



Marine Turtles Western Australia

North West Shelf Flatback Turtle
Conservation Program

Monitoring Summary 2023

The North West Shelf Flatback Turtle Conservation Program

- Began in 2009.
- Is a 60-year conservation program delivered as an environmental offset from the Gorgon Gas Project.
- Is run by the Department of Biodiversity, Conservation and Attractions.
- Directly monitors two key nesting sites each year; Delambre Island and Thevenard Island.

3264

hours of monitoring were conducted
by 45 volunteers this season!

Did you know?

The emergence success of hatchlings is on average **76%** from each nest. Modelling of future climate scenarios shows this will reduce to **63%** with a 2°C increase in air temperature, and **37%** with a 4°C increase. Climate change is a major threat to flatbacks.

Below – Map of the North West Shelf study area. Source: © Landscape / DBCA

Objectives of the program

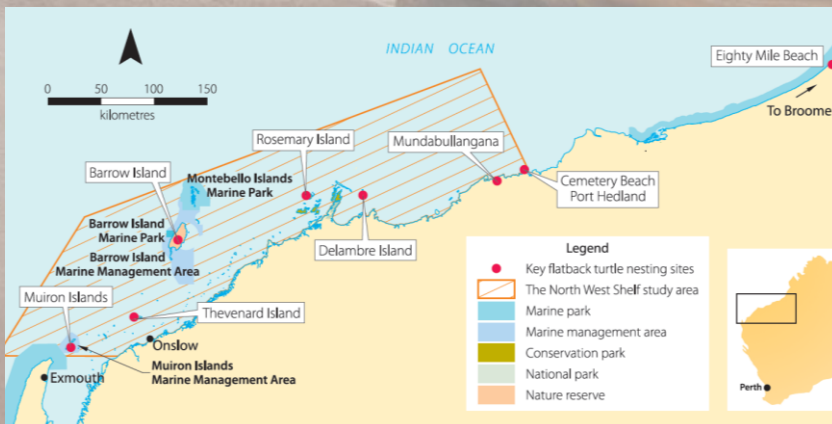
This program intends to increase the conservation and protection of the North West Shelf flatback turtle population by:

- Surveying, monitoring and research.
- Reducing interference to key breeding and feeding locations.
- Establishing information and education programs.

The program monitors

- nesting abundance and distribution by completing track counts, tagging and aerial surveys.
- demographic parameters including nesting success, recruitment and survivorship by tagging.
- hatching and emergence success by excavating nests.
- turtle health by measuring mass, carapace length and observations.
- foraging locations and behaviour.

Rangers from the **Ngarluma Aboriginal Corporation** were involved in monitoring this nesting season on Delambre Island.





Delambre Island

- **648 unique flatback turtles** were seen, with 1163 flatbacks processed over the monitoring season.
- Some individuals returned to the beach several times this season.
- 183 flatback turtles were observed for the first time at Delambre, while 465 were “remigrants”.
- There were 629 flatback nests recorded in the tagging area from tagging efforts and morning walks.
- Nesting success was recorded for 40 individuals, which showed a 42.5% nesting success rate. Failed nesting was due to collapsing sand for 92% of failed attempts.
- 84% hatching success and 83% emergence success were recorded.



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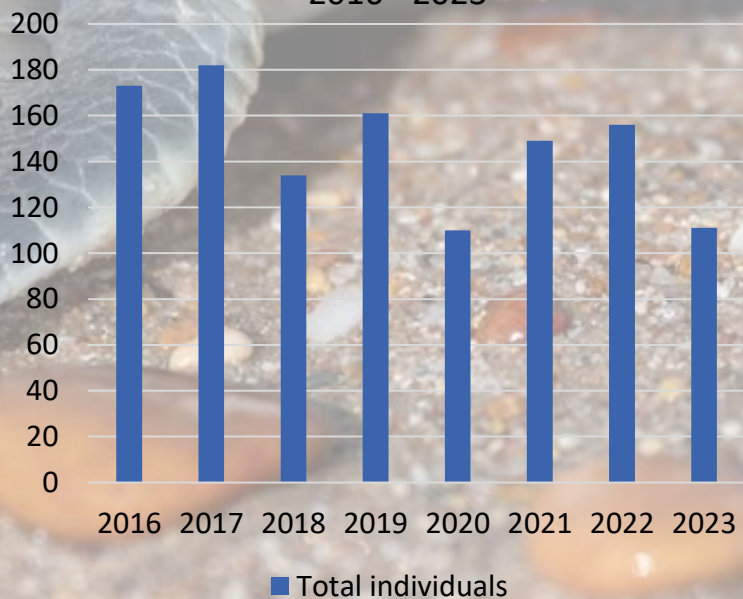
Total flatback turtle tracks recorded at Delambre Island
2017 - 2023



Thevenard Island

- **111 unique flatback turtles** were seen, with 222 processed over the monitoring season.
- Some individuals returned to the beach several times this season.
- 16 flatback turtles were observed for the first time at Thevenard, while 95 were “remigrants”.
- There were 115 flatback nests recorded in the tagging area from tagging efforts and morning walks.
- 619 green turtle tracks were recorded over the same period.
- 69% hatching success and 68% emergence success were recorded.

Total individual turtles monitored at Thevenard Island
2016 - 2023



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The North West Shelf Flatback Turtle Conservation Program supports monitoring at other Kimberley and Pilbara locations including Cape Domett, Cable Beach, Eco Beach, 80 Mile Beach and Cemetery Beach.