

LIBRARY

Department of Biodiversity,
Conservation and Attractions

This PDF has been created for digital preservation. It may be used for research but is not suitable for other purposes. It may be superseded by a more current version or just be out-of-date and have no relevance to current situations.



Photo - Doug Coughran

WHALE SHARKS

The mass spawning of more than 200 species of coral in March and April each year is part of a chain of biological events that heralds the arrival, in Ningaloo Marine Park, of the world's largest fish, the whale shark (*Rhincodon typus*). These gentle giants cruise the world's oceans in search of concentrations of plankton. They have thousands of tiny teeth arranged in more than 300 rows, but they neither bite nor chew their food. Water is drawn into their large mouths and strained through the gills, where a fine mesh of gill rakers extract the tiny plankton. They are also thought to supplement their diet periodically with squid and small fish such as anchovies and sardines.

Whale sharks are found in a band around the equator between about 30° north and 35° south. They prefer surface water temperatures between 21°C and 25°C, where cool nutrient-rich upwellings mingle with warm plankton-laden waters. They may reach 18 metres in length, but are more commonly 4 to 12 metres long. A 12 metre individual weighed 11 tonnes and its mouth was over a metre in width. Little is known about the whale shark's life cycle and how long they live is still a mystery.

Occurrences of the whale shark are patchy and unpredictable. Ningaloo Reef is one of only a few places in the world where they appear regularly in any numbers, in near-shore waters, easily accessible to observers.

WHO TO CONTACT

Details of whale shark observations can be left at:

EXMOUTH DISTRICT OFFICE
Payne St (Old Shire Chambers)
PO Box 201
EXMOUTH WA 6707
Ph (099) 49 1676 Fax (099) 49 1580

MILYERING VISITOR CENTRE
Cape Range National Park
Phone/Fax (099) 49 2808

PILBARA REGIONAL OFFICE
SGIO Building
Welcome Road
KARRATHA WA 6714
Ph (091) 86 8288 Fax (091) 44 1118

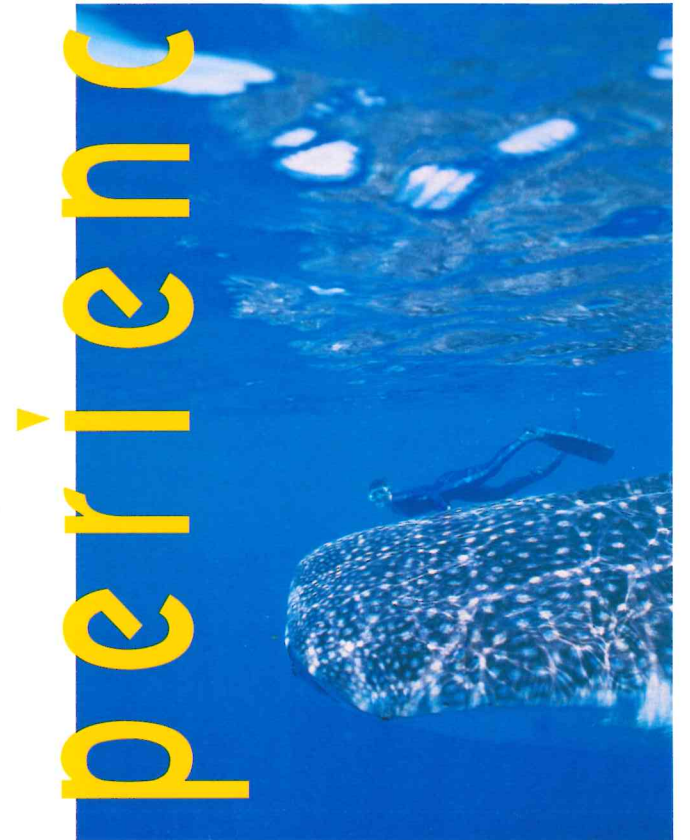


DEPARTMENT OF CONSERVATION
AND LAND MANAGEMENT

INDEMNITY

In participating in the whale shark watching tour, the participant acknowledges and assumes all associated risks and will hold the Executive Director, his employees, servants and agents free from any and all liability, causes of action, debt, claims and demands of every kind and nature whatsoever which may arise out of or in connection with participation in the tour.

