

Flatback turtle monitoring program - Thevenard Island -

Information booklet for volunteers

V 2021



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Department of **Biodiversity,
Conservation and Attractions**



Interested in becoming a volunteer?

- 1) Read this information booklet
- 2) Confirm your interest and availability by email to James Gee at: turtles@dbca.wa.gov.au . Please attach a short CV to your email
- 3) Receive approval of your application and exact field dates
- 4) Fill out volunteer forms, complete medical forms, attend a medical check by your GP (at your own expense) and send both sets of forms back to James
- 5) Send copies of insurance coverage if applicable
- 6) Complete Department of Biodiversity, Conservation and Attractions (DBCA) induction
<https://www.dbca.wa.gov.au/sites/default/files/2019-11/DBCA%20Volunteer%20Health%20and%20Safety%20Induction.pdf>
- 7) Attend “Turtle Project” briefing session
- 8) Complete online learning module on turtle track recognition and read material provided
- 9) Have fun in the field!



A Group of volunteers, research students and staff from 2016

A. About the project

Background

The *North West Shelf Flatbacks* conservation program has been operating since 2009. In November/December 2016 and January 2017 a team of scientists and volunteers undertook a pilot monitoring program on Thevenard Island to establish if the turtle rookery was a suitable long-term monitoring site for the program. This pilot was successful, with scientists estimating that at least 200 flatback turtles used the island during the season.

The scientific and management objectives of this program are to assess the size of the flatback turtle population nesting on Thevenard Island (by counting tracks and tagging females) and to deploy satellite tags to track female turtles' movements during and after the nesting season. Collected data will contribute to a broader understanding of the ecology and demography of the Pilbara flatback turtle stock.

Dates

The monitoring program will run from mid-November to mid-December each year. Transfers to the island are organised once a week. Volunteers are expected to stay on the island a minimum of seven nights. We are looking for 6-8 volunteers per week.

Cost

A \$150 fee is required from each volunteer to cover basic operational costs.

Covered by DBCA are the following:

- Return transport from Perth to Onslow by plane and Onslow to Thevenard Island by boat.
- Food and accommodation on Thevenard Island.

Not covered are:

- Food and accommodation in Perth/Onslow prior to and after the trip to Thevenard Island.
- Transport to and from the airport in Perth.
- Personal Insurance – Volunteers who are Australian residents/citizens are covered by DBCA's insurance policy (see details below). International volunteers are expected to have their own personal travel and health insurance. Some activities such as snorkelling and diving during the volunteer's own free time are not covered by DBCA's insurance policy. Volunteers may therefore want to contract their own insurance to be covered for these activities.
- Medical check by GP
- Personal expenses.



Summary of research activities

The flatback turtle (*Natator depressus*) is the most common turtle nesting on Thevenard Island. green (*Chelonia mydas*) and hawksbill (*Eretmochelys imbricata*) turtles also nest on the island. Turtle research is conducted with DBCA Animal Ethics Committee approval under a Wildlife Conservation Act 1950 Regulation 17 'Licence to Take Fauna for Scientific Purposes'.

Volunteers will help with research on flatback turtles. Duties will include:

- Patrolling the beach at night for nesting turtles
- Tagging
- Measuring
- Taking skin biopsy
- Deploying satellite tags
- Patrolling the beach and counting tracks during the day
- Monitoring nesting success and hatching success
- Deploy temperature loggers
- Data entry



