

## Why do Gnaraloo sea turtles need our protection?

Coastal development, commercial fishing, unsustainable harvests, pollution, climate change, beach disturbance, 4WD traffic and predation by introduced species all pose a threat to sea turtles. So much so that the dominant species of turtle nesting at Gnaraloo is endangered.

With only about 1 in 1,000 – 2,000 turtle hatchlings on the Ningaloo Coast surviving to sexual maturity, which takes 30 years or more for a loggerhead, it's vitally important to protect them. The wilderness beaches of Gnaraloo are among the few remaining sites where turtles can lay their eggs without disturbance.

### About the scientific monitoring program

The loggerheads from Gnaraloo are part of the southeast Indian Ocean sub-population, which is very poorly understood and faces many threats, so research and protection of the Gnaraloo rookeries is vital.

From November to February each year, scientists monitor turtle nesting and feral animal activities on the beach to understand more about the turtles.

During 2015 - 2017, for the first time, we tracked 10 female loggerheads via satellite to understand where they go after nesting. View their fascinating journeys on our Gnaraloo Turtle Tracker app available for Windows, Android and Apple.



## The Gnaraloo Wilderness Foundation

We are a not-for-profit charity with a charter that sets out to protect the landscape, flora and fauna at Gnaraloo.

### Turtle monitoring and conservation

Our annual program collects scientific data on sea turtle nesting activities to promote their long-term survival.

By identifying nesting trends and monitoring feral animal disturbance and predation, our scientists gather information to inform responsible management and protection of sea turtles and their critical coastal nesting habitat.

### Feral animal monitoring and control

Since 2008, we have collected important baseline data on sea turtles and feral animals at Gnaraloo. Foxes used to dig up a large proportion of turtle nests at Gnaraloo Bay to eat the eggs and hatchlings. The highly successful Gnaraloo Feral Animal Control Program has reduced nest predation by feral animals to 0 % for seven consecutive seasons from 2010/11 - 2016/17. This has saved over 275,000 eggs at the Gnaraloo Bay Rookery. This program also helps to protect other biodiversity values at Gnaraloo and the adjacent significant Lake MacLeod wetland system, which are negatively impacted by foxes, feral cats and wild dogs.

### Scientific internships, training and data sharing

We train graduates from Australia and overseas under our Scientific Internship Program. We share our data with the scientific community worldwide to support research and conservation efforts.

### Community and school engagement

We work with the community and schools to increase awareness of the Gnaraloo sea turtle rookeries and their need for protection. More information on our website.



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*gnaraloo wilderness foundation*

## Gnaraloo Turtle Conservation Program



[www.gnaraloo.org](http://www.gnaraloo.org)



## What can you do to help protect the Gnaraloo sea turtles?

1. It's important never to drive 4WDs on the beach and dunes at Gnaraloo because you risk damaging nests or killing hatchlings and turtles as they cross the beach.
2. Hatchlings navigate by looking for the lowest bright horizon, so any torches or light from buildings, streets or cars can confuse this perception and cause them to lose their way.
3. If a turtle emerges from the ocean to nest, you need to 'stop, drop and act like a rock'. The turtle will crawl past you to its nesting site. After about half an hour, the turtle should have settled in to lay her eggs and you can crawl closer to observe, but only from behind – never let her see you. Only use the moonlight. Never use a torch.
4. Dogs must be kept on a leash at all times.
5. Join the **Gnaraloo Wilderness Foundation**. Come to Gnaraloo during the turtle nesting season (Nov - Feb) and join the GTCP researchers on beach surveys to learn more about turtles.

## Ways to help our conservation efforts

**Make a donation.** Funds help us protect the turtles and their nesting habitat.  
[www.gnaraloo.org/donate](http://www.gnaraloo.org/donate)

**Sponsor a turtle.** Every year, you can help our research by sponsoring a **satellite tracker** to help determine where the Gnaraloo females go after nesting. This contributes valuable data to protect sea turtles. You will be able to track the turtle's progress through our free app. See the report with the findings of our first tracking project during 2015/17 on our website.

**Visit [gnaraloo.org](http://gnaraloo.org)** for other ways to help.

## How many nesting activities occur at Gnaraloo Bay?

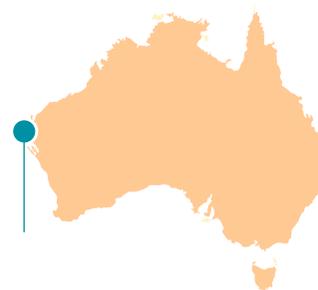
### Loggerhead Turtle (*Caretta caretta*)

Season	Nesting activities	Nests	Female Turtles
2008/09	-	319	67
2009/10	731	480	100
2010/11	758	399	83
2011/12	700	324	68
2012/13	672	303	63
2013/14	635	424	89
2014/15	528	328	69
2015/16	479	304	64
2016/17	695	405	85



### Where do they nest?

There are two main rookeries: Gnaraloo Bay and Gnaraloo Cape Farquhar



## Which sea turtles come to Gnaraloo Bay?

Mostly loggerheads nest here, but some green and possibly hawksbill turtles use the beach for nesting.

### Loggerhead Turtle

Conservation status: endangered

Age at maturity: around 30 years

Average length: 80-120cm

Average weight: 70-146kg

Diet: omnivore

Clutch size: around 112 eggs

Clutches laid per season: average 3-4

at about 2-week intervals

Remigration interval: females return to nest every 2-5 years

Gnaraloo  
Cape Farquhar



Gnaraloo Bay

Homestead Area

3Mile Camp

Sea turtle rookeries at Gnaraloo Station

Ningaloo Marine Park Sanctuary Zones