WHALE SHARKS IN NINGALOO MARINE PARK



ExperiencE

A GUIDE FOR PASSENGERS
OF COMMERCIAL TOURS



DEPARTMENT OF CONSERVATION
AND LAND MANAGEMENT

Photo - Doug Coughran

CALM'S ROLE IN WHALE SHARK WATCHING

The Department of Conservation and Land Management (CALM) conserves and manages Western Australia's wildlife and the lands, waters and resources entrusted to the Department for the benefit of present and future generations.

CALM, therefore, ensures that access to natural attractions is well managed, is ecologically sustainable, and only occurs where appropriate. To do this requires a diverse range of skilled professional staff including scientists, rangers, wildlife officers, recreation planners and commercial operations administrators.

CALM tries to recover the cost of management and research activities through a system of licence charges on tour operators. By doing this, commercial whale shark watching can be managed to be both ecologically and economically sustainable.

Tour operators are expected to provide their passengers with a safe, interactive tour with the whale sharks without causing harm to the animals.

Participation in whale shark tours, therefore, provides a direct benefit to further research into whale shark behaviour and ensures that future generations will also have the opportunity to swim with whale sharks at Ningaloo.



Photo - John Edwards

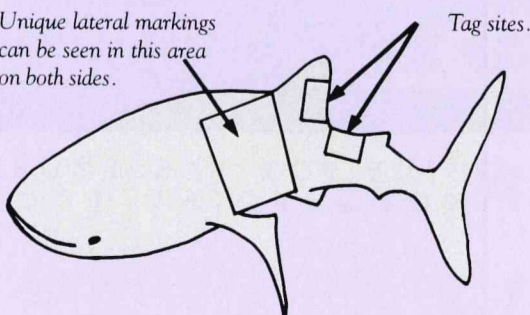
HOW YOU CAN HELP

CALM is interested in any information you can provide about whale sharks. You can assist skippers by helping to record the following details when you interact with the sharks:

- date, time and location;
- number of sharks seen;
- approximate length of each shark;
- gender of each animal;
- their behaviour
- distinguishing features* (distinctive lateral markings on both sides behind the gill slits; scars on body or fins);
- tags* ('smart' tags and thin strips of plastic that resemble game fish tags). If you see a shark with a 'smart' tag trailing from its dorsal fin, please alert the crew of your vessel immediately. Do not attempt to remove the tag yourself;
- overall quality of the interaction (poor, average, good or excellent).

WHERE TO LOOK FOR TAGS AND LATERAL MARKINGS

Unique lateral markings can be seen in this area on both sides.



Tag sites.

