

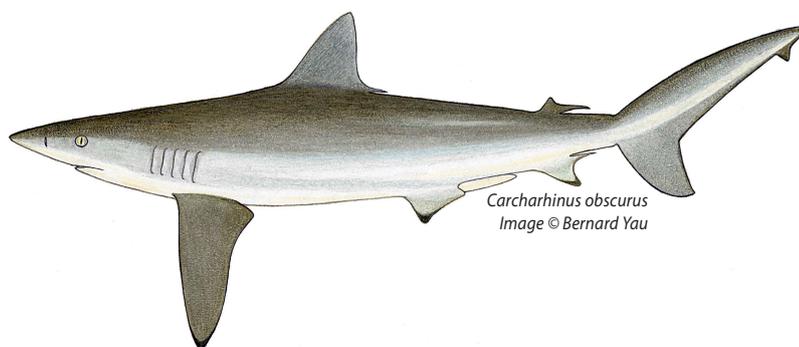
# Whaler Sharks

## (*Carcharhinus* spp.)

**EXPLOITATION STATUS** UNDEFINED

A complex of species that are very difficult to identify (particularly as juveniles). Insufficient information is available to determine status for any of the whaler shark species.

SCIENTIFIC NAME	STANDARD NAME	COMMENT
<i>Carcharhinus brachyurus</i>	bronze whaler	Generally south of Coffs Harbour.
<i>Carcharhinus brevipinna</i>	spinner shark	Generally north of Jervis Bay.
<i>Carcharhinus falciformis</i>	silky shark	Generally north of Sydney.
<i>Carcharhinus leucas</i>	bull shark	Nearshore, estuaries and rivers from Sydney north, more common on North Coast.
<i>Carcharhinus limbatus</i>	common blacktip	Caught north of Bermagui.
<i>Carcharhinus obscurus</i>	dusky whaler	Mainly caught inshore.
<i>Carcharhinus plumbeus</i>	sandbar shark	Generally from Coffs Harbour north in water warmer than 23°C.



### Background

Seven species of whaler sharks have been recorded in catches off NSW. The bronze whaler (*Carcharhinus brachyurus*) is found on the inshore continental shelf, usually in depths shallower than 100 m. Its Australian distribution extends southward from Coffs Harbour in NSW to southern WA. Bronze whalers reach a length of 300 cm, with males maturing at 235 cm, and females at 245 cm. Litter sizes of bronze whalers range from 7 to 20 pups.

Both the spinner shark (*C. brevipinna*) and common blacktip shark (*C. limbatus*) occur on the continental shelf from nearshore to depths of 75 m, although the common blacktip occasionally may be caught far offshore. These

two species are found from southern NSW northward around northern Australia to WA. In tropical waters, the common blacktip is externally indistinguishable from the Australian blacktip shark (*C. tilstoni*), however this species is infrequently found in NSW. Maximum length of the spinner shark is 280 cm, while the blacktip shark reaches 250 cm. For the spinner shark both sexes mature at 190-200 cm, while maturity in the blacktip shark varies with location. Males can mature at 135-180 cm and females between 120 and 190 cm. Litter sizes vary from 3 to 15 pups in the spinner shark, and 1 to 10 (usually 4 to 7) pups in the common blacktip shark. For both species, gestation period is 10-12 months and females breed every 2 years. There is a late summer fishery on juvenile spinner sharks in Stockton Bight off Newcastle, NSW.

The silky shark (*C. falciformis*) is oceanic but most abundant along the edge of the continental shelf, and can be found from the surface down to depths of 500 m. Silky sharks occur in waters north from Sydney, across northern Australia, and south to Lancelin in WA. Maximum length is 330 cm, with both sexes mature between 200 and 210 cm. The silky shark produces litter sizes between 2 and 15 pups after an unknown gestation.

The bull shark (*C. leucas*) is a coastal, estuarine and riverine shark. In the marine environment it occurs near the bottom, from the surf zone to depths of at least 150 m. It is found in tropical and warm temperate seas around northern Australia between Sydney and Perth. Bull sharks reach a length of 340 cm, and both sexes mature at 220-230cm. Litter sizes range from 1 to 13 pups. Females normally give birth in the lower reaches of estuaries, and the juvenile sharks may remain in the river for up to 5 years.

The dusky whaler (*C. obscurus*) is a widespread species, distributed around the entire Australian coast (although rare off southern Tasmania). It is found on the continental shelf, from the surf zone to adjacent oceanic waters. The dusky whaler inhabits depths ranging from the surface down to at least 400 m. Maximum length is 365 cm, with males maturing at 265-280 cm and females at 295-310 cm. Litter sizes range from 3 to 14 pups (average 10). Adults and adolescent dusky whalers appear to move inshore during summer in WA waters, however the occurrence of similar movement patterns has not been examined on the east coast.

