

SPECIES IDENTIFICATION GUIDE

Pilbara/Kimberley Region



Department of Fisheries
Government of Western Australia



Fish for the future

ABOUT THIS GUIDE

The Pilbara/Kimberley Region extends from the Ashburton River near Onslow to the Northern Territory/South Australia border.

Recreational fishing activity in the region shows distinct seasonal peaks, with the highest number of visitors during the winter months (dry season). Fishing pressure is also concentrated around key population centres. An estimated 6.5 per cent of the State's recreational fishers fished marine waters in the Pilbara/Kimberley during 1998/99, while a further 1.6 per cent fished fresh waters in the region.

This guide provides a brief overview of some of the region's most popular and sought-after fish species. Fishing rules are contained in a separate guide on fishing in the Pilbara/Kimberley Region.

FISHING IN THE PILBARA/KIMBERLEY

Within the Pilbara/Kimberley Region, creek systems, mangroves, rivers and ocean beaches provide shore and boat fishing for

a variety of marine and freshwater species including barramundi, tropical emperors, sea-perches, trevallies, sooty grunter, threadfin, mud crabs, and cods.

The Ord and Fitzroy Rivers are two of the State's largest river systems. They are highly valued by visiting and local fishers. Both river systems are relatively easy to access and are focal points for recreational fishers pursuing barramundi.

Offshore islands, coral reef systems and continental shelf waters provide species of major recreational interest, including many members of the demersal sea perch family (*Lutjanidae*) such as scarlet sea perch and red emperor, cods, coral and coronation trout, sharks, trevally, tuskfish, tunas, mackerels and billfish.

Fishing charters and fishing tournaments have become increasingly popular in the region over the past five years. The Dampier Classic and Broome sailfish tournaments are both state and national attractions, and WA is gaining an international reputation for the quality of its offshore pelagic sport and game fishing.



OFFSHORE - BOTTOM DWELLING



Blackspotted tuskfish

Choerodon schoenleinii

Habitat: Over seagrass beds and along coral reefs. **Grows to:** 80cm and 9kg.

Reproduction: Matures as female at 25cm and then dominant female changes sex to male at 56cm. **Life Span:** At least 16 years.

Features: Black spot at base of dorsal fin.



Blue tuskfish

Choerodon cyanodus

Habitat: Over seagrass beds and along coral reefs. **Grows to:** 40cm and 4kg.

Reproduction: Matures as female at 13cm and then dominant female changes sex to male at 22cm. **Life Span:** At least 12 years.

Features: White chin and white spot on the middle of the back.



Blue-lined emperor (Black snapper)

Lethrinus laticaudis

Habitat: Juveniles are commonly found over inshore seagrass beds. Larger fish migrate to coastal reefs. **Grows to:** 80cm and 6kg.

Reproduction: Matures as female at 32cm then changes sex to male at 38 to 44cm.

Features: Dark streaks on each scale and short blue lines connecting the eyes.



Blue-spotted emperor

Lethrinus sp.

Habitat: Coral reefs and lagoons, hard sandy sea-bed away from reefs. **Grows to:** 60cm and 3kg. **Features:** Blue cheek spots, brown streak from the eye to the jaw.



Spangled emperor (Nor'west snapper)

Lethrinus nebulosus

Habitat: Coastal reefs over sand.

Grows to: 80cm and 6kg.

Reproduction: Matures at 40 to 45cm and four to five years old. **Life span:** At least 27 years.

Features: Blue bars on cheek.

OFFSHORE - BOTTOM DWELLING

Sweetlip emperor (*Red throat emperor*)

Lethrinus miniatus

Habitat: Coral/rocky reefs, forages widely over sand at night. **Grows to:** 90cm and 9kg.

Reproduction: Matures at 40cm and six to seven years old. Changes sex from female to male. **Life span:** At least 22 years.

Features: Red fins, mouth and red around eyes.



Yellow-tailed emperor

Lethrinus atkinsoni

Habitat: Coral reefs, lagoons, seagrass.

Grows to: 45cm and 2kg.

