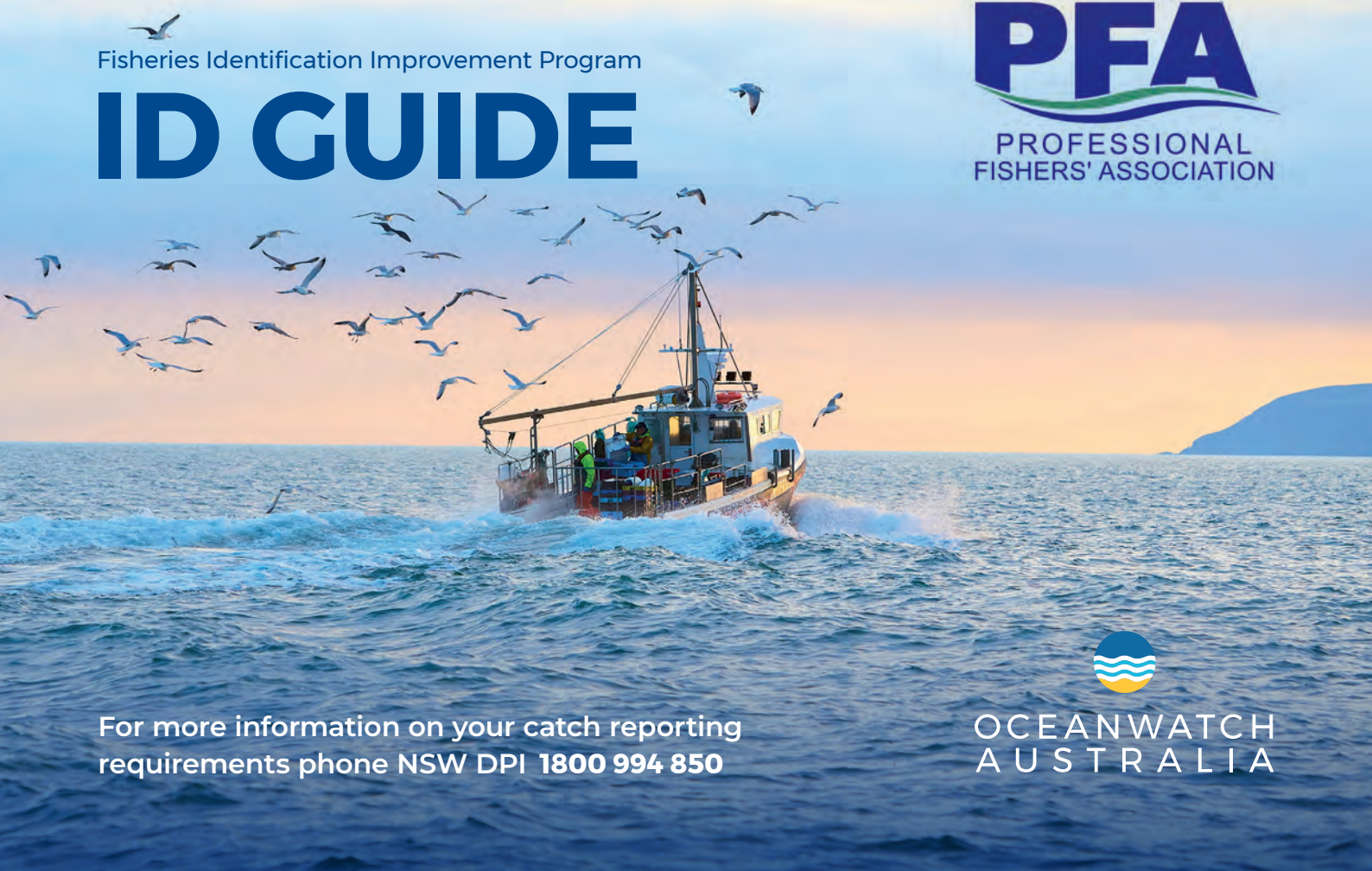


Fisheries Identification Improvement Program

ID GUIDE



For more information on your catch reporting requirements phone NSW DPI **1800 994 850**



OCEANWATCH
AUSTRALIA

The purpose of this ID Guide is to improve your species identification and confidence in the data you report.



