



THE UNIVERSITY OF
SYDNEY

ONE TREE ISLAND RESEARCH STATION VISITOR INFORMATION

One Tree Island is situated in the Capricorn Bunker group of islands approximately 20 km east of Heron Island and about 100 km from the Queensland city of Gladstone. It is a coral rubble cay of four hectares and is situated at the southeast end of its reef. One Tree Reef is 5km long and up to 3.5 km wide and is an excellent example of the structure and ecosystem characteristic of the southern Great Barrier Reef.

The whole of One Tree Reef and surrounding waters is a Scientific Research Zone within the Great Barrier Reef Marine Park. It provides a unique opportunity for field work at sites relatively free of human disturbances. The ponded lagoon has a rich patch reef system with good variation in zonal characteristics. The reef has well defined windward and leeward differentiation on the outer slopes. The One Tree Island Research Station provides easy access to study sites within the first lagoon at any stage of the tide.

More information about One Tree Island Research Station (OTIRS) may be obtained on our website: <http://sydney.edu.au/science/oti/>

Contact: **One Tree Island Research Station**
via Heron Island
Gladstone Qld. 4680
AUSTRALIA
Phone: +61 7 4972 9691
Email: science.onetree@sydney.edu.au

RESEARCH PERMITS

In order to access One Tree Island and conduct research within Scientific Research Zone, scientists are required to first obtain a permit from the Great Barrier Reef Marine Park Authority (GBRMPA). It is necessary for scientists to liaise directly with GBRMPA for their permit. Please allow four months for permits to be processed.

Great Barrier Reef Marine Park Authority

PO Box 1379, Townsville Qld 4810

Phone: +61 7 4750 0700

Email: permitenquiry@gbrmpa.gov.au

The island itself is part of the Capricornia Cays National Park Scientific and a separate permit, issued by the Queensland Department of Environment and Science, Queensland Parks and Wildlife Service is required for land-based work. Allow approx. four months for permits to be processed.

Queensland Parks and Wildlife Service,

Department of Environment and Science

Parkaccess@des.qld.gov.au or Ph: (07) 3181 2443

If you require a pre-lodgement meeting or advice please complete the form in the link provided; [Pre-lodgement enquiry form | Business Queensland](#).

Scientists conducting extractive research may also require a permit from the Queensland Department of Agriculture and Fisheries.

Queensland Fisheries Service

PO Box 5396, Portsmith Qld 4870

General enquiries [13 25 23](tel:132523)

info@daf.qld.gov.au

Education Groups

People wishing to visit One Tree Island for an education program will require a GBRMPA permit. Minimal collecting may be possible under an educational permit held by your institution.

BENCH FEES FOR RESEARCHERS AND VISITORS

Rates are based on the cost per night and includes accommodation, diving (excluding air fills), use of boats (excluding fuel), use of laboratories, use of island equipment and internet.

Please refer to summary of charges sheet for most up to date prices. Please be aware that these are subject to change in line with external costs.

A statement of costs incurred will be presented for your review once you depart the island and the total should be paid to the University of Sydney on receipt of an invoice.

RESEARCH FACILITIES

One Tree Island is very remote and has limited resources. Ensure that you bring ALL tools, equipment and materials you will need to conduct your research. However, DO contact us about materials you require as we have a selection of items available for use. If you are unsure of the availability or suitability of the resources on the island, bring it with you, as it may not be possible to get extra supplies from the mainland during your stay.

Dry Lab

This laboratory is set up for computer-based lab work, charging of equipment, seminars and lectures. It 240V power outlets are located throughout the laboratory. There are comfortable work chairs, an air-conditioner, access to microscopes, a small library and the room is insect screened.

Wet Lab

The wet lab facilities include four wet tables which can be supplied with continual clean sea water from three separate 50 mm diam. intake lines. The building also has two indoor wet labs. The use of the wet lab is limited to natural seawater only and does not allow for chemically manipulative experiments or additives to the system as water is recirculated back into the lagoon. Any experiments of this nature are undertaken within the Biological Laboratory, where the contaminated water can be collected and later removed.

Wet tables	Four 2.2m x 1.0m tables under roof, each with light and electrical supply. Two 2.4m x 0.9m tables under shade or in full sunlight.
Light wet lab	Screened room with fresh and saltwater supply, work benches, electrical supply and fully waterproofed walls, benches and floor to allow for running water systems.
Dark wet lab	As above but with the ability to be fully blacked out.