From left to right: flatback, green and hawksbill turtles

Volunteer requirements and Fitness expectations

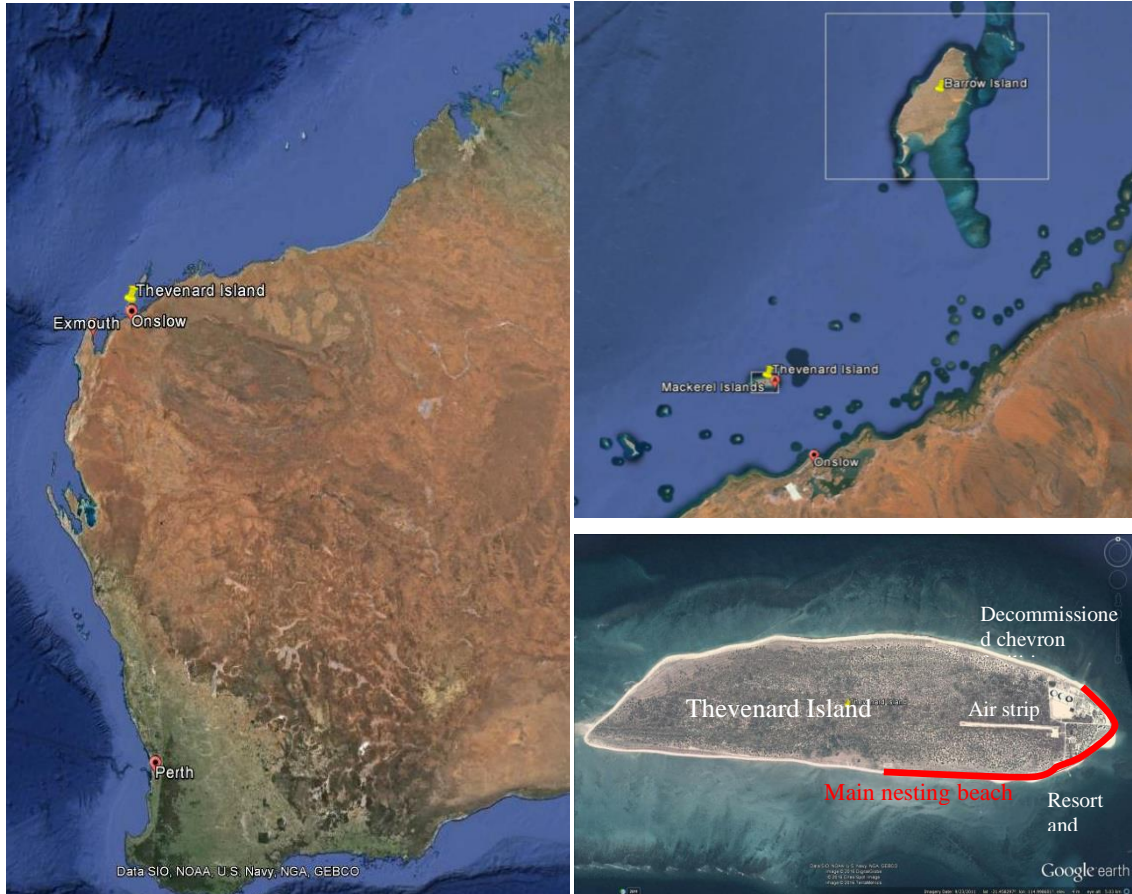
- Capable of patrolling the beach at night for five/six hours carrying 6kg
- Capable of walking on uneven terrain (rocks, soft sand)
- Capable of walking 6 - 12km in hot daytime conditions
- Able to sleep during the day
- Capable of lifting 15kg
- Good eyesight for night patrols conducted with special artificial lighting
- Volunteers must present fit for work each time they are on duty and act in accordance with the DBCA's Code of Conduct.

If you have any concerns about these requirements or any health conditions that may adversely affect your capacity to perform these duties, please discuss this with DBCA staff before applying for the program or commencing duties. It is essential that your health conditions are considered before signing up to the program. All volunteers will need to make an appointment with their GP to get their medical fitness for work assessment signed.

B. Thevenard Island

Location

Thevenard Island is located approximately 22km off the coast from Onslow in the Pilbara region of Western Australia. The island is the largest of a group of ten islands called the Mackerel Islands. The Mackerel Islands are 1400km north of Perth.



Environment

Thevenard Island is a “Class C” Nature Reserve. The island is approximately 6km in length and occupies a total area of 550 hectares. The Chevron oil and gas facilities, on and offshore Thevenard Island, were decommissioned late 2015.

Limestone reefs and platforms surround the island, with diverse coral assemblages on the northern side. Areas of deep sandy soil are found on the island supporting Acacia and Triodia shrubland and coastal heath scrub. In addition to green and flatback turtles, humpback whales can be seen around the Mackerel Islands from June to October, dugongs from September to April and many species of dolphins such as common, bottlenose, spinner and humpback dolphins all year round.