INTRODUCTION

In 2019 an assessment of NSW offshore fisheries was conducted by a third-party auditor at the request of the Professional Fishers Association (PFA). The assessment was to benchmark NSW offshore fisheries against world's best practice.

One gap that was evident was the need to improve species identification and reporting for some species that either had misidentification issues, or a lack of current and accurate data.

PFA in-conjunction with OceanWatch Australia (OceanWatch), has implemented a fishery identification improvement program that will link strongly with Australian Marine Park values and strategies in the Ocean Trap & Line and Ocean Trawl fisheries.



This Our Marine Parks Grants project received grant funding from the Australian Government. We wish to acknowledge the NSW Offshore fishers for assisting with providing advice on the guide. We also acknowledge the support of the Australian Government and NSW Department of Primary Industries for funding and guidance, and imagery. This guide has been compiled by OceanWatch Australia on behalf of the Professional Fishers Association (PFA).



Leafscale Gulper Shark

NSW DPI
CODE

Centrophorus squamosus

SHK - 53



KEY FEATURES:

- No anal fin
- Two dorsal fins with spines, the first dorsal being relatively low and long
- Large eyes
- Rough leaf-like denticles



Harrison's Dogfish

NSW DPI
CODE

SHK - 22

Centrophorus harrissoni

Conservation Dependent under the Commonwealth *EPBC Act 1999*



KEY FEATURES:

- No interdorsal ridge
- No distinct black tips on fins
- Prominent spines extending from 1st and 2nd dorsal fin origins
- No small white spot in middle of upper surface of snout
- No anal fin
- Light-greyish or brownish upper body pale underside
- Tail mostly greyish with a slightly darker posterior half of tail-flaps
- Upper front of dorsal fins with dark patch; less obvious in adults
- Often a dark smudge around the bases of dorsal fins



Southern Dogfish

NSW DPI
CODE

Centrophorus uyato

SHK - 21



KEY FEATURES:

- No interdorsal ridge
- No distinct black tips on fins
- Prominent spines extending from 1st and 2nd dorsal fin origins
- Small white spot in middle of upper surface of snout
- No anal fin
- Upper body light brown in adults; grey in juveniles, pale underside
- Tail mostly greyish with a slightly darker posterior half of tail-flaps
- Tips and trailing edges of dorsal fins can be dark, but much less so in adults