There is also access to water heaters and chillers, aquaria lights and air stones that can be used in set up of experiments.

Biology Lab

The biology lab is an air-conditioned unit with an extraction fan. A chemical cabinet for corrosives and flammables is available for the storage of chemicals while at OTIRS. The lab also had stock of some basic lab equipment and there is a minus 80 freezer and centrifuge.

** Please inform the managers of your lab requirements when booking, including if you plan to use scientific or other equipment which will have large power demands. Energy demanding experiments which require the use of the generator will incur an additional charge for fuel.*

ACCOMMODATION FACILITIES

One Tree Island Research Station can house up to 29 visitors in two accommodation buildings.

Lagoon View dorm Accommodates up to 13 visitors in 4 bunk-style bedrooms and room with a double bed. The kitchen has two gas stoves, one chest freezer and two fridges and coffee machine.

Eagle View dorm Accommodates up to 16 visitors in four bunk-style bedrooms. The kitchen has a gas stove, one chest freezer, coffee machines and two fridges.

There is also a BBQ/picnic area with unobstructed water views.

All kitchen utensils, crockery and cookware are provided as well as mattress, blanket and pillow. However, **visitors must bring their own towel, top and bottom sheets and pillowcase.**

FRESH WATER SUPPLY

The only fresh water available on One Tree Island is collected and stored from rainfall. Therefore, water conservation is a high priority. Each person is allocated one bucket per day for showering but during times of low rainfall and high usage restrictions may be enforced.

POWER SUPPLY

The main source of energy for the research station is solar panels. Additional power is supplied by a diesel generator with a petrol driven generator as back up. Generated power is directed through an inverter that provides mains quality power. The laboratories and accommodation buildings are all serviced by 240V outlets.

COMMUNICATIONS

A microwave link provides high speed internet access to the station and charges are included in your bench fee. There is no mobile service on the island, but a home phone line can be used whilst on the island for emergency cases only.

BIOSECURITY

It is a legal requirement that you are to check all gear including equipment, tools, luggage, clothing and shoes are thoroughly checked for any plant material including seeds and/or animals. They must be removed and thoroughly washed, if necessary, prior to arrival on the island. Please refer to our biosecurity plan for more information. [Link](#) to the Be Pest Free Guide.

SUNSCREEN AND HYGIENE PRODUCTS

All cleaning materials provided on the station are biodegradable based and we ask that if you are bringing your own that they are biodegradable that are grey water safe only. Some examples of brands that suitable include Sukin, Dr. Bronners, Earth Choice, Ecostore, Ethique. If you forget to bring the correct products with you or would prefer you can purchase small bottles from the station.

DISPOSAL OF WASTE MATERIALS AND LIQUIDS**Sewage**

The station has three waterless composting toilets. No rubbish of any kind is to be deposited into the toilet. Bags for correct disposal of sanitary items are provided in all toilets and as are bins.

Recycling

Materials such as glass, paper, cardboard, plastics, and cans are recycled. Visitors are to wash and sort recyclables for removal from One Tree Island upon their departure.

General Waste

Food scraps and organic waste is disposed of into kitchen bench compost collectors. All other food waste and scraps must be disposed of only in bins provided in the accommodation kitchens. When a bin liner becomes full tie the bin liner to secure and put into larger bins under the Lagoon View toilet area ensuring lid is closed after.

Lab Wastes

Visitors must obtain permission to bring non-biodegradable, toxic or radioactive chemicals and materials to the island and are solely responsible for all safety aspects of storage and use whilst on the island as well as its removal from the island upon departure.

Research Materials

Visitors are required to remove any equipment and materials used for their research from the lagoon and/or reef on completion of their project/s and/or prior to the expiry of their permit, in accordance with GBRMPA guidelines. Any live organisms brought onto the island must follow a strict removal protocol.

** All costs for the removal of specimens, materials and/or chemicals from the island that have been left without prior consent from the managers will be charged to the client.*

WEATHER CONDITIONS

Details of air temperature, rainfall, water temperature, etc. are available on request. Visitors should bring wet-weather gear as well as some warm clothing at all times of the year. The Station Manager has the final say as to whether boating or diving activities are possible in marginal weather.

