

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 It may be superseded by a more current version or just be out-of-date and have no relevance to current situations.



Below The whale shark flag which commercial operators must display while the vessel is in the exclusive contact zone.

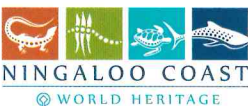
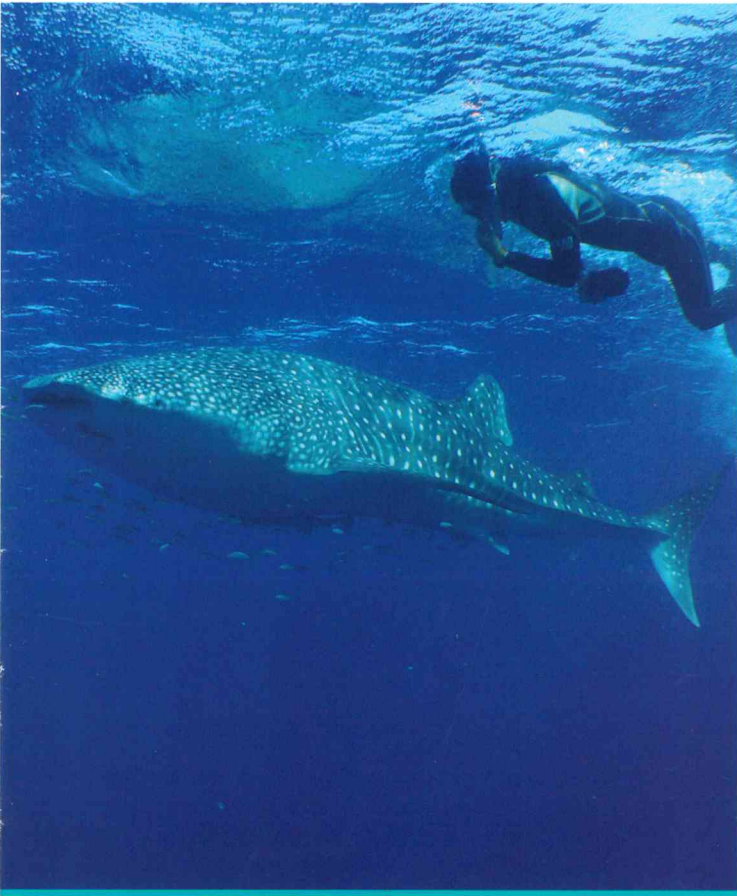
- exceed 10 people in the water at any one time.
- use motorised propulsion aids
- undertake flash photography, use cameras on extension poles
- approach closer than 3m from the head or body and four metres from the tail
- restrict the normal movement or behaviour of the whale shark
- attempt to touch or ride on a whale shark

Swimmers in the contact zone must not:

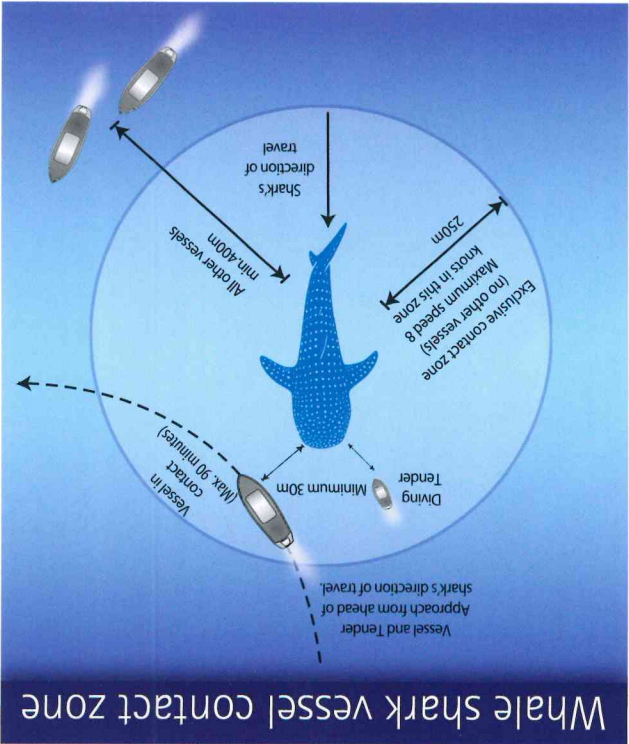
interacting with whale sharks. or disturbed, the following interaction protocol applies when experience and to prevent the animals from being harmed their body, tail or fins. To ensure that you have a safe, enjoyable animals that can inflict serious injury if they strike a swimmer with 2016. Although they appear to be 'gentle giants', they are wild Land Management Act 1984 and the Biodiversity Conservation Act