Thevenard Island has a resident population of raptors including Osprey, Nankeen Kestrels and White Bellied Sea Eagles, while Brahminy Kites, Black Shouldered Kites and Goshawks are regular visitors. The endangered short-tailed mouse, endemic to Thevenard Island, can also be seen. It is estimated there are 2,000 individuals remaining in the population. Saltwater crocodiles are rarely seen in the Pilbara, with their common range being further north in the Kimberley.

The turtle tagging program will be based on the southern side of Thevenard Island (see map). The aerial photo shows the western side of the main flatback nesting beach, directly in front of the accommodation.

Getting there

Volunteers take direct flights from Perth to Onslow. From Onslow, staff and volunteers will be transported to Thevenard Island by charter boat. The trip across takes around 45 minutes in relatively choppy water. There is also an airstrip on the island in case of emergency.

C. Daily life

Turtle work

Turtle work mainly occurs at night; however, some turtles will nest on a high tide during the daytime. We also count turtles’ tracks during the day, starting at dawn. It is important to remember that we work around the turtles – not the other way around.

Please be flexible as shifts will vary due to tides, the number of turtles on the beach and the number of staff/volunteers available. Be aware that some nights may be quiet, and other nights may be extremely busy. Pace yourself as you may get very tired (especially after the first week) and take time to sleep during the day.

Tagging turtles is physically demanding and you should expect long hours working under difficult conditions (approximately 5-8 hours per night). You will be asked to monitor sections of beach varying from 500m to 6km. This will require you to walk over uneven ground and sandy beaches for up to 10km a night while carrying a 5-7kg backpack and occasionally to walk up and/or down steep slopes. Volunteers will need to have a reasonable level of physical fitness to walk these distances. If you have any concerns about this, please discuss this with DBCA staff before applying for the program or commencing duties.



For some it is also quite mentally and/or emotionally demanding. For safety, ease and comfort, you will always tag with at least one other person. DBCA staff and volunteers with little/no turtle tagging experience will be trained by experienced DBCA staff. Prior to your trip to Thevenard Island, you will be expected to attend a briefing night, read all material that we will recommend and complete the online learning modules.

Data Entry

Data from each night of turtle tagging will be entered into a database the following day using a laptop computer. Volunteers will assist with data entry as it provides participants with a better understanding of the program.

Recreation

Daytime activities can include wildlife watching, swimming in the sea and/or pool, going to the gym, snorkelling, fishing and walks to look at the island. Please note that no access is allowed on to Chevron facilities or the airstrip.

You are encouraged to bring something else to keep you amused i.e. a good book, diary, sketch book etc.

Tagging turtles is the number one priority of the program, so please do not over-exert yourself with daytime activities as we may have many busy (or late) nights.

Examples of typical days

Three teams of two people would work for 6-8 hours around high tide at night. A fourth team of two people would walk around the island every morning to count tracks.

Eg 1 High Tide at 600am 600pm – We would start just before sunset and patrol the beach until turtles stop nesting for the night (maybe 11pm). We would then start again at 4am to survey the beach for morning nesters around the high tide.

Eg 2. High tide at Midday and Midnight – We would start patrolling the beach at 9pm and go through until 4am.

D. On the Island

On arrival (and departure)

The tagging program works best if everyone 'pitches in' and helps. Volunteers would be expected to help set up the office on arrival and help pack away at the end of the season.

Accommodation and amenities

Thevenard and Direction Islands are the only two Mackerel islands with accommodation. Staff and volunteers will stay at fully self-contained cabins.

Cabins have two to five bedrooms with two single beds in each bedroom, so staff and volunteers will be expected to share. When possible, gender specific rooms will be allocated. Cabins are very comfortable with air conditioning and fully contained kitchen facilities. All cabins have their own private bathrooms. Each cabin also has



its own ocean front shaded entertaining area, complete with BBQ and outdoor setting. The cabins are spaced along the beach front overlooking the mooring bay and the island jetty. Washing machines (coin operated) and clothes lines are available.

There is a general store on the island which stocks some grocery requirements; however, during low season, i.e. mid October to March, it holds only minimal stock and fresh supplies have to be brought with us from the mainland. The shop stocks some fishing tackle; snorkel and plaka boat hire is available on the island. Pool and gym areas are closed to volunteers this year as Chevron staff are using them.

