Composting and Organic Pest Control Workshop – 4 hours, any time of day

Ever wonder how to make your own super compost at home? How about fighting pests in a way that is effective and organic, while aiding the environment? We begin by teaching the different phases of composting followed by the creation and maintenance of your own compost. The second part of this workshop is dedicated to the creation of organic treatments, such as pest controls. We will also teach you how to recognize the common pests that you will most likely see in your garden along with the best actions to take in order to combat against them in an ecologically responsible and effective way.

Price: Minimum price for activity is \$125 USD (\$250 BZD) for 1 to 10 people. Add \$7.50 US (\$15 BZD) for every additional person.



Plant Propagation Workshop – 4 hours, any time of day

Discover the exciting world of flowering plant propagation and become a part of the process! We will teach you the basics of how to successfully germinate and plant various seeds. You will discover techniques of cutting adapted for different plant types to improve success rate and learn best practices for maintaining your plants whether they are in pots or in the ground. Finally, as a way of incorporating the nature around us, create an insect tower in tribute of pollinating insects which are a large part of plant propagation. This multi-level microhabitat allows beneficial insects to flourish with your plants!

Price: Minimum price \$125 USD (\$250 BZD) for up to 10 ppl, add \$7.50 USD (\$15.00 BZD) pp beyond 10.



Kriol Drumming Sambai – 7:00 pm to 11:00 pm

Djembe master Emmeth Young and his band the Talla Walla Vibrations will thrill you with their rhythms and energy. Learn about traditional Kriol drumming culture and its roots in Belize. Dance the night away to West African and Kriol rhythms the traditional "sambai" way in a circle around the fire.

Price: \$385 USD (\$770 BZD) for groups of any size staying on site at T.R.E.E.S. For groups staying off-site and only attending the evening sambai, add \$50 USD (\$100 BZD). Drumming lessons and drum-making workshops are also available. Contact us with details on your group for pricing.



Lecture Series – 45 minutes each lecture

Supplement your course material with additional lectures. T.R.E.E.S biologists are knowledgeable in ecology and conservation issues in Belize. Lectures can be paired with an activity to get the most out of the topic. We can design a customized lecture with advance notice on a topic of your choice. Our existing lectures are \$37.50 USD (\$75 BZD)/lecture, and a custom-made lecture is \$75 USD (\$150 BZD)/lecture. Our biologists can co-teach and co-lead field courses at a cost of \$150 USD (\$300 BZD)/day. Discounted rates are available for Belizean students.



