

# SPECIES IDENTIFICATION GUIDE

## Gascoyne Region



Department of Fisheries  
Government of Western Australia



*Fish for the future*

## ABOUT THIS GUIDE

The Gascoyne bio-region extends from the Zuytdorp Cliffs, north of Kalbarri, to the Ashburton River, south of Onslow. The Gascoyne attracts about seven per cent of the State's recreational fishers – about 42,000 anglers a year – who target around 100 species of demersal and pelagic marine finfish.

This guide provides a brief overview of some of the region's most popular and sought-after fish species. Fishing rules are contained in *Recreational Fishing Guide to the Gascoyne Region* brochure.

## THE MARINE ENVIRONMENT

The Gascoyne's marine environment is characterised by a mix of tropical and temperate conditions, which is reflected in the fish species found in the area.

To the north, near Exmouth, tropical species such as emperor species and mackerel dominate. Farther south, temperate species such as western rock lobster, tailor, pink snapper, mulloway and western sand whiting occur.

A major influence on marine ecology, and the distribution of species and their spawning success, is the Leeuwin Current. This warm, tropical current flows south from Indonesia and down WA's coast past Cape Leeuwin and into the Great Australian Bight.

While the current varies greatly from year - to -year, it strengthens in March - April, carrying free-floating larvae, and many tropical species down the west coast.

## NINGALOO AND SHARK BAY

An array of aquatic life and natural wonders has made the Shark Bay World Heritage Area and the Ningaloo Marine Park world famous, attracting thousands of tourists and fishers each year.

One of the most popular species in Shark Bay for fishers is pink snapper. There are three separate stocks of pink snapper in the inner gulfs of Shark Bay, plus a separate oceanic population. These stocks do not interbreed and are vulnerable to overfishing. Accordingly, there are special fishing rules to help preserve pink snapper stocks in and around Shark Bay.

The protected waters of Shark Bay sustain extensive seagrass beds which are key nursery areas for finfish and invertebrate species, such as prawns and scallops. The warmer waters around the Ningaloo Marine Park supports a diversity of marine life associated with its coral reef systems.

The reef, at 260 kilometres long, is Australia's largest fringing coral reef system. In general, the Ningaloo Marine Park is essentially closed to commercial fishing and provides a high quality recreational fishing experience for species such as spangled emperor, Spanish mackerel and coral trout. The North West Cape protects the inner waters of