Features: Reddish fins and yellow-orange tail with red margins. Yellow around eye and red at corner of mouth.



Chinaman fish

Symphorus nematophorus

Habitat: Inshore coral reefs and deeper offshore areas to at least 50m.

Grows to: 100cm and 18kg.

Life span: At least 30 years.

Features: Juveniles have elongated filaments on rear part of dorsal fin.



Bar-cheeked coral trout

Plectropomus maculatus

Habitat: Inshore coastal reefs.

Grows to: 100cm and 25kg. **Reproduction:** Matures at 53 to 54cm and two years old. Changes sex from female to male.

Life span: At least 12 years.

Features: Numerous small blue round spots on body, large mouth and head.



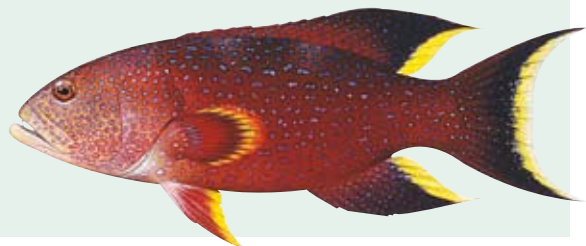
Coronation trout

Variola louti

Habitat: Inshore coral reefs and deeper offshore reefs to 100m.

Grows to: 83cm and 12kg.

Features: Distinct lunar-shaped tail.



OFFSHORE - BOTTOM DWELLING



Estuary cod

Ephinephelus coioides

Habitat: Juveniles found in estuaries and among mangroves. Mature adults migrate to near shore and offshore reefs. **Grows to:** 120cm and 30kg. **Reproduction:** Matures as female at 57cm and three to four years old. Changes sex to male at 55 to 75cm and five years old. **Life span:** At least 22 years. **Features:** Oblique bands on sides overlaid with red-brown spotting.



Malabar cod

Ephinephelus malabaricus

Habitat: Juveniles found in estuaries and among mangroves. Mature adults migrate to near shore and offshore reefs. **Grows to:** 115cm and 25kg. **Reproduction:** Changes sex from female to male. **Life span:** At least 32 years. **Features:** Dark spots with irregular white spots or blotches.

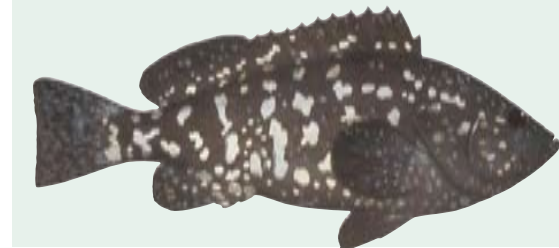


Queensland groper

PROTECTED SPECIES

Ephinephelus lanceolatus

Habitat: Inhabits coral reefs and rocky areas, often in the vicinity of caves. **Grows to:** 270cm and 400kg. **Reproduction:** Changes sex from female to male. **Features:** Juveniles have distinctive yellow patterned fins.



Rankin cod

Ephinephelus multinotatus

Habitat: Juveniles are found in inshore coral reefs. Adults migrate to deeper offshore reefs and trawling grounds when mature. **Grows to:** 100cm and 9kg. **Reproduction:** Matures at 41cm. Changes sex from female to male. **Features:** Irregular white blotches.



Crimson seaperch

Lutjanus erythropterus

Habitat: Offshore reefs and flat-bottom trawling grounds. **Grows to:** 80cm and 10kg. **Reproduction:** Matures at 34cm and two years old. **Life span:** At least 33 years. **Features:** Orange to red colouring on back with lighter colouring on belly. Smaller head and mouth than Scarlet seaperch.

OFFSHORE - BOTTOM DWELLING

Fingermark seaperch (*Golden snapper*)

Lutjanus johnii

Habitat: Coastal areas, especially near mangroves in estuaries and tidal rivers.

Grows to: 100cm and 12kg.

Features: Metallic pale yellow to silvery colour. Dark smudge below dorsal fin.