- **Tropical Ornithology** – This lecture includes an introduction to avian taxonomy, the diversity of Neotropical birds, and the characteristics of each of the representative bird families found in Belize. Learn how to identify common species around T.R.E.E.S.
- **Tropical Ornithological Techniques** – This lecture teaches monitoring techniques in the Tropics. Topics include: bird banding and mist-netting, nest searching, point count surveys, avian recordings and call back techniques, and behaviour observation techniques. Best paired with an early morning bird walk.
- **Introduction to Bird Banding** – Budding bird banders learn the history of banding, how to set-up mist-nests, how to extract birds, morphometric measurement techniques, ageing and sexing birds, and the use of Pyle and other resources to start you up on your banding career. Pair this lecture with a mist-netting workshop to get a hands-on practical experience.
- **Tropical Herpetology** – This lecture is an overview of amphibian and reptile taxonomy, ecology, and diversity with a focus on taxa present in Belize. Learn how to identify common species around T.R.E.E.S with a discussion on sampling techniques used, major threats and conservation concerns for herpetofauna of Belize. A night walk to practice hands-on sampling and identification of common herps at T.R.E.E.S. can be added to this lecture.
- **Belizean Ecosystems, Habitats and their Associated Species** – A general introduction lecture on the different ecosystems and habitat types, flora and fauna species associated with each present in Belizean landscape ecology and conservation issues. Five Blues Lake or the Blue Hole National Park are both great sites to visit to showcase major concepts learned in this lecture.
- **Neotropical Rivers: Formation, Function, and Conservation** – This lecture is a great follow-up to the general ecosystem lecture with a more in-depth look at the Neotropical riverine system. We introduce concepts of geology, hydrology and their driving force in riverine ecosystem creation in Belize. Focus is on human impacts to riverine systems; upper watersheds to coastal waters and beyond.
- **Assessing Habitat Quality through Rapid Bio-assessment and Bio-monitoring** – In this lecture we describe how to assess habitat quality (with a focus on freshwater habitat) using environmental parameters like water quality and bio-indicators. Techniques for sampling are reviewed, vegetation mapping and habitat characterization. Pair this lecture with the Stream Ecology Workshop to practice techniques learned in a field setting.
- **Tropical Mammalogy** – This lecture will introduce basic mammal biology, behaviours and lifecycle of Belizean mammals, and basic tracking and monitoring techniques. Pair with a mammal tracking workshop to get a hands-on practical experience.
- **Wildlife Conservation in Belize** – This lecture focuses on describing the main conservation issues affecting Belizean wildlife including poaching, coastal development, climate change, and more.
- **Conservation and Community-Based Management in Belize** – In this lecture, an overview of the mechanisms behind Belizean conservation issues with a focus on opportunities for conservation and how community involvement plays an important role. Pair with a Local Village Tour so students have a rich opportunity to interact with local people and how they live in our rural community.
- **Marine Biodiversity in Belize** – This lecture focuses on describing the main marine ecosystems and associated species in Belize. We review how these ecosystems function, their animal and plant biodiversity, as well as ecological threats. Recommended before heading to a marine site.

Early Morning Bird Walk – dawn, 1.5 hrs

Join the T.R.E.E.S resident biologist and/or guide to see and identify birds by sight and sound along forest trails and in open orchard habitat. Sightings of impressive species like Toucans, Trogons, White Hawks, and King Vultures are not rare here. It is a birder's paradise at T.R.E.E.S! Scope provided, but guests must bring their own binoculars.

Price: Minimum price for activity is \$100 USD (\$200 BZD) for groups up to 10 people. Add \$5 USD (\$10 BZD) for every additional person.



Night Walk – 7:30 pm to 9:00 pm

Join the T.R.E.E.S resident biologist and/or guide to look for mammals, amphibians, reptiles and other night-active creatures and learn about their behaviour and ecology. Walk riparian forest trails to see animals like paca, kinkajou, skunks, possums, and armadillos. Explore the river to search for frogs, snakes, turtles, sleeping lizards and birds. Guests should bring their own headlamps so your hands will be free!

Price: Minimum price for activity is \$100 USD (\$200 BZD) for groups up to 10 people. Add \$5 USD (\$10 BZD) for every additional person.



Bat Mist-Netting Workshop – dusk till 10:00 pm

Bat mist net setup and monitoring is introduced. Learn how to differentiate morphological features and utilize our dichotomous key to identify bats to species. Safe handling and extraction techniques will be explained and observed. All equipment and support for extraction and identification is provided. Note that for the bat's safety and to minimize risk of disease transmission, participants will not extract bats from nets unless they have prior experience and an up-to-date Rabies vaccine.

Price: \$250 USD (\$500 BZD) for 10 people or less. Add \$12.50 USD (\$25 BZD) for every additional person.



Ethnobotanical Walk ('Irma Walk') – 2 hours, any time of day

No visit to T.R.E.E.S would be complete without our quintessential 'Irma Walk'. Our guide Irma is a bush-guide with over 10 years' experience on the T.R.E.E.S property. Join Irma in the bush and let her share her jungle medicine with you; learn what to eat and what not to eat if you are lost in the jungle and how to heal yourself from a variety of ailments using jungle plants.

Price: \$100 USD (\$200 BZD) for 10 people or less. Add \$7.50 USD (\$15 BZD) for every additional person.



