



National Environmental
Research Program

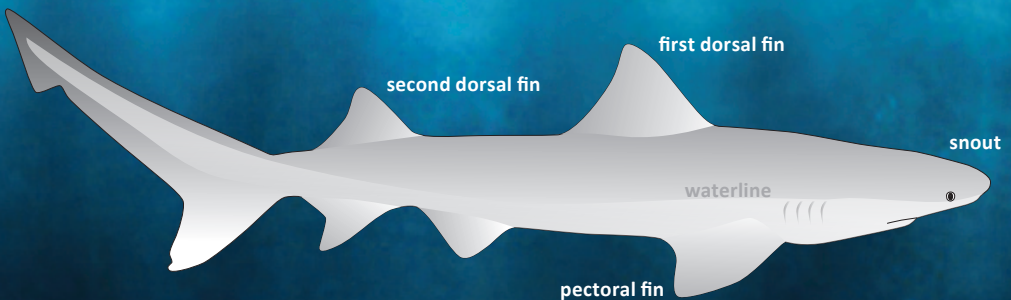
MARINE BIODIVERSITY *hub*

NORTHERN AUSTRALIA HUB

kakadu[®]
NATIONAL PARK

A GUIDE TO

SHARKS *of* KAKADU RIVERS



The sharks of Kakadu rivers

Three species of shark occur in the rivers of Kakadu National Park.

The globally widespread Bull Shark is common across northern Australia, while the two river sharks (*Glyphis* species) have restricted distributions and habitats. These two species are found only in limited areas of northern Australia



and southern Papua New Guinea. Kakadu is an internationally significant place for these threatened species.

Further shark species occur in estuarine waters of Kakadu, but this brochure features the three 'euryhaline' species: those that tolerate salinities ranging from freshwater to seawater. Very few shark species are capable of this. Rivers are especially important for juvenile euryhaline sharks. Adult Northern River Sharks also occur in rivers, estuarine, coastal and marine waters. The occurrence and habitat of adult Speartooth Sharks is unknown because adults of this species have not been recorded.

Speartooth Sharks and Northern River Sharks are protected species. If they are caught, they must be released safely back into the water.

Conservation status

Species	International Status ¹	Australian Status ²
Bull Shark	Near Threatened	Not listed
Speartooth Shark	Endangered	Critically Endangered
Northern River Shark	Critically Endangered	Endangered

¹ IUCN Red List of Threatened Species

² Commonwealth Environment Protection and Biodiversity Conservation Act

Report a sighting or catch

Research is being undertaken in Kakadu rivers to better understand shark ecology in order to help manage these species, particularly the threatened river sharks (*Glyphis* species).

Sharks are tagged to monitor movement patterns, determine critical habitats and estimate natural mortality. DNA is collected to understand the local and global structure of the population of these species, and to look at the family tree of the Speartooth Shark. Mathematical models are used to estimate the population size and trend (decreasing, increasing or stable) of Speartooth Sharks.

Research has shown that the Alligator Rivers region, in particular the South and East Alligator Rivers, support a significant population of Northern River Sharks. Speartooth Sharks are rarer, making the South Alligator River population of considerable importance.

If you've seen or caught a Speartooth Shark or a Northern River Shark, please send details to:

peter.kyne@cdu.edu.au

or call (08) 8946 7616

Include: Location of sighting or capture, date, size (if possible), photographs.

Releasing Sharks

- Do not gaff the shark.
- If safe to do so, remove hook and all fishing line using a de-hooking device.
- If you can't remove the hook, cut the line as close to the hook as possible.
- Minimise capture and handling time as much as possible.

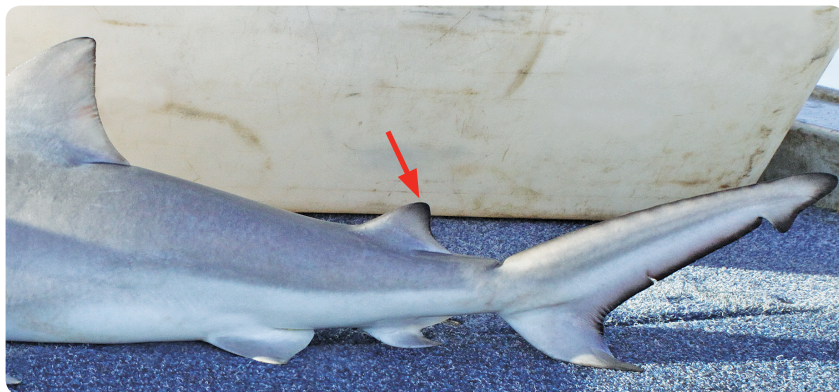


Separating river sharks from Bull Sharks

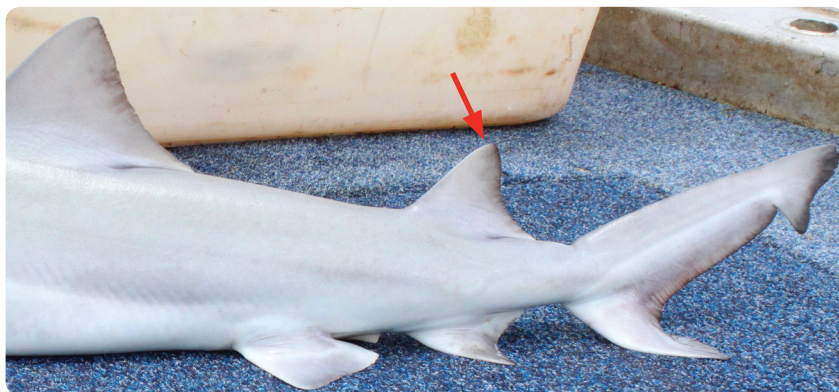
Three sharks occur in northern Australian rivers: Speartooth Shark, Northern River Shark (collectively known as 'river sharks') and Bull Shark.