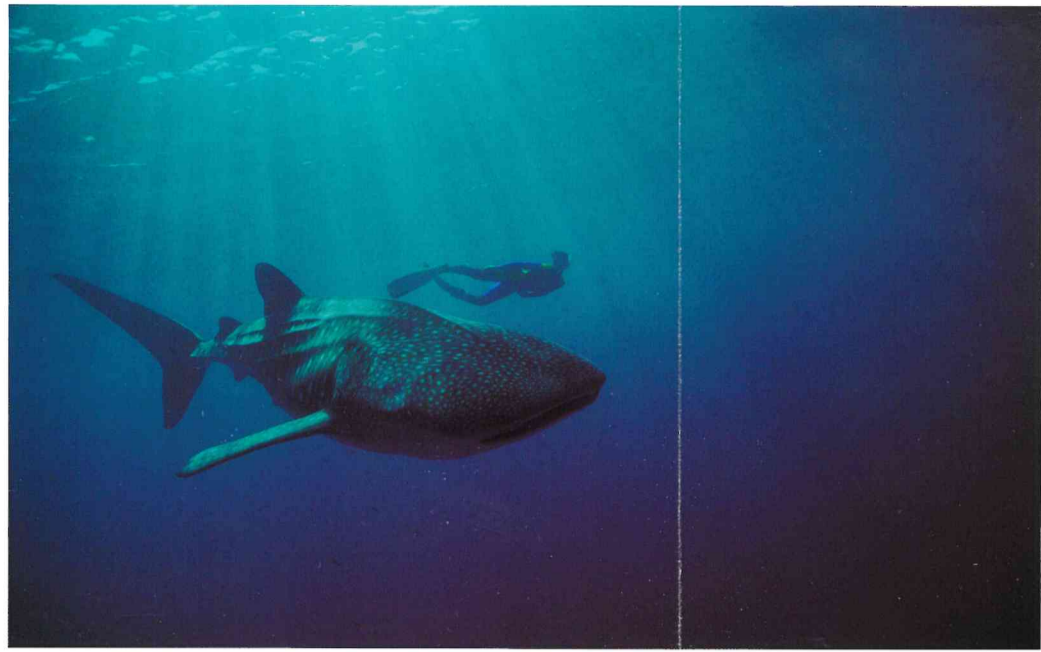


Photo - Simon Jones

RESEARCH

Very little is known about whale shark numbers, behaviour patterns or how much human contact they will tolerate before becoming disturbed and perhaps avoiding any contact. Care must be taken to ensure that we do not lose this unique opportunity for interaction. Scientific information about whale shark migratory patterns, breeding and life history is limited. Exactly why the annual aggregation at Ningaloo occurs and the reasons for any seasonal fluctuations in shark numbers are not yet fully understood.

Preliminary research examined correlations between coral spawning events, the Leeuwin Current and shark numbers and movements. Plankton sampling has been carried out to identify potential food sources. Individual sharks may be recognised by scars and unique lateral markings. New initiatives include the use of 'smart' tags, digital data loggers attached to the dorsal fin that record a shark's position and depth for periods of up to five years, a study of behaviour and possible effects of disturbance, and surveys of tourism aspects of the interaction.



Photos - Doug Coughran

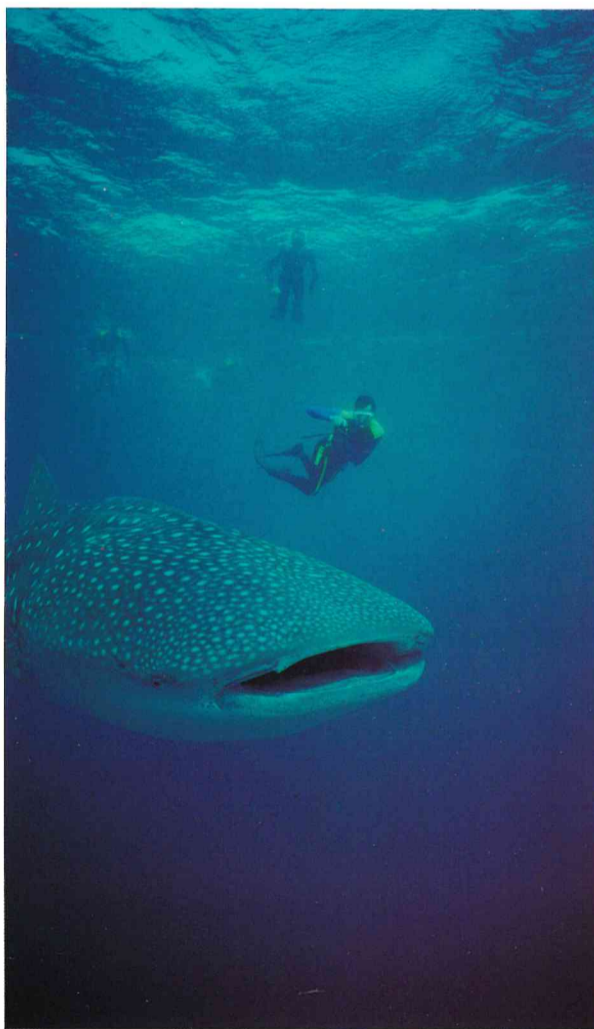
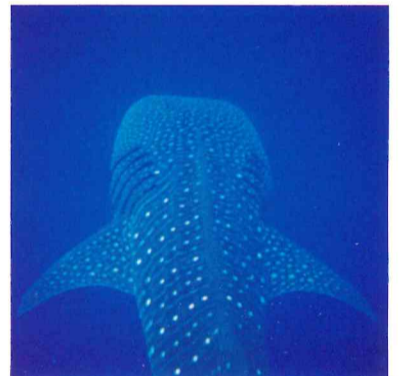