Communications

Mobile phone coverage varies depending on which network you are with (Telstra works around the resort but cannot be relied on). Internet can be access through mobile phone hotspots. DBCA does not provide internet access to volunteers. The resort also has land line communication.

Mackerel islands resort number: (08) 9184 6444

See list of contact numbers below - A full list of numbers will be provided to volunteers to pass on to family members before heading to the field.

Food

All food (standard meals and snacks) and non-alcoholic drinks will be provided by DBCA. There will be plenty of food but you are welcome to bring extra/specific snacks. Breakfast and lunch are do-it-yourself at whatever time you wake up. The responsibility of preparing and cooking dinner is shared by everyone so you will be expected to contribute.

Specific food allergies and needs can be catered for but early notification must be provided.

Medications

Ensure that you bring any required medications; there will be limited opportunity to resupply.

Alcohol policy

To ensure a safe work environment where staff and volunteers of DBCA are not exposed to hazards and risks associated with the use of alcohol and/or other drugs, a strict alcohol policy will apply while on the island:

- Employees and volunteers will present to work fit for duty and free of impairment by alcohol and any other form of drug.
- A BAC of 0.00% is required for any employee or volunteer undertaking turtle monitoring for the department:

Smoking

In the field, smoking is not permitted while patrolling the beach and handling turtles. Smoking will be allowed in designated areas.

Duties

As well as the turtle related duties, you will be expected to contribute to simple chores, such as washing dishes, keeping the cabin clean, preparing meals etc. Not everyone is expected to be a chef and you will not be judged on your cooking.

E. Safety and well-being

Fitness and medical history

Volunteers need to have a good level of physical fitness, you will be required to go see your GP to have your medical fitness for work assessment completed.

Provided Safety Equipment **

- Defibrillator
- A master first aid kit will be located in one of the cabins
- Smaller first aid kits will be available for backpacks
- Satellite Phone
- VHF Radios
- Sunscreen
- Insect repellent

**All DBCA staff are trained in Senior First Aid

Hydration and water availability

Water is produced on the island through a desalination plant. This water is good to drink and will be used by the team. In an unexpected circumstance where this water was not suitable for drinking, water would be brought in.

Hydration guidelines in a hot climate are a minimum of three litres per day for men and two litres per day for women.

Weather conditions & UV radiation

Weather conditions on Thevenard Island in November/December can be hot, particularly around midday. Average temperatures vary between 20°C and 35°C. Please be sensible and 'slip, slop, slap' during the day with long sleeved shirts, sun cream, broad-brimmed hats and sunglasses. There will be ample drinking water so keep your body fluids up by drinking plenty of water. Whilst the weather is usually warm, nights can be cool and we may experience some rain. Volunteers need to be prepared for a variety of weather.

Sea sickness (transfer to Island)

The trip to Thevenard Island can be rough. For those people who suffer from travel sickness it is best to take sea sickness tablets at least 30 minutes before departure.

Cuts, abrasion, sprains, strains

Turtle tagging requires staff and volunteers to monitor sections of beach that may be uneven, rocky or steep, during both daytime and night time. Suitable footwear waterproof, with enclosed toes, ankle support and slip-resistant sole must be worn as you will be walking on soft sand and over rocky areas. Long pants and long-sleeved shirts are recommended as they help prevent scratches from turtles' nails or from barnacles on turtles' carapaces.

Sleep

It is essential that everyone gets adequate sleep. You should be able to sleep during the daytime and at irregular hours. A quiet environment should be maintained around the sleeping area to allow everyone to rest.

Lifting

There will be many tasks requiring lifting. Each person must recognise their own ability and not go beyond this point. There are many people to help and lifting can always be shared. Please remember to keep a good posture and in particular a straight back when lifting.

Working with turtles

Training on how to handle turtles will be provided in order to limit the risks of being injured by turtles:

- Never stand in front of the turtle - Flatback turtles can bite if given the opportunity
- When tagging or measuring keep feet and legs away from the turtle because the claws on the flippers can scratch
- Be careful not to get sand in your eyes when turtles are digging or covering their nest.