Bird Banding Workshop – dawn til 9:30 am

Strengthen your bird identification skills by studying birds like many ornithologists do - by catching them in mist-nets, noting their plumage, moulting patterns, and body condition, and putting bands on them for future tracking and individual identification. This workshop is a must-do for bird lovers. When else do you get to hold these lovely creatures in your hand (using the proper bander's grip which you will learn, of course)? All equipment provided. For the bird's safety, participants will likely not extract birds from nets (unless they have prior experience).

Price: \$250 USD (\$500 BZD) for group of 10 people or less. Add \$12.50 US (\$25 BZD) for every additional person. Coffee and fruit/pastries provided for a small fee



Mammal Tracking Workshop – 2 hours, any time of day

Curious about the mammals traversing the jungle trails? Want to learn about how to identify their signs? In this workshop you will learn techniques for studying the elusive mammals, including the five wild cats that have all been observed on the T.R.E.E.S property! Identification of tracks and other tell-tale signs of presence as well as camera trapping are all tracking techniques you will learn. View pictures from the 17 camera traps we currently have up on our trails and get visual proof of your track identification skills! Fun for nature enthusiasts and forensic science enthusiasts alike!

Price: Minimum price for activity is \$175 USD (\$350 BZD) for 1 to 10 people. Add \$7.50 US (\$15 BZD) for every additional person.



Stream Ecology Workshop – half day

In this workshop you will be wading through the waters of Dry Creek to learn about the creatures that call the stream "home". Learn ecological field techniques from T.R.E.E.S resident biologists including habitat characterization, benthic macro-invertebrate sampling using dip nets, and fish and tadpole sampling using minnow traps. Identify your catch in the lab using lab techniques and dichotomous keys.

Price: Minimum price for activity is \$175 USD (\$350 BZD) for 1 to 10 people. Add \$7.50 USD (\$15 BZD) for every additional person.



Farm Fresh Food Tour – 2 hours, any time of day

First you will visit our aviary to see where our 80 free-range organic laying hens live, as well as our organic meat chickens and Muscovy Ducks that we keep for meat, eggs, and pest control. Then take a trip to the orchard to look at what's growing in our vegetable garden, entirely cultivated without any chemicals products, as well as in our organic orchard full of tropical fruit trees. You will discover how we grow tropical fruits and other food plants such as limes, pineapples, coconuts, mango, breadfruit, papaya, and even sugar, in an ecological way, and the process they take to end up on your plate. A must-do tour for food lovers and ecologists alike. Cost of farm meal is included in price with two or less participants.

Price: Minimum price for activity is \$100 USD (\$200 BZD) for 1 to 10 people. Add \$7.50 USD (\$15 BZD) for every additional person.



Belizean Cooking/Food Transformation Workshop – 2 hours, any time of day

Ever wonder why you pay so much for store-bought tortillas full of preservatives when you can make them yourself with only a bit of effort and a couple of cups of flour? What makes Belizean stews so darn delicious? Spend some time with our cooks and you will learn the secrets of the trade! You will learn to make tortillas, stews with Belizean Ricardo paste, and traditional Maya, Garifuna, and Kriol dishes using staple local fruits and vegetables like plantains, coconuts, and cassava. If you would like to focus on making wine and vinegars from local fruits, jams/jellies, hot sauces, cured meats, or fermented products like yoghurt, kombucha, or sauerkraut, ask for the Food Transformation Workshop instead! Cost of meal is included in price with two or less participants.

Price: Minimum price for activity is \$100 USD (\$200 BZD) for 1 to 10 people. Add \$7.50 USD (\$15 BZD) for every additional person.



Mile 28 Community Farm Tour – 2 hours, any time of day

At T.R.E.E.S we are privileged to be located adjacent to the lovely village of Mile 28, a traditional Central American village full of welcoming and friendly people. Most of our neighbours are subsistence farmers who grow their own fruits and vegetables to sell at little road-side stands. Taste the unique fruits that are grown in the villager's yards, have the children take you to their favourite swimming hole, help the kids with their homework, or play a little game of soccer or volleyball!

Price: \$100 USD (\$200 BZD), contributions go directly to the Mile 28 Community

