



Department of Planning



Western Australian Planning Commission

Coastlines

autumn edition 2012



Planting method to achieve a high seedling survival rate



Friends of North Ocean Reef - Iluka foreshore



Record crowd at Sculpture by the Sea exhibition 2012



Gnaraloo Turtle Conservation Program Trail opening



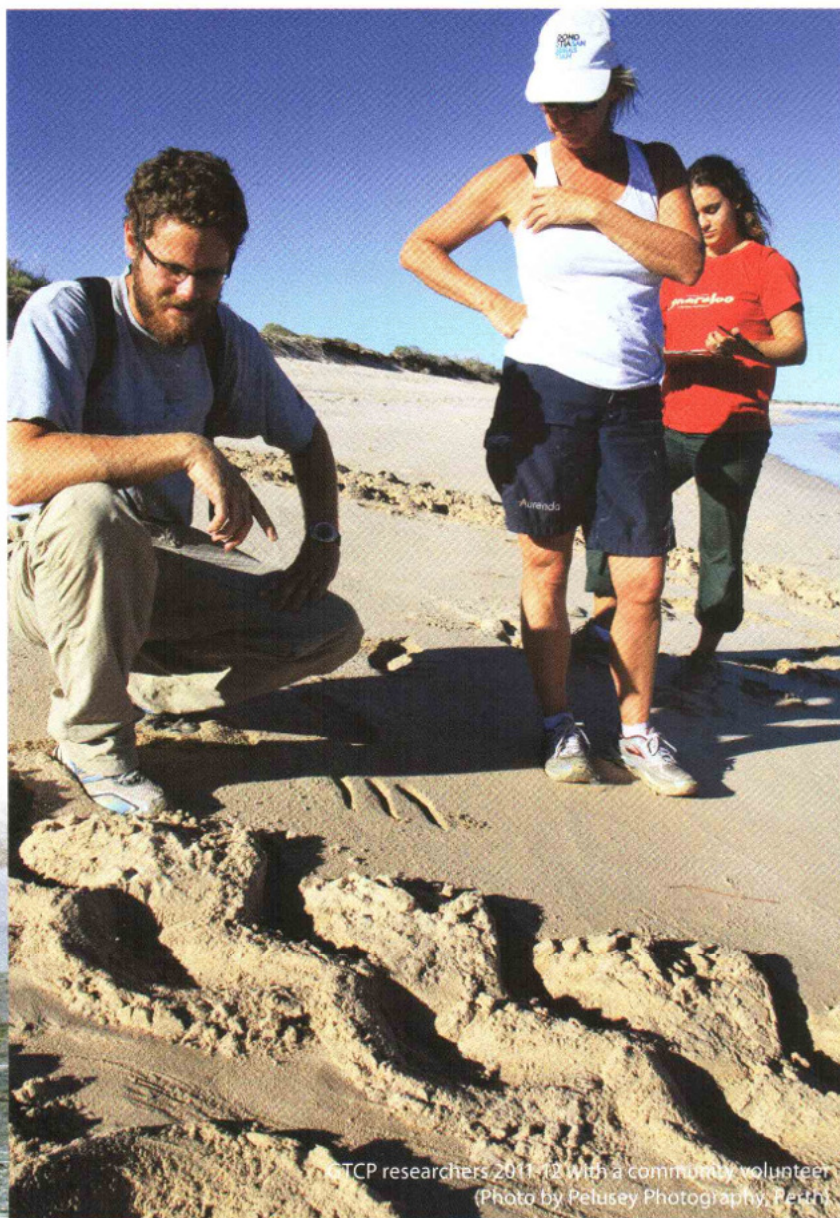
"Coastwest - Helping communities to care for the WA Coast"

Gnaraloo Turtle Conservation Program

monitoring endangered sea turtle rookeries

Gnaraloo is a mixture of a wilderness tourism business and a working pastoral station on the Ningaloo coast, about 150 km north of Carnarvon, Western Australia. Gnaraloo is situated within the Ningaloo National Heritage Area and adjacent to the Ningaloo Marine Park and newly created Ningaloo World Heritage Area. It abuts approximately 60 km of coastline, including southern parts of the Ningaloo Reef. Gnaraloo includes a number of marine sanctuary zones, namely Turtles, 3Mile, Gnaraloo Bay and Cape Farquhar. The Indian Ocean borders Gnaraloo to the west.