Moses seaperch

Lutjanus russelli

Habitat: Estuaries, bays and coastal and offshore reefs. **Grows to:** 50cm and 2kg.

Reproduction: Matures at 29cm.

Features: Reddish colouration and back spot (sometimes faint) on back.



Scarlet seaperch (*Saddle-tailed seaperch*)

Lutjanus malabaricus

Habitat: Coastal and offshore reefs and trawling grounds. **Grows to:** 100cm and 8kg.

Life span: At least 32 years.

Features: Orange to red colouring. Has a larger head and mouth than Crimson seaperch.



Stripey seaperch (*Spanish flag*)

Lutjanus carponotatus

Habitat: Forms schools near inshore coral reefs and on soft bottoms to 80m.

Grows to: 50cm and 2kg. **Reproduction:**

Matures at 24cm. **Life span:** At least 20 years. **Features:** Sides of body yellow or blue-grey with orange or yellow stripes.



Red emperor

Lutjanus sebae

Habitat: Juveniles inhabit nearshore turbid waters to offshore reefs. Mature adults migrate to deeper offshore coral reefs and adjacent sand and rubble bottoms.

Grows to: 116cm and 33kg. **Reproduction:** Matures at 50cm and three to four years old. **Life span:** At least 34 years. **Features:** Distinguished by shape and red-pink colour.



OFFSHORE - BOTTOM DWELLING

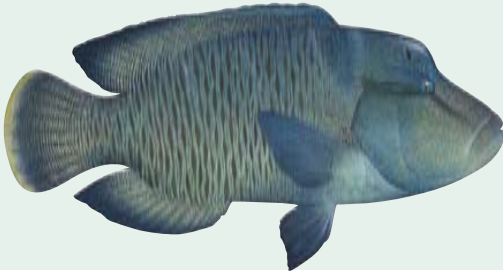


Potato cod *PROTECTED SPECIES*

Epinephelus tukula

Habitat: Inhabits coral reefs in vicinity of caves and ledges. **Grows to:** 140cm and 60kg. **Reproduction:** Mature at 99cm.

Features: Creamy white with large ovate spots.



Humphead Maori wrasse

PROTECTED SPECIES

Cheilinus undulatus

Habitat: Inhabits coral reefs in vicinity of caves and ledges. **Grows to:** 230cm and 190kg. **Reproduction:** Matures at 110cm. Changes sex from female to male.

Life span: At least 32 years.

Features: Large hump on forehead with scribbled blue/green stripes.



Maori seaperch

Lutjanus rivulatus

Habitat: Inshore coastal reefs and deeper offshore waters. **Grows to:** 65cm and 4kg. **Reproduction:** Matures at 37cm.

Features: Blubbery lips and wavy lines on head.



Robinson's seabream

Gymnocranius grandoculus

Habitat: Deep offshore reefs and trawl grounds. **Grows to:** 80cm and 5kg.

Features: Wavy blue lines on cheek and snout.



Painted sweetlips

Diagramma labiosum

Habitat: Coral reefs.

Grows to: 90cm and 6kg.

Features: Silver body colour.

OFFSHORE - BOTTOM DWELLING

Barramundi cod

Cromileptes altivelis

Habitat: Caves and crevices of coral reefs.

Grows to: 70cm and 5kg.

Reproduction: Matures at 39cm.

Features: Small compressed head and polka dot pattern.



OFFSHORE - PELAGIC

Broad barred Spanish mackerel (Grey mackerel)

Scomberomorus semifasciatus

Habitat: Coastal seas near reefs.

Grows to: 125cm and 15kg.

Reproduction: Matures at 63cm and one to two years old.

Life span: At least 12 years.

Features: Dark bars down sides and black area at front of dorsal fin.



Narrow barred Spanish mackerel

Scomberomorus commerson

Habitat: Offshore and coastal reefs.

Grows to: 240cm and 70kg.

Reproduction: Matures at 80cm and two years old. **Life span:** At least 22 years.

Features: Banded pattern, elongated shape, fewer dorsal spines than its broad barred relative.