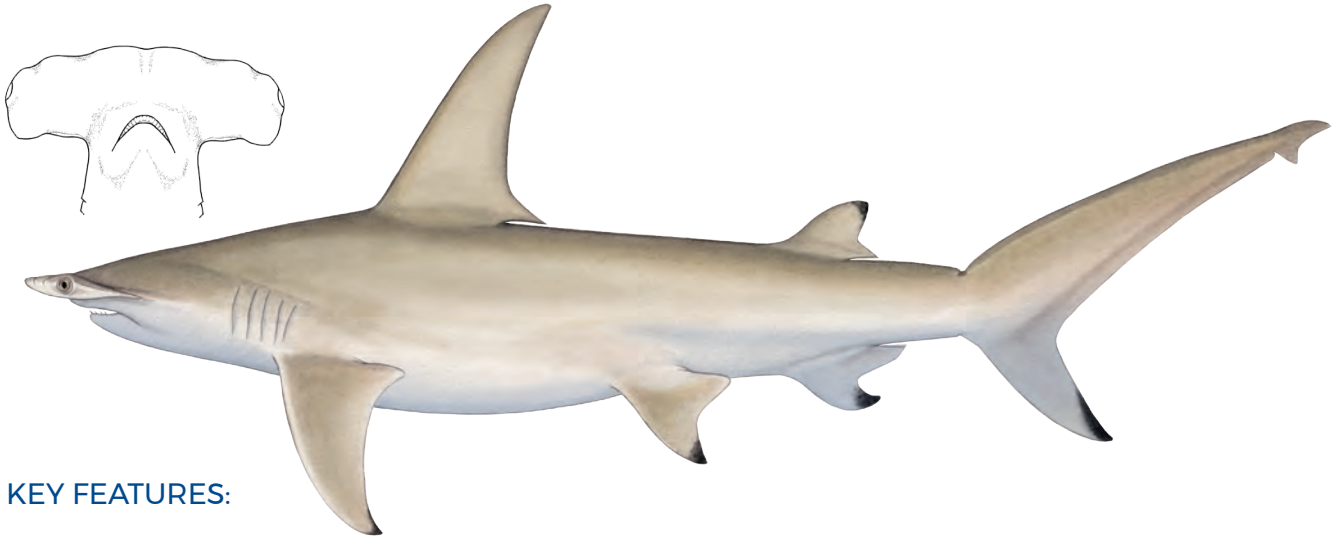
Great Hammerhead

NSW DPI
CODE

SHK - 33

Sphyrna mokarran

Conservation Status: Vulnerable under the NSW *Fisheries Management Act 1994*



KEY FEATURES:

- Hammer-like head with shallow side indentations
- Front of head nearly straight, with central indentation
- Height of 2nd dorsal fin equal to or slightly greater than height of anal fin
- Extremely tall, sickle-shaped 1st dorsal fin
- Teeth with clear serrations
- Bronzy to greyish-brown upper body; pale underside
- No fin markings in adults; 2nd dorsal fin tip dark in juveniles



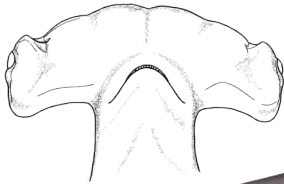
Scalloped Hammerhead

NSW DPI
CODE

SHK - 34

Sphyrna lewini

Conservation Status: Conservation Dependent under the Commonwealth *EPBC Act 1999*,
Endangered under the NSW *Fisheries Management Act 1994*



KEY FEATURES:

- Hammer-like head with deep side indentations
- Distinctive central Indentation front of head
- Head curved forward
- 2nd dorsal fin smaller than anal fin
- Teeth smooth edged (or at most weakly serrated)
- Olive-bronze to brownish-grey upper body; pale underside
- Underside of pectoral-fin tips dusky in adults; no other fin markings
- Pectoral, lower tail and 2nd dorsal fin tips dark in juveniles



Grey Nurse Shark

NSW DPI
CODE

N/A

Carcharias taurus (eastern stock)

Conservation Status: Critically Endangered under the Commonwealth *EPBC Act 1999*,
Critically Endangered under the NSW *Fisheries Management Act 1994*



KEY FEATURES:

- Large stout that are tapered at each end
- Short pointed snout and small eyes
- Upper surface is grey-brown or bronze coloured, underside is pale white
- Juveniles often have dark spots of varying sizes on the lower half of the body and the caudal (tail) fin
- Two distinctive large dorsal (top) fins of similar size.
- First dorsal fin is set well back from the pectoral (side) fins situated behind the gill slits
- The mouth extends beyond the front of the eye, and the long awl-like teeth visibly protrude from the mouth

