To Whom It May Concern:

The Staff and Director of the Cape Tribulation Tropical Research Station are writing to you about an exciting educational opportunity for your students enrolled in programs of study in biology or environmental science (or related subjects). We are offering students, either as individuals or as part of a student group, the opportunity to participate in biological field research under the co-supervision of the station’s director and an appropriate instructor from your university or college, to earn academic credit. Your student (or students) would live at the station and participate in every aspect of life here, from academic research to cooking, to weed control. As we are a not-for-profit organisation, we only charge the students who come here the cost of their maintenance while they’re here.

As an organisation, we are extremely experienced at working with students, having had over 500 volunteers/interns and students in the last 30+ years, and after a brief break for some much-needed rest and renovation, we are once again taking on students.

We see coming here as a unique opportunity for students to participate in real, on-the-ground science in the very special environment which is the Daintree Rainforest, a part of Far North Queensland’s wet tropics and a World Heritage site.

For more information, please see our station prospectus (attached)

Yours Sincerely,
Dr Hugh Spencer and Ms Talia Morris
Cape Tribulation Tropical Research Station
Australian Tropical Research Foundation
hugh@austrop.org.au or pteropus.rex@gmail.com
Cape Tribulation Tropical Research Station

Your special place to be

Who we are, what we are, where we are

We are a small scientific research and environmental Station located near the coast in the Daintree rainforest, a World Heritage-listed area in Australia’s Far North Queensland.

The Station was established in 1988 to restore parts of the rainforest which had been cleared in the 1970s for development and agriculture and to provide a living example of how it is possible to live comfortably while caring for the rainforest and having a minimal carbon footprint.

We didn’t get where we are by ourselves. In 1988, when Hugh Spencer and Brigitta Flick first arrived in Cape Tribulation, the lot that was to become the Station was little more than an empty field of tall grass, but with the help of groups of skilled and dedicated volunteers, over the years, who dug, cooked, cleared, cleaned, organised, planted, and built.

Little by little, over more than thirty years, the Station grew from an abandoned orchard to a sophisticated, well-equipped research facility covering 8.5 hectares of restored rainforest and has attracted environmentally-concerned people from all over the world, from high school student groups to BBC natural history filmmakers.

The Station is now a Nature Refuge (Cluster Fig) – as the fruiting patterns of our giant cluster figs (*Ficus variegata*) have been (and continue to be) a continuing research interest.
Ilsa (Netherlands) doing nectar analysis

**Our research**

Because we are a small, independent organisation not affiliated with any university, not receiving government support for our work here and situated in a remote location, we enjoy an extraordinary degree of scientific autonomy.

For this reason, research at the Station has tended to be varied and diverse – ranging from sociological studies about community attitudes toward environmental issues, to the origins and treatment of trigeminal neuralgia, to behavioural studies of spectacled flying foxes, control of invasive species in our littoral rainforests.

Because of our experience and our well equipped facility, we are able to support an amazing array of projects (depending on student interests) – from pollination studies, to radio-tracking, to soil invertebrates .. the list goes on.

One of our advantages, is that we can introduce students to the reality that they can carry out important basic research without needing the latest in equipment. We have elements of “Medicine Man” here.
**Our mission, your role**

Our mission here at Cape Tribulation is twofold: First, to preserve the Daintree rainforest and protect it from future development, and second, perhaps even more importantly, to act as an educational resource for the teaching of environmental science and wildlife biology.

As educators, you are in an ideal position to further the aims of the Station, while at the same time providing your students with a unique opportunity to be part of a working research station in a beautiful and biodiverse (and very safe) tropical environment.

As students, interns, volunteers, or as members of student groups, they participate in all aspects of station life, from scientific research to cooking, maintenance, the removal of invasive weeds, planting forests and in a very real sense, become members of the Station “family”.
Our plants for regeneration

The Station – first impressions

The station grounds, a lush, green patch of regenerated rainforest dotted with small, rustic buildings, are nestled between the Cape Tribulation coast and the Coastal Range. Set
 amongst the greenery at the Station is an eye-boggling array of tools, plants in pots, vehicles, and scientific equipment. If you come in the spring or summer, you may be greeted by a large cage full of juvenile spectacled flying foxes looking out at you with their huge, brown eyes and expressive faces. Native birds, mostly brush turkeys and orange-footed scrub fowl wander freely throughout the grounds. And overhead in the treetops – a chatty, busy colony of wild spectacled flying foxes.