Queensland school mackerel

Scomberomorus munroi

Habitat: Inshore coastal waters.

Grows to: 130cm and 12kg.

Reproduction: Matures at 53 to 54cm and one to two years old. **Features:** Large dark spots on sides and black area at front of dorsal fin.



OFFSHORE - PELAGIC



Cobia

Rachycentron canadus

Habitat: Coastal waters. **Grows to:** 200cm and 68kg. **Reproduction:** Matures at 50 to 60cm and two to three years old.

Life span: At least 15 years.

Features: White stripe on side.



Mahi-mahi (Dolphin fish)

Coryphaena hippurus

Habitat: Warm oceanic waters, often schooling around floating objects.

Grows to: 210cm and 40kg.

Reproduction: Matures at 40 to 50cm and four to five months old. **Life span:** Short lived, up to four years. **Features:** Yellow sides with black spots, elongated body and humped head.



Mackerel tuna

Euthynnus affinis

Habitat: Open waters close to the shoreline.

Grows to: 100cm and 14kg.

Reproduction: Matures at 50 to 60cm and three years old. **Features:** Dark blue colouring on shoulder and broken stripes on lower back.



Northern bluefin tuna

(Longtail tuna)

Thunnus tonggol

Habitat: Inshore and ocean waters.

Grows to: 150cm and 36kg.

Features: Short pectoral fins and slender body shape.



Wahoo

Acanthocybium solandri

Habitat: Oceanic waters, well offshore.

Grows to: 250cm and 83kg.

Reproduction: Matures at one to two years old. **Life span:** At least six years.

Features: Elongated shape, numerous spines in first dorsal fin.

OFFSHORE - PELAGIC

Barracuda

Sphyræna barracuda

Habitat: Coastal waters and offshore reefs.

Grows to: 180cm and 50kg.

Reproduction: Matures at two to four years and 60cm. **Features:** Large in size with diffuse dark bars on back.



Indo-Pacific sailfish

Istophorus platypterus

Habitat: Oceanic waters generally well offshore. **Grows to:** 300cm and 56kg.

Reproduction: Matures at 150cm.

Life span: To 13 years.

Features: Large sail-like dorsal fin.



INSHORE

Barramundi

Lates calcarifer

Habitat: Juveniles inhabit the upper reaches of rivers. Mature fish inhabit coastal waters, estuaries and lagoons, returning to the estuaries to spawn. **Grows to:** 200cm and 60kg. **Reproduction:** Matures as male at 50 to 55cm and three to five years old. Changes sex to female at 80cm or five years old. **Features:** Silvery appearance, deeply notched dorsal fin, 'humped' back and glassy eye.



Brown mud crab

Scylla sp.

Habitat: Muddy bottoms among mangroves, in sheltered estuaries and tidal flats.

Grows to: 25cm carapace and 2kg.

Reproduction: Matures at 110 mm carapace length. **Life span:** Four to five years. **Features:** Single spine behind each claw and one spine on each wrist.



INSHORE



Green mud crab

Scylla sp.

Habitat: Muddy bottoms among mangroves, in sheltered estuaries and tidal flats.

Grows to: 30cm carapace and 2.5kg.

Reproduction: Matures at 130mm carapace length. **Life span:** Four to five years.

Features: A pair of double spines situated behind each claw and another pair on each wrist.



Common dart

Trachinotus botla

Habitat: Sheltered bays and estuaries to surf beaches. **Grows to:** 75cm and 3.5kg.

Features: Small embedded scales, short pectoral fins, deep angular body.



Longtom

Family *Belonidae*

Habitat: Coastal waters, sometimes fresh water, to well offshore in the open sea.

Grows to: 150cm and 6.5kg.

Features: Long slender body, jaws extended into a bill, sharp teeth.



Mangrove Jack

Lutjanus argentimaculatus

Habitat: Juveniles inhabit mangrove estuaries and tidal rivers. Mature adults migrate to sheltered inshore coral reefs and offshore trawling grounds. **Grows to:** 150cm and 12kg.