One Tree Island is subject to tropical cyclones, the season for which is generally between November to April, although exceptions occur. In the event that One Tree Island is placed on "Cyclone Watch" by the Australian Bureau of Meteorology you may be required to evacuate the island. Evacuation can occur by boat or seaplane and OTIRS managers will have the final say as to when and whether you are required to evacuate. Optional evacuation is also possible by seaplane and visitors can arrange directly with the relevant company.

** All costs for evacuation will be incurred by the individual and charged to your user bill.*

DIVING INFORMATION

Divers at One Tree Island Research Station must provide a signed dive plan from their home institution which lists all divers intending to dive on the plan. Divers should also be familiar with the regulations and conditions outlined in the [University of Sydney SCUBA Diving Operations Manual \(.doc\)](#), as they will be expected to adhere to University of Sydney Policy where these rules are more conservative. Note that the station does allow diving with no boat tender in sheltered water conditions though one member of each buddy pair must carry with them a submersible means of communication such as a Nautilus Lifeline. The station has three units which can be borrowed for this purpose.

Certification

A Dive Plan and Dive Authorisation from your parent institution's Dive Officer must be forwarded to the both the Station Managers (science.onetree@sydney.edu.au) prior to your arrival at OTI.

If you are working from an institution which does not have its own Dive Officer (and diving operations manual) you must first register and obtain authorisation from the University of Sydney Dive Officer.

Diving Equipment

One Tree Island Research Station provides tanks, weight belts and weights. Please remember to return any gear which you have borrowed from the station before your departure. The cost of replacement of any equipment which has not been returned will be charged to your user bill.

Visitors intending to dive need to bring the following equipment with them:

- Buoyancy control device with power inflator
- Regulator with alternate air source
- Wetsuit
- Contents Gauge
- Depth Gauge
- Dive Knife
- Dive Watch
- DCIEM Dive Tables
- Whistle
- Underwater torch for night diving
- Glow sticks (for night diving only)
- Protective gloves
- Safety sausage

Snorkeling

All snorkeling activity taking place at the station must adhere to the University of Sydney's Snorkel Policy. Visitors will be required to fill in a snorkel registration form prior to arrival. Group leaders will be responsible for ensuring all members meet the standards for "Snorkelers" as set out in the guidelines as well as ensuring all team roles are filled as necessary based on the activity.

The station has a range of snorkeling gear available to hire. Please consult the summary of fees document for the current pricing and contact the managers well in advance to ensure the

station has what you need. Rentals can either be paid via cash on site (no facilities for cards) or can be added to the user bill for the group.

BOATING INFORMATION

A recreational boat license is required to drive or act as dive attendant on all boats with >6hp motors. Bench fees include the use of small boats and fuel is charged at per fuel caddie (see summary of fees for latest prices).

Research Vessels

RV Linckia II 10.5m aluminum monohull research vessel with twin 225hp outboard motors. Maximum capacity of 12 passengers + 2 crew members.
Skipped by OTIRS Manager only.

RV Orcinus II 5.9m aluminum pontoon boat with twin 60hp outboard motors. Maximum capacity of 6 passengers + 2 crew members (numbers reduced if transporting luggage).
Skipped by OTIRS Manager only.

RV Corypheana 4.6m aluminum pontoon boat with 1 x 60hp outboard motor. Maximum capacity of 8 including skipper. Minimum of recreational boating licence or above to operate.

Pontoon boats 2 x 3.9m aluminum pontoon boats with 30hp outboard motor. Maximum capacity of 6 including skipper (dependent on equipment load). Recreational boating license or above required to operate.

1 x 4.1m aluminum pontoon boat with 30hp outboard motor. Maximum capacity of 5 including skipper (dependent on equipment load). Recreational boating license or above required to operate.

FIRST AID

The island has a well-equipped Royal Flying Doctor medical chest and access to medical advice. However, visitors are required to provide their own basic first aid needs. At least one member from each research group should hold a minimum senior first aid qualification.

INSURANCE

Visitors to OTIRS must arrange their own liability and travel insurance through their parent institution or the insurance company of their choice.