More about the Station

**Laboratories:** The Station has two well-equipped labs. The larger of the two is the main biological laboratory / computer room and contains microscopes and chemical/biological analysis equipment including HPLC and gas chromatograph. The second, and smaller of the two is the electronics lab, where critical station equipment, including the station’s solar energy system is maintained. Both are cooled and dehumidified to protect essential equipment from Cape Tribulation’s tropical conditions, and it’s almost all done with renewable energy (solar).

**Kitchen and Library:** The kitchen and library are converted “dongas” (trailer-like mobile buildings) purchased in the early 1990s from Queensland Department of Transport and Main Roads. They are situated opposite each other, surrounded by a raised, roofed-over wooden veranda. The kitchen-library area serves as the Station’s common room and dining area where people can gather to talk, eat, prepare food, read, and socialise. The long, wooden tables (actually retired lab benches) which run down the centre of the veranda are ideal for outdoor computer and microscope use as well as for dining.

**Workshop:** Contains most of the Station’s tools, both manual and power – everything from simple hammers and wrenches to industrial-sized chainsaws as well as enough hardware and other building supplies to fill two or three normal garages. The workshop is where everything here is kept in good working order.

**Toilet and Shower Block:** Built entirely by volunteer labour, the toilet and shower block is the Station’s only two-storey building. The bottom level contains the tank for the composting toilet system and the Station’s laundry area – a sturdy washing machine, a sink, and some clothes lines for hanging up washing in rainy weather. The top level contains two showers, a sink, two toilets, and a small storeroom.

**Living Quarters:** Accommodation at the Station consists of five two-room wooden cabins containing very basic furniture (beds, tables, lamps, and chairs). Windows are large and screened but unglazed to allow adequate ventilation in tropical temperature and humidity conditions as well as to protect the buildings from wind damage in the unlikely event there is a cyclone (strong wind blows right through instead of causing structural damage). All cabins have electricity and running water.
**Water, Power, and Waste Disposal:** Water for drinking and general use comes from a deep (30-meter) bore and is brought to the surface by a solar-powered bore pump; it is entirely free of contaminants, chemical additives, and microorganisms. The water comes from rainfall on the local mountain, Mount Sorrow.

Power is supplied by a 24-volt DC solar system. Solar panels are located on the roof of laboratory building and located in a field near the Station's garden. Captured solar energy is stored in a bank of batteries located near the lab buildings and fed through an inverter, where it is converted to 240-volt AC. When there is insufficient solar input, the batteries are charged with a supplementary generator.

Recyclable plastic, glass and paper waste is shipped out of the Station for recycling. Non-recyclable waste (mostly one-use plastic items not suitable for recycling) is incinerated on the premises. Human solid and liquid waste becomes (after composting), compost for the garden along with organic kitchen waste, leaves, pulled weeds, and grass clippings. We also have a biodigester which provides some gas for cooking.

**The Garden and other Food Sources at the Station:** While the Station is far from self-sufficient in food (we are working on it), some fruit-bearing trees and plants like soursop, jackfruit, durian, bananas, pumpkins, native spinach, and chilli peppers grow here and are regularly harvested for food. The Station also butchers its own meat when a feral pig has been killed.
If you and your Educational Institution are interested in being active participants in the life of the Cape Tribulation Tropical Research Station, the most important way you can do this is by sending your students to us – as students, interns, either singly or as part of a group, or as volunteers.

This station was built by the love, devotion, and very hard work of many, many volunteers and interns and students and it continues to thrive with their help. When a student comes here, it is a win-win situation for both the student and the Station. The student gets a once-in-a-lifetime chance to live and learn, not only as a working scientist but in a unique teaching environment which offers some protection from the real-world pressures that working scientists often face in an industrial or formal academic environment. The Station gets the chance to work with, learn from and teach a developing young mind (as well as benefiting from an extra hand on deck!).


If, after reading this prospectus and visiting our website, you and your institution are interested in furthering the aims of the Station but don’t presently have the resources to send students here, financial contributions are always gratefully accepted. (There is a donation page on our website.).