The large, second dorsal fin of river sharks (the height is about three quarters of the height of the first dorsal fin) distinguishes them from the Bull Shark.

BULL SHARK second dorsal fin



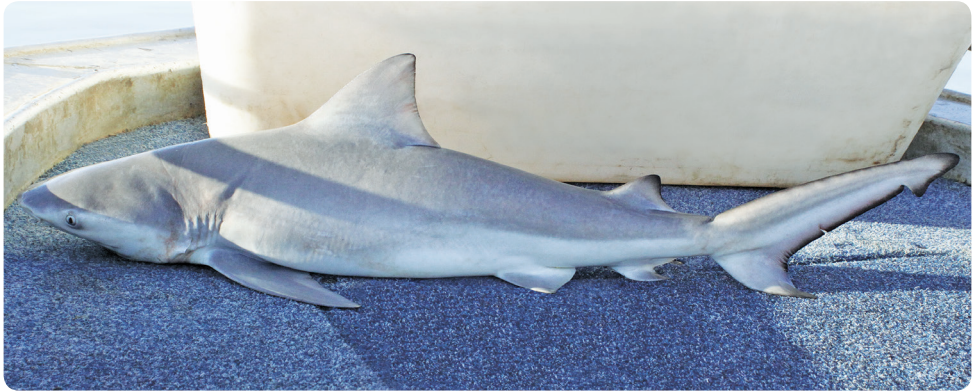
RIVER SHARK second dorsal fin



Bull Shark (*Carcharhinus leucas*)

In addition to the relatively small second dorsal fin, Bull Sharks have a short blunt snout and young have prominent dark markings on most fins. This species is sometimes referred to locally as 'black-tip shark' but that name should be

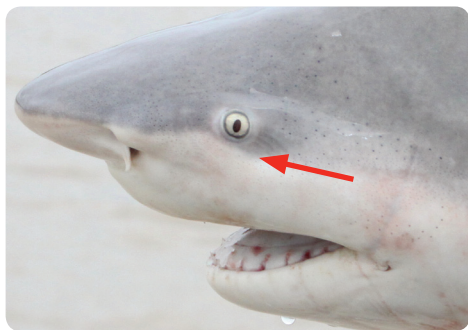
reserved for the true Blacktip Shark (*C. limbatus*) and Australian Blacktip Shark (*C. tilstoni*), both of which are common in northern coastal waters.



Spear-tooth Shark (*Glyphis glyphis*)

The large second dorsal fin easily separates Spear-tooth Shark from Bull Shark. The waterline mark just below the eye, prominent dark blotches on undersides of the pectoral fins (although not

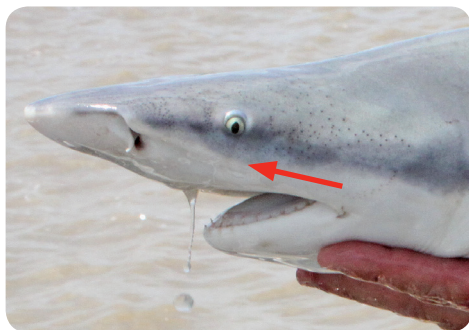
always as dark as shown) and the short snout separates Spear-tooth Shark from Northern River Shark.



Northern River Shark (*Glyphis garricki*)

The large second dorsal fin easily separates Northern River Shark from Bull Shark. The waterline mark more than an eye diameter below the eye, often pale undersides of the pectoral fins

(although can be dark in some individuals) and the elongate snout separates Northern River Shark from Speartooth Shark.



Sharks and Indigenous culture

Sharks are important to local bininj (Indigenous people).

Sharks are called *wamba* in Gundjeihmi and *arli* in Limilngan language. Sharks in Kakadu, like other plants and animals, relate to the seasons. Sharks are harvested by bininj when they are fat, and are an important resource for local communities.

'We call them arli or wamba. We know them all as one shark. It's pretty special for Aboriginal people in Kakadu to know that wamba are important'.
Samson Henry, Traditional Owner

'Bininj used to live on Bull Shark. Now we know some are different to Bull Sharks, I'll tell my family "throw it back"'. Irene Henry, Traditional Owner



Australian Government

Department of the Environment



Australian Government
Geoscience Australia



Australian Government



AUSTRALIAN INSTITUTE
OF MARINE SCIENCE



THE UNIVERSITY OF
WESTERN AUSTRALIA

The NERP Marine Biodiversity and Northern Australia Hubs are supported through funding from the Australian Government's National Environmental Research Program, administered by the Department of the Environment. The NERP program's objective is to improve our capacity to understand, manage and conserve Australia's unique biodiversity and ecosystems through the generation of world-class research, and its delivery to Australian environmental decision-makers and other stakeholders.



Further information:

Peter Kyne

T (08) 8946 7616

Peter.Kyne@cdu.edu.au