The sandbar shark (*C. plumbeus*) prefers water warmer than 23°C. Its distribution extends around northern Australia from Coffs Harbour in NSW to Esperance in WA. The sandbar shark is found on the continental shelf and adjacent deep water from the intertidal region to depths of 280 m. This species is normally found closely associated with the substrate. It grows to a maximum length of 240 cm. Males mature at 130-180cm and females mature at 145-185 cm. Only 3 to 8 pups are produced every second year, with multiple males fathering a single litter.

Individual statistics are not available for each of these species from NSW catch records, as a large proportion of sharks have been reported in the 'sharks unspecified' category. The Ocean Trap and Line Fishery lands 68% of the annual catch of whaler sharks, with Estuary General and Ocean Trawl Fisheries also contributing

catches. Whaler sharks are the largest NSW commercial shark catch, with an average of 165 t landed per year between 1997/98 and 2005/06. The 2006/07 catch was considerably higher, at 425 t due to an increase in targeted fishing off the north coast of NSW. This fishery has prompted the development of specific management rules for shark fishing, and a requirement for fishers to more accurately report catches by species for the 'whaler shark' group. Many of the species landed in the NSW commercial fishery are also landed by fisheries in adjoining jurisdictions, and by recreational fisheries in NSW.

## Additional Notes

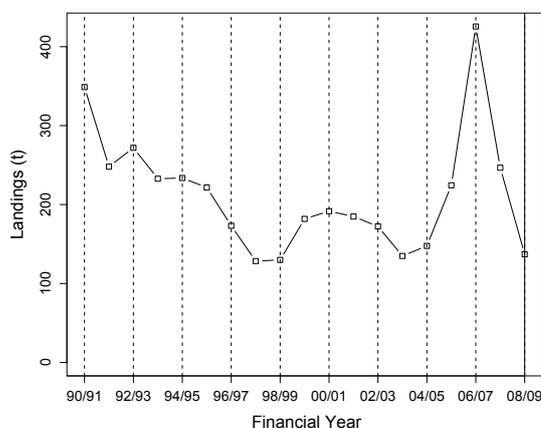
- Onboard observer studies suggest five species make up the majority of the catch by commercial line fishers.
- NSW recreational gamefish catch information is available, including identification of landed sharks to species level (Chan, 2001).
- There is a recreational bag limit of one whaler shark.

## Catch

### Recreational Catch of Whaler Sharks

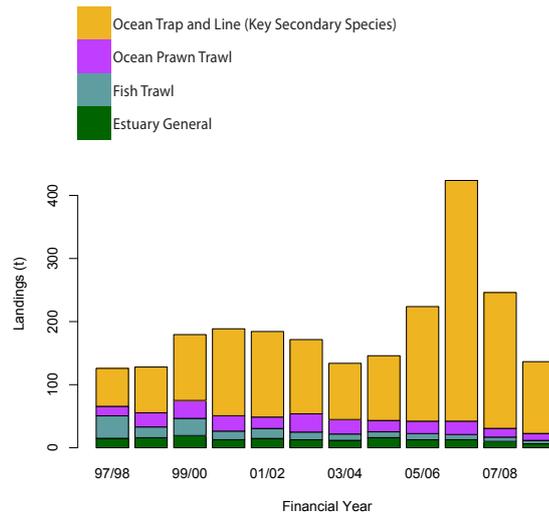
The annual recreational harvest of whaler sharks in NSW is likely to lie between 40 and 160 t. This estimate is based upon the results of the offsite National Recreational and Indigenous Fishing Survey (Henry and Lyle, 2003) and onsite surveys undertaken by I & I NSW.

### Historical Landings of Whaler Sharks



**Commercial landings (including available historical records) of whaler sharks for NSW from 1990/91 to 2008/09 for all fishing methods.**

## Landings by Commercial Fishery of Whaler Sharks



**Reported landings of whaler sharks by NSW commercial fisheries from 1997/98. Fisheries which contribute less than 2.5% of the landings are excluded for clarity and privacy.**

## Further Reading

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Please visit the CSIRO website, <http://www.marine.csiro.au/caab/> and search for the species code (CAAB) 37 018001, 37 018023, 37 018008, 37 018021, 37 018039, 37 018003 and 37 018007, common name or scientific name to find further information.