Reproduction: Matures at 54 to 55cm and five to six years old. **Life span:** At least 52 years.

Features: Tall dorsal fin, no stripes on side, no black on fins.



Northern mullet

Protonibea diacanthus

Habitat: Found in tidal rivers, estuaries and coastal waters over muddy bottom.

Grows to: 150cm and 20kg.

Reproduction: Matures at 75cm and three years old. **Features:** Large scales, needle-like teeth and silvery-bronze in colour.

INSHORE

Queenfish

Scomberoides ommersonnianus

Habitat: Tropical waters over the Continental Shelf, often in very shallow water.

Grows to: 120cm and 16kg.

Reproduction: Matures at 63cm.

Features: Leathery skin with needle-like scales, sides with dark blotches.



Painted (green) rock lobster

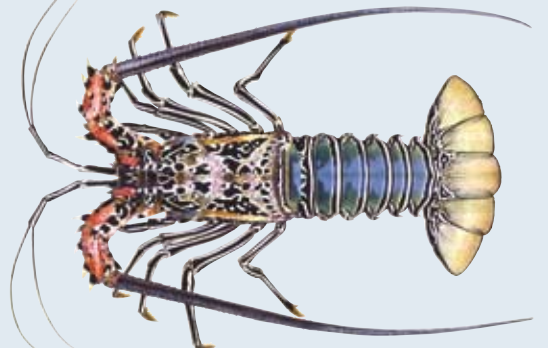
Panulirus versicolor

Habitat: Coral bottoms and coral reef heads.

Grows to: At least 150mm carapace length.

Reproduction: Matures at two and a half to three years and 75 to 95mm carapace length. **Life span:** At least five years.

Features: Greenish-blue in colour with distinct elongated stripes on legs.



Ornate (tropical) rock lobster

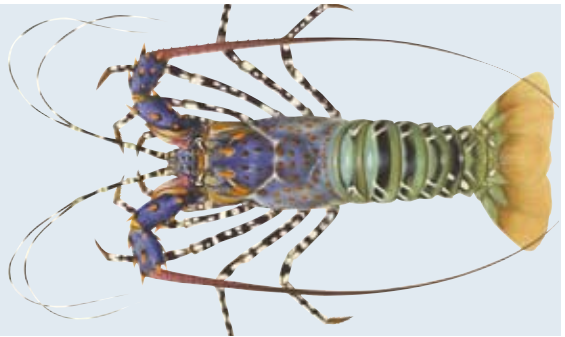
Panulirus ornatus

Habitat: Coral bottoms and coral reef heads.

Grows to: 150mm carapace length.

Reproduction: Matures at two and a half to three years and 75 to 95mm carapace length. **Life span:** At least five years.

Features: Greenish blue to reddish-brown in colour. Distinct rings and blotches on legs.



Spotted javelinfish

Pomadasyds kaakan

Habitat: Coastal waters and estuaries, usually over sand or mud bottoms

Grows to: 80cm and 6kg.

Reproduction: Matures at one year old.

Life span: Up to five years.

Features: Series of spots arranged in vertical rows on upper side and spots on dorsal fin.



INSHORE



Tripletail

Lobotes surinamensis

Habitat: Inhabits bays, muddy estuaries and lower reaches of large rivers. A sluggish offshore fish that often floats on its side near the surface in the company of floating objects. **Grows to:** 110cm and 19kg.

Reproduction: Matures at 25 to 50cm.



Blue (fourfinger or bluenose) threadfin

Eleutheronema tetradactylum

Habitat: Estuaries and muddy rivers, often near mangroves. **Grows to:** 120cm and 18.5kg. **Reproduction:** Matures as male at 28 to 55cm and one to two years old. Changes sex to female at 33 to 85cm and two to three years old. **Life span:** Six years.

Features: Divided pectoral fin with lower part containing four free filaments.



King (giant) threadfin

Polydactylus macrochir

Habitat: Inhabits shallow, often turbid water over sandbanks and mud substrates.

Grows to: 170cm and 45kg.

Reproduction: Matures as male then changes sex to female at 80 to 95cm.