Bites and stings

The surrounding reef provides opportunities for amazing snorkelling as there is a large diversity of marine life. Marine animals such as stonefish, jellyfish, cone shells and blue-ringed octopuses can be dangerous and can potentially bite or sting. Do not touch corals as you could end up with stings or coral cuts (poisoning). Other animals to be aware of include sharks and rays.

It is highly recommended that you ensure that your tetanus shots are up to date.

Suitable footwear with enclosed toes is highly recommended when going on a hike on the island.

Snorkelling and Fishing

You must snorkel within your ability and within sight of other people. It is preferred that you use a 'buddy system' i.e. snorkelling in pairs.

Staff and volunteers participating in out-of-hours (before or after work or during your lunch break) in-water activities such as snorkelling and diving when on field trips may not be covered by departmental insurance for injury or evacuation purposes. A large number of variables are associated with determining the department's liability and each claim would be treated on its merits prior to injury or evacuation compensation being given to the employee/volunteer. Therefore, all staff/volunteers who wish to engage in any out-of-hours diving or snorkelling during fieldtrips do so at their own personal risk, with potentially no corporate insurance cover. If you wish to ensure you are covered adequately then you may consider organising personal dive injury and evacuation insurance through an independent provider.

Other

Appliances such as gas bbq or gas stove might be different from what you are used to, so please do not hesitate to ask for instructions before using them.

Before leaving to go on walks or do water activities, you must:

- tell someone (who is awake!)
- wear sensible clothing/footwear
- take sufficient water, and
- record your details (name, destination, time of departure and expected time of return) on the whiteboard in the cabin. Failure to do so will result in a severe fine: cooking and washing up for the rest of the trip.

Please take these safety procedures seriously. If you have any questions or doubt, please do not hesitate to ask a member of staff.

F. Things to bring

For tagging:

- OLD clothing – long pants and long sleeved shirts or overalls
- Head torch – it must have a red light
- Suitable footwear waterproof, with enclosed toes, ankle support and slip-resistant sole – make sure they are **comfortable** as you will be doing a lot of walking! Shoes/boots with high ankles will help keep sand out. Reef walkers or wetsuit booties are not suitable
- Gaiters or sock guards may be useful for keeping sand out of your shoes/boots
- Glasses/contacts (if required) for recording or reading tag numbers
- Watch/timepiece for recording the time on datasheets
- Alarm clock (essential to ensure that you wake for your shift)

In general:

- Sun glasses x 2
- Sunhat
- Water bottle
- Casual clothing for ALL conditions (it can get cold at night, especially if there's a wind – a warm shirt/light jacket and beanie are recommended)
- Small daypack for day use when exploring the island
- Water bottle
- Sunscreens
- Towel/sarong
- Toiletries, medications and personal items
- Sense of humour

Optional:

- Camera
- Binoculars
- Books/music etc
- Eye shades and ear plugs for daytime sleeping
- Any special food you require
- Fishing, swimming and snorkelling gear

G. Other important information

Volunteer insurance

Volunteers are covered under DBCA's insurance policy for volunteers if they are registered volunteers and if they are Australian residents/citizens.

Volunteers are covered within the scope of the tasks designated and available for a particular project. They are also covered whilst travelling between place of residence and place of voluntary employment but not during any substantial deviation for reasons unconnected with the voluntary employment.

Volunteers who wish to engage in any out-of-hours diving or snorkelling during fieldtrips do so at their own personal risk, with potentially no corporate insurance cover. If you wish to ensure you are covered adequately then you may consider organising personal dive injury and evacuation insurance through an independent provider.

Personal Injury: Benefits are paid on an "out of pocket basis" after other entitlements have been exhausted. That is, volunteers are required to first claim on Medicare, private health cover, personal insurance, employment sick leave entitlements, compulsory third-party insurance etc.... Volunteers are covered up to \$221,891 for personal accident.

Vehicle and property damage: Benefits will be paid on an "out of pocket basis" for damage caused to a volunteer's private motor vehicle or personal property used whilst undertaking authorised Departmental volunteer activities, after other entitlements have been exhausted. That is, volunteers are required to first claim on private insurance before submitting a claim for out of pocket expenses to the department. RiskCover may pay excess over \$1000.