Swimmers interacting with whale sharks

Experiencing
whale sharks
in Ningaloo Marine Park



Department of Biodiversity,
Conservation and Attractions



Who to contact

If you would like more information, or can provide details about sightings or interaction with whale sharks, you can contact the Parks and Wildlife Service at the Department of Biodiversity, Conservation and Attractions (DBCA):

**Parks and Wildlife Service
Exmouth District Office**
20 Nimitz Street, Exmouth, WA
PO Box 201
Exmouth WA 6707
Ph: (08) 9947 8000 Fax: (08) 9947 8050
Email: whale.shark@dbca.wa.gov.au

Milyering Discovery Centre
Cape Range National Park
Ph: (08) 9949 2808 Fax: (08) 9949 2541

**Parks and Wildlife Service
Pilbara Regional Office**
Lot 3 Anderson Road
Karratha Industrial Estate, Karratha WA
PO Box 835
Karratha WA 6714
Ph: (08) 9182 2000 Fax: (08) 9144 1118

You may also wish to visit the Parks and Wildlife Service website at pws.dbca.wa.gov.au and search whale sharks.



Department of Biodiversity,
Conservation and Attractions



Indemnity

In participating in the whale shark watching tour, the participant acknowledges and assumes all associated risks and will hold the Director General, 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.

Cover photos – DBCA

This publication is also available in alternative formats on request.
Information current at March 2021.

2021_191 -3-7M

**Whale shark interaction
protocol for vessels**

The Biodiversity Conservation Regulations set out rules that commercial and private vessels are bound by these rules, which must be adhered to while within the 'exclusive contact zone';

Exclusive contact zone:

- An exclusive contact zone of a 250m 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 eight knots (14.8kmh) or less.
- The first vessel within that zone is deemed to be 'in contact'; The second vessel to arrive must keep a distance of 250m from the shark, and any other vessels must be 400m from the shark.