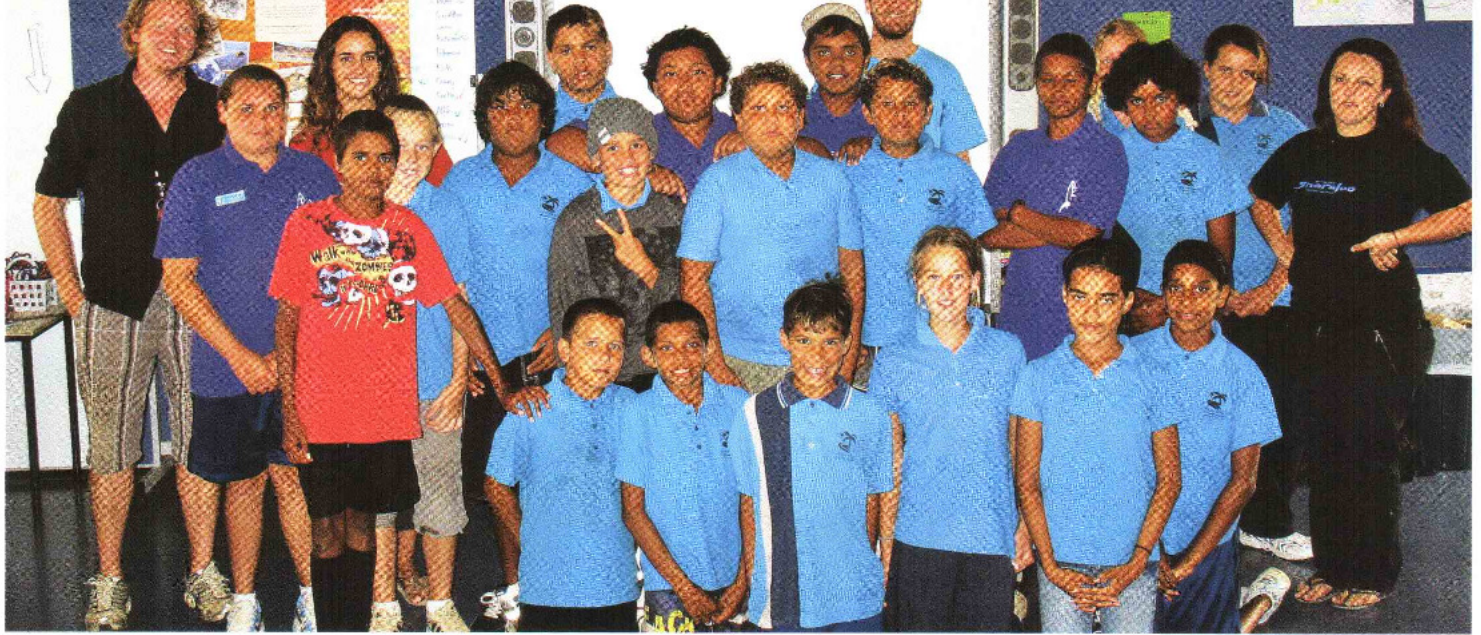
Gnaraloo initiated the Gnaraloo Turtle Conservation Program (GTCP) during 2005 to identify and protect significant sea turtle rookeries on its coastline. As a result of the work, which commenced onsite during 2008, three of the world's seven sea turtle species have been found to nest on Gnaraloo beaches, namely endangered loggerhead (*Caretta caretta*), endangered green (*Chelonia mydas*) and critically endangered hawksbill (*Eretmochelys imbricata*) turtles.



GTCP researchers 2011-12 with a community volunteer
(Photo by Pelusey Photography, Perth)



Female loggerhead at Gnaraloo Bay
(Photo provided courtesy of the Gnaraloo Turtle Conservation Program)



GTCP presentation to Carnarvon Primary School, 25 October 2011
(Photo provided courtesy of the Gnaraloo Turtle Conservation Program)

One of these areas, the Gnaraloo Bay Rookery, has been discovered to be predominantly a loggerhead breeding area. The Gnaraloo Bay Rookery is one of the two most significant mainland rookeries for loggerheads in Western Australia (the other is in Cape Range National Park, Exmouth), and the Gnaraloo loggerheads are believed to be part of the third largest loggerhead turtle population in the world. Considering the endangered status of loggerheads, the Gnaraloo nesting population could play a vital role in the success of the greater population. Threats such as climate change, pollution, human activity and inappropriate coastal developments may reduce loggerhead numbers and reduce the number of available suitable coastal nesting habitat. The research at Gnaraloo is important to gain as much knowledge as possible about the Gnaraloo turtles in order to fully protect them.

The GTCP is also gathering data on the newly discovered Gnaraloo Farquhar Rookery which was identified through previous aerial surveys. Should this area also be found to be significant, it would mean that the Gnaraloo coastline may be even more important than previously realised as habitat for endangered turtles.

The seasonal GTCP scientific team 2011/12 comprises three scientists with degrees in biological or environmental



The GTCP scientific team 2011-12
(Photo provided courtesy of the Gnaraloo Turtle Conservation Program)

sciences. The scope of research includes identification of turtle species and nest distribution within monitored beaches through track interpretation. This involves daily patrols to locate new turtle tracks to identify species, determine nesting activity by counting nests and unsuccessful nesting attempts and recording nest locations. Environmental and predator impacts on the nests are also monitored throughout the season.

The GTCP also aims to involve the community, school groups and the general public with sea turtle research at Gnaraloo. Please contact us should you, your family or friends be interested to participate with the program as community volunteers (November to February only).

Although the GTCP is in its infancy, the data collected on the Gnaraloo turtles each season will make important contributions to sea turtle research worldwide. A portion of all accommodation fees at Gnaraloo is re-invested into the GTCP to ensure its continuation as it may take up to 30 years to establish a representative baseline of sea turtle nesting activity at Gnaraloo and develop conservation management plans to protect the biodiversity at Gnaraloo.

For more information on the program, see 'Gnaraloo Turtle Conservation Program' on Facebook and follow us on Twitter: @GnaralooTurtles. Or contact Karen Hattingh: Gnaraloo Turtle Conservation Program Gnaraloo Environmental Office P: (08) 9840 1556 E: enviro@gnaraloo.com.au