Life span: At least 10 years.

Features: Five long thread-like filaments on the pectoral fin.



Giant trevally

Caranx ignobilis

Habitat: Coastal waters and offshore waters near reefs. **Grows to:** 170cm and 80kg.

Reproduction: Matures at 95 to 96cm and five years old. **Features:** Steep forehead, silvery dusky colour.

INSHORE

Golden trevally

Gnathanodon speciosus

Habitat: Coastal waters and offshore waters near reefs. **Grows to:** 120cm and 15kg.

Features: Large fleshy lips, no discernible teeth and golden belly with black spots.



Yellowfin bream

Acanthopagrus latus

Habitat: Coastal reefs, estuaries and inshore reefs to 35m. **Grows to:** 50cm and 1.5kg.

Reproduction: Matures as male at 24cm and two to three years old, then changes sex to female. **Life span:** At least 24 years.

Features: Lighter in colour than Northwest Bream and has yellow fins.



Golden-lined whiting

Sillago analis

Habitat: Sandy areas near estuary mouths and inshore waters. **Grows to:** 45cm and 0.3kg.

Reproduction: Matures at 26 to 27cm. **Features:** Yellow pelvic and anal fins, plain and silvery sides, pointed snout.



Salmon catfish

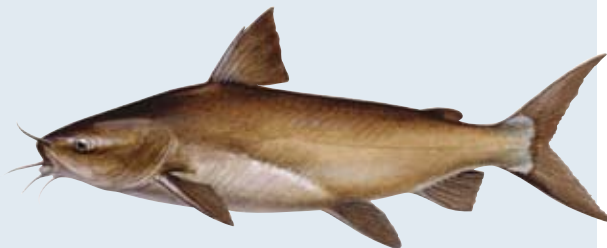
Arius thalassinus

Habitat: Coastal waters.

Grows to: 185cm and 4.5kg.

Reproduction: Matures at 33 to 40cm and two to four years. **Life span:** 19 years.

Features: Barbel on upper jaw.



FRESHWATER



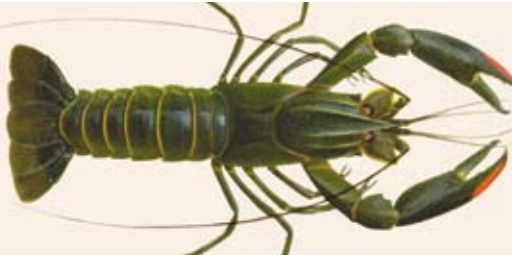
Sooty grunter

Hephaestus fuliginosus

Habitat: Freshwater rivers and streams.

Grows to: 54cm and 6kg.

Features: Darkish in colour, with 'blubber' lips.



Queensland redclaw

Cherax quadricarinatus

Habitat: Introduced into Lake Kununurra. Not native. **Grows to:** 90mm carapace length. **Life span:** Four to five years.

Features: Large freshwater crayfish with red claws.



Cherabin

Macrobrachium sp.

Habitat: Freshwater rivers and pools.

Grows to: 100mm carapace length.

Features: Large freshwater prawn.



Sawfish PROTECTED SPECIES

Family *Pristidae*

Habitat: Inshore areas, upstream to freshwater environments.

Grows to: 600cm and 500kg.



Silver cobbler

Arius midgleyi

Habitat: Freshwater environments, common in Lake Argyle. **Grows to:** 90cm and 14kg.

Features: Silver in colour, with thin short barbels.

Before you leave, tell someone about your boating plans, and if these change during the voyage, notify them immediately. Always report in when you return.

The information in this guide is current at the time of the date of printing, but may change. For the most up-to-date information on Fisheries and fishing rules in plain English, check the Department of Fisheries' web site at www.fish.wa.gov.au or contact the Department before going fishing.

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The latest version of each brochure is available for download in PDF format from the web site. For legislation, a link from the web site will take you to the State Law Publisher.



Further Information

Visit the Department of Fisheries website at: www.fish.wa.gov.au or contact:

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