TRAVEL ARRANGEMENTS

Access to One Tree Island Research Station is from Gladstone. Transport between Gladstone and One Tree Island is organised by the OTIRS Managers and take into consideration local conditions and transport schedules. Please consult with OTIRS Managers before booking flights or making other travel arrangements to ensure that connections are possible as access to and from the island is weather dependent and restricted by tide.

Catamaran between Gladstone and Heron Island

The Heron Islander catamaran runs five days a week; Mon, Wed, Fri, Sat and Sun.

- The vessel departs Gladstone at 09:30am and arrives at Heron Island ~11:45.
- Then returns from Heron Island at 12:45 and arrives in Gladstone ~ 15:00.
- Check-in closes at the Gladstone marina ferry terminal at 08:30am.
- Luggage capacity on the boat is limited but generally one piece of personal luggage and one other gear bag (e.g. dive bag) is acceptable. Large amounts of equipment must be transferred to Heron Island by barge service. Please advise the OTIRS Managers in advance if you wish to transport any food on the ferry.

The ferry schedule changes throughout the year so please check with the OTIRS Managers when booking your trip. Alternatively, you can book a taxi by calling (07) 4979 7100 or 131 008. The price for a taxi between Gladstone Airport and Marina is ~\$25.

Boat transfer from Heron Island to One Tree Island

There are two different pricing options depending on the date of your arrival, weather and size of your group. A supply run between One Tree Island and Heron Island usually occurs on a Friday fortnightly to coincide with the arrival of the supply barge at Heron Island. Personnel transfers that align with this regular run are at a highly discounted rate.

Personnel transfers in addition to these regular runs are arranged by chartering *Linckia II* or *Orcinus II*. The charter of these vessels is tide, weather and staff dependent, so check directly with the OTIRS Managers well in advance.

Please arrange with the Managers if you wish to freight luggage ahead of/after your travel dates. There will be a charge for staff time to transport unaccompanied freight.

Helicopter transfers to/from One Tree Island

It is possible to charter a helicopter to One Tree Island from Gladstone or to obtain a one-way backload rate if the helicopter has already been chartered in the other direction. The helicopter has strict weight limits for both passengers and baggage and can only land during certain tides and times. Please contact OTIRS Managers if this is an option you would like to discuss further.

Discuss your plan with OTIRS Managers prior to making any bookings.

In the event that weather and/or sea conditions are too rough for crossing between One Tree Island and Heron Island, it may be necessary for visitors to travel using seaplane or to delay their travel until conditions improve. It is therefore recommended to book airline flights with some degree of flexibility in travel dates.

RESEARCH AND VISITORS TO HERON ISLAND RESEARCH STATION – FOOD ORDERING GUIDE

FREIGHT TRANSPORT

Heavy items or large amounts of research equipment are to be transported on the fortnightly barge which services Heron Island. Please ensure that your freight is clearly labelled and delivered to the barge yard by COB on the Monday prior to sailing. Barge dates are subject to change so please check with OTIRS Managers for barge dates.

Label your freight as follows: – YOUR NAME –
One Tree Island Research
Station via Heron Island

And have delivered to: Robert Poulson Barge Yard
11 Rooksby St. Gladstone, QLD 4680.

Freight sent to Heron Island in advance can only be stored for short periods. Visitors should ensure that the arrival of their freight coincides closely with their date of arrival. All freight charges will be added to your user bill.

** Additional charges apply for transport of unaccompanied freight to OTIRS. Please arrange with the Managers if you wish to freight any luggage ahead of/after your travel dates.*

ACCOMMODATION AT HERON ISLAND RESEARCH STATION

As access to One Tree Island is tide and weather dependent it is sometimes necessary to overnight at Heron Island Research Station (HIRS). The OTIRS Managers will advise you if this is required and will make this booking on your behalf. The cost of your accommodation at HIRS will be added to your OTIRS user bill. Visitors staying at OTIRS and HIRS must cater for themselves. See below for details of how to order food.

PROVISIONS

Alcohol

Alcohol can be purchased and paid for with credit card from the following bottle shops which will arrange for orders to be delivered directly to the barge.

Dacey's Cellarbrations Phone: +61 7 4972 2600

Food

Visitors to OTIRS cater their own meals. Groceries can be purchased from Woolworths in Gladstone which deliver directly to the barge yard for transport to Heron Island. When ordering, clearly specify that the food is *en route* to One Tree Island Research Station. Please refer to separate food ordering guidelines document.