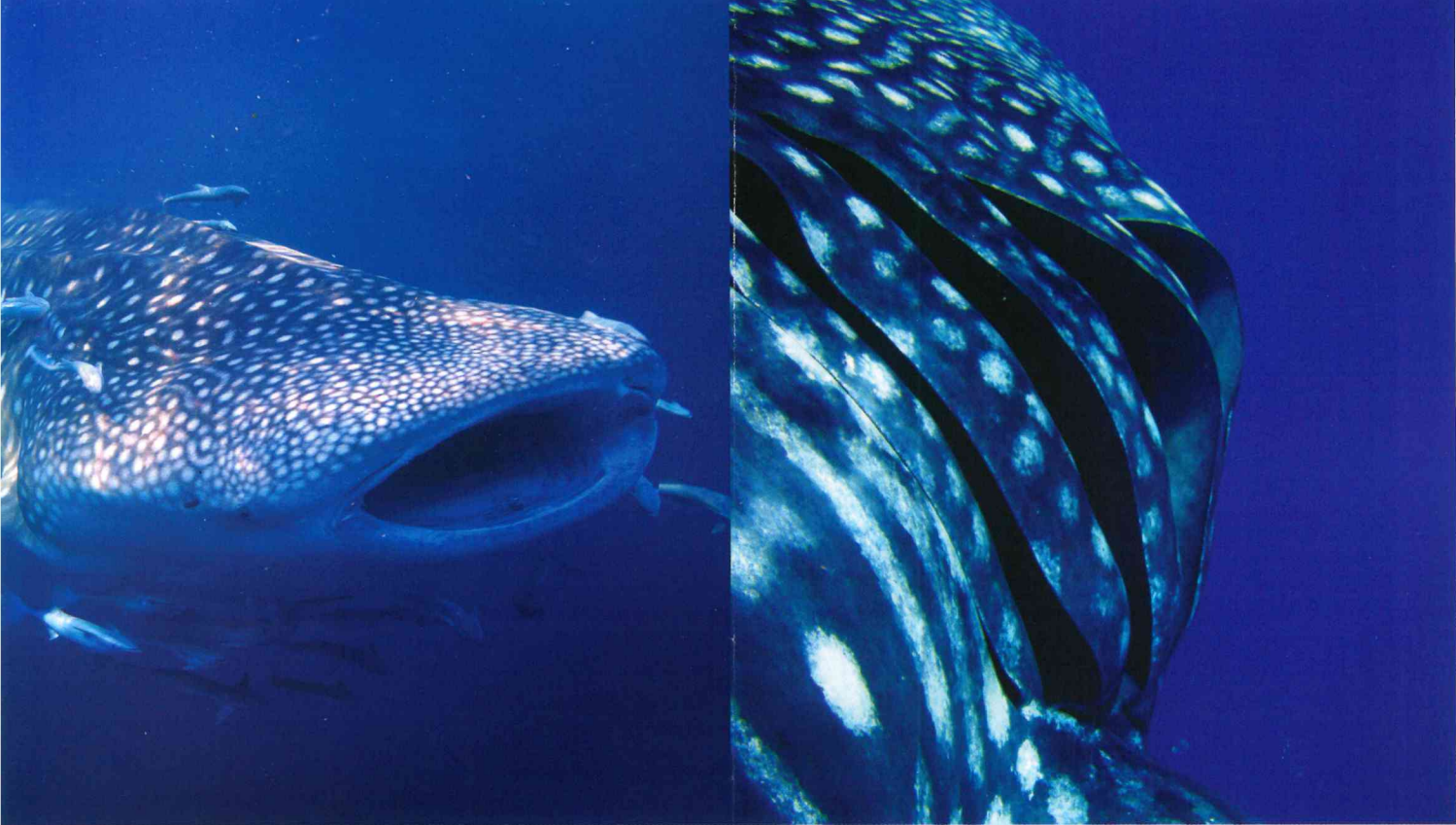
Vessel operators in the contact zone:

- must not approach closer than 30m to a shark
 - should approach from ahead of the shark's direction of travel when dropping swimmers into the water
 - must display both whale shark (commercial vessels only) and dive flags when swimmers are in the water
- Commercial tour operators operate under similar requirements to other vessels but have specific licence conditions that apply to their operation.

Above The Ningaloo Marine Park coastline. Photo – DBCA

Dubbed the 'gentle giants' of the sea, whale sharks visit the waters of Ningaloo Marine Park, Ningaloo Coast World Heritage Area on the Western Australian coast to feed on plankton between the months of March and July, some years extending and later after August.

During this time, we are privileged to be able to swim with these magnificent animals for an exhilarating and truly memorable experience.



Above Whale shark feeding on plankton.
Photo – Dani Rob/DBCA

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 of the world’s largest fish, the whale shark (*Rhincodon typus*) to Ningaloo Reef. These gentle giants cruise the world’s oceans in search of concentrations of plankton.

A fully grown whale shark can reach up to 18m in length, but more commonly, individuals encountered at Ningaloo Reef are between 4–12m long. A 12m whale shark may weigh as much as 11 tonnes and have a mouth more than 1m wide.

This annual aggregation is one of the key reasons that the Ningaloo Coast achieved World Heritage listing in 2011.

Above Whale sharks gills. *Photo – DBCA*

Distribution

Whale sharks are found in a band around the equator between about 30° north and 35° south, in water temperatures of 18°C to 30°C. They prefer water temperatures around 27°C, where cool nutrient-rich upwellings mingle with warm plankton-laden waters.

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 where they are easily accessible to observers.