Conflict of interest

Volunteers are required to read DBCA's Conflict of Interest Information Sheet and Conflicts of Interest Policy before they start working.

A conflict of interest is a situation arising from conflict between the performance of the functions of the department and private or personal interests. Volunteers should take all reasonable steps to avoid a conflict of interest and be aware of and identify for themselves any conflicts of interest or perceived or potential conflicts of interest and disclose them to a member of staff.

Occupational Health and Safety

Safety and health in Western Australian workplaces is regulated by the *Occupational Safety and Health Act 1984* (the OSH Act) and the Occupational Safety and Health Regulations 1996 (the OSH regulations) supported by codes of practice and guidance notes

DBCA has a responsibility to ensure volunteers are not harmed as a result of the work carried out by the employer, employees or other volunteers.

Volunteers are not considered 'employees' for the purpose of the Acts; however, DBCA's policy states volunteers are to be treated like employees.

Volunteers are protected under Section 21 of the Act where employers must ensure that people who are not their employees are not harmed as a result of the work carried out. Section 23E of the Act also encompasses volunteers and states that employer duty of care requirements are applicable.

Emergency response procedures, Evacuation Plan and Medical incident

You will receive a copy of the emergency response procedure and evacuation plan before starting your trip.

In case of a medical incident, volunteers must:

- Administer first aid and report injury to Volunteer Coordinator
- Seek medical attention and obtain a First Medical Certificate from their GP
- (Advise GP this is not 'Workers Compensation')
- Volunteer pays for the treatment, otherwise delays may occur possibly resulting in debt collection from volunteer by provider.
- Volunteer to complete a RiskCover workers' compensation Claim form (obtained through DBCA Community Involvement Unit or Risk Management Branch)
- Provide documents showing out of pocket costs e.g. difference between Medicare payment & GP
- Risk Cover reviews information accuracy vital to determine liability.
- Claim is determined – if approved claimant is reimbursed out of pocket expenses

NOTE: Claimant must pay the account first, then claim through their own insurance or Medicare. Insurance does not cover total cost of treatment.

General code of conduct

DBCA's staff and volunteers are expected to be open, accountable, responsive, innovative, outcome focused and collaborative and will always act with the highest integrity.

Volunteers are required to read DBCA's Code of Conduct before they start working. Some important points are highlighted below:

Staff and volunteers are required to:

- act with integrity in the performance of official duties and to be scrupulous in the use of official information, equipment and facilities
- exercise proper courtesy, consideration and sensitivity in dealings with members of the public and other employees/volunteers.

In case of a workplace incident (e.g. conflict between volunteers, complaints regarding workload or work environment, harassment, health and safety issues), volunteers should report to the group leader/volunteer coordinator immediately.

Media

If a journalist contacts you directly, refer them to the volunteer coordinator.

Photography

General information about a photographer's right can be found at: <http://www.artslaw.com.au/info-sheets/info-sheet/street-photographers-rights/>

Please be aware that volunteers must follow the code of conduct regarding photographs of turtles, work undertaken or staff, which are taken whilst on duty. These are considered to be 'official information' and can only be disclosed with the express permission of the Director General (DG). Placing photos on social media such as Facebook or Instagram is considered publishing, so would require DG permission.



Volunteers may take photos for personal use whilst on the island. Photos of scenery or of the volunteer, taken whilst 'off duty', may be published on social media as long as any caption or comment does not disclose information that is not already in the public domain.

Volunteers are encouraged to follow the department's Facebook page and share updates and photos of the turtle work from there.

H. Essential contact numbers

Resort:

[\(08\) 9184 6444](tel:(08)91846444)

James Gee

James.gee@dbca.wa.gov.au

Scott Whiting

Office: 08 9219 9752

Mobile: 0413 375 782

Scott.whiting@dbca.wa.gov.au

Shaun Wilson:

Office 08 9219 9806

Mobile: 0400 121 175

If you have any questions, please do not hesitate to contact us and we will get back to you as soon as possible

Thank you for your interest in the program! We are looking forward to the field season and to meeting new volunteers with a keen interest in turtle conservation!