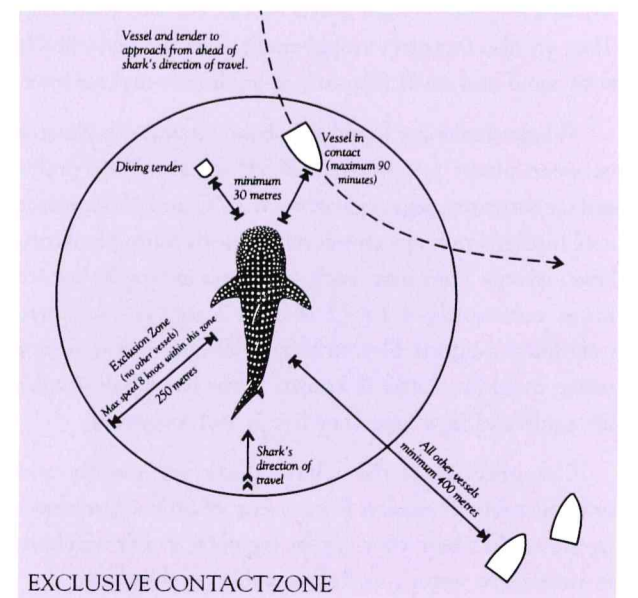
Photo - Simon Jones

WHALE SHARK WATCHING FROM PRIVATE VESSELS

The protection afforded to whale sharks by the Wildlife Conservation Act and the CALM Act extends to the activities of private vessels as well as commercial vessels. The code of conduct developed for passengers of commercial vessels also applies to people on private vessels. In addition, private vessels must also follow the guidelines for commercial vessels within the "exclusive contact zone".

Contact zone

- An exclusive contact zone of 250 m radius applies around any whale shark.
- Only one vessel at a time may operate within the zone for a maximum time of 90 minutes and at a speed of 8 knots or less.
- The first vessel within that zone will be deemed to be 'in contact'. The second vessel to arrive must keep a distance of 250 m from the shark, and any others must be 400 m from the shark.



*Photographs are useful for recording these details and help in the identification of individual sharks. If you provide any photographs of whale sharks to CALM, please ensure that they are accompanied by as much information as possible, including a record of the date, time, and location of the encounter and the vessel name.

Please do not use flash as this may upset the sharks.

EXCLUSIVE CONTACT ZONE

WATCHING WHALE SHARKS

Whale sharks are fully protected under the Wildlife Conservation Act and the CALM Act. Although they appear to be 'gentle giants', they are wild animals that can inflict serious injury if they strike a swimmer with their body, tail or fins. To minimise the risk of injury and to prevent the animals from being harmed or disturbed, the following code of conduct has been prepared for passengers on commercial and private vessels.

SWIMMERS IN THE CONTACT ZONE:

- Must not attempt to touch or ride on a whale shark, restrict the normal movement or behaviour of the shark, or approach closer than 3 metres from the head or body and 4 metres from the tail.
- Must not undertake flash photography or use motorised propulsion aids.
- Are limited to a maximum of 10 people in the water at any one time.



Photo - Pip O'Dell