Feeding

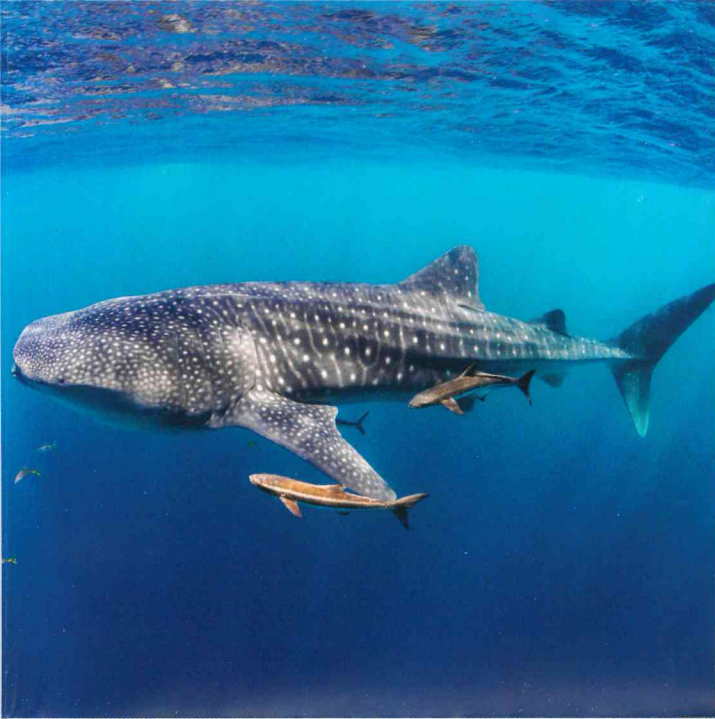
Whale sharks have thousands of tiny teeth arranged in more than 300 rows, but they neither bite nor chew their food. They are filter feeders, either actively sucking water into their mouths or cruising along near the surface of the water with their large mouths agape. Planktonic organisms, including small crustaceans such as krill and copepods, are strained from the water through the whale sharks’ gills by a fine mesh of gill rakers. They are also thought to supplement their diet periodically with squid and small fish such as anchovies and sardines.

Life cycle and reproduction

Little is known about the whale shark’s life cycle or exactly how long they live. It is speculated that whale sharks have a life span of more than 100 years, reaching maturity at about 30 years.

They are ovoviviparous, bearing live young which hatch from an eggcase while inside the mother’s body before being expelled. The period of gestation is unknown and the number of live young born also remains unclear.

Below Whale shark and cobia. *Photo – Migration Media*



Conservation

The role of the Department of Biodiversity, Conservation and Attractions

The Department of Biodiversity, Conservation and Attractions (DBCA) is entrusted to conserve and manage Western Australia’s wildlife, lands, waters and resources for the benefit of present and future generations.

DBCA 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.

DBCA recovers some of the cost of management and research activities through a system of licence charges on tour operators. By doing this, commercial whale shark interactions 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 for further research into whale shark behaviour and ensures that future generations will also have the opportunity to swim with whale sharks at Ningaloo.

Below DBCA’s Parks and Wildlife Service staff monitoring Ningaloo Marine Park. *Photo – DBCA*



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.

Scientific research continues to be conducted into the relationship between coral spawning events, upwellings, and the yearly aggregation of whale sharks to Ningaloo Reef.

DBCA supports various research programs including the effects of ecotourism on whale sharks, photo identification and tagging research.

Three forms of tags, acoustic tags, archival tags and satellite tags are being used to record information on depth, temperature, light and movement patterns. To protect the welfare of the sharks, tagging is conducted strictly in accordance with regulations of animal ethics committees.

Below Tourists swimming with a whale shark. *Photo – Cam Skirving*



Threats

Whale sharks are a threatened species. Listed as endangered on the International Union for Conservation of Nature (IUCN) Red List means they are facing a high threat of extinction in the wild.

Two of the threats they face at Ningaloo Marine Park are boat strike and ingestion of litter.

What can we do to help?

SLOW DOWN! Whale sharks commonly swim at the surface of the ocean, making them susceptible to being hit by boats. Reduce your speed when travelling through the marine park, and maintain a lookout at all times.

Small particles of plastics in the water can be ingested by not only whale sharks, but by other animals such as manta rays, turtles and whales. Remove all your litter from the marine park and dispose of it responsibly.

Whale sharks have feelings too... Mind what your propellers do.

Below Injury due to propeller strike. *Photo – Three Islands Whale Shark Dive*