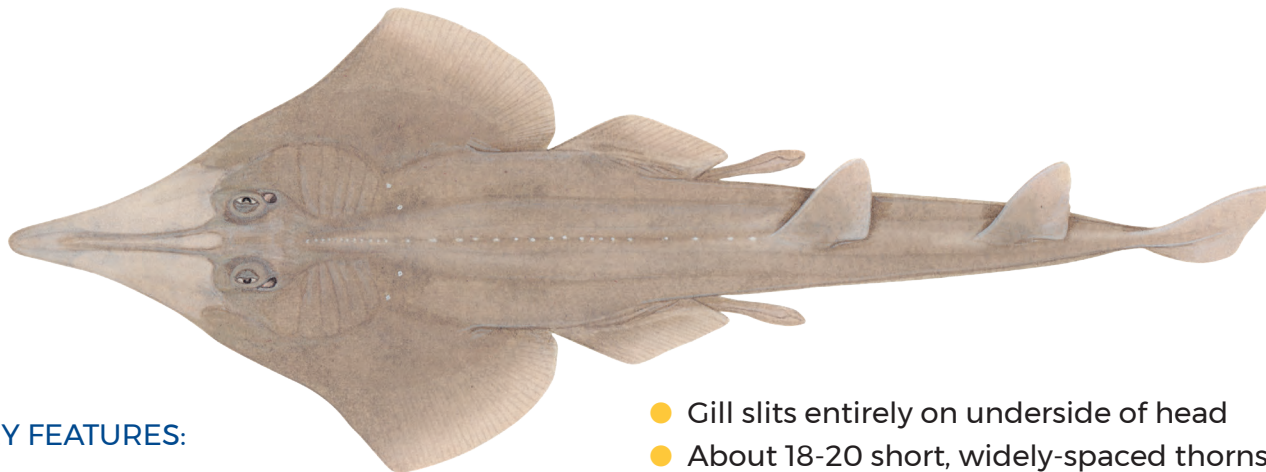


Eastern Shovelnose Ray

NSW DPI
CODE

Aptychotrema rostrata

SHK - 51



KEY FEATURES:

- Snout without saw-teeth
- 1st dorsal fin well behind pelvic fins
- No distinct lower tail lobe
- Long, flat, triangular, sharply-pointed (i.e. < 90-degree angle) snout and head
- Only 2-3 small thorns in front of each eye and only 1-2 small thorns next to each spiracle
- Gill slits entirely on underside of head
- About 18-20 short, widely-spaced thorns along centre-line of head and pre-dorsal tail
- Plain light brown upper body – sometimes with dusky blotches or light coloured speckles; mostly white underside
- Snout translucent, sometimes black underneath towards the tip



White's Seahorse

NSW DPI
CODE

N/A

Hippocampus whitei

Conservation Status: Endangered under the Commonwealth *EPBC Act 1999*,
Endangered under the NSW *Fisheries Management Act 1994*



KEY FEATURES:

- 17-18 dorsal-fin rays, and 16 pectoral-fin rays
- 34-35 tail-rings
- Coronet is tall arranged in five pointed star at apex
- Spines are variable ranging from low to moderately developed and from round to quite sharp
- The species colour is highly variable as the species is known to change colour depending on their mood and the habitat colouration it is living on.
- A long snout



Black Rockcod

NSW DPI
CODE

N/A

Epinephalus daemelli

Conservation Status: Vulnerable under the Commonwealth *EPBC Act 1999*,
Vulnerable under the NSW *Fisheries Management Act 1994*



KEY FEATURES:

- Black saddle-shaped spot on the base of its tail
- Distinct canine teeth on both the upper and lower jaws
- Adult fish can change quickly from a uniform dark grey-black to a blotched or distinctively banded dark pattern

Fisheries Identification Improvement Program

ID GUIDE



FisherDirect
(nsw.gov.au)

IT IS IMPORTANT TO RECORD ALL CATCH CORRECTLY

Improved reporting and data collection ensures accurate information is used to support fisheries management and planning, enabling more robust stock assessment to be completed.

GOOD DATA = GOOD MANAGEMENT DECISIONS

This ID guide will assist you by highlighting the identifying features on the species of concern. Carefully look for similarities, and once you are sure it is the same species as identified in the ID guide, record the interaction in the appropriate space within your logbook or via FishOnline - FisherDirect. Remember to include the correct NSW DPI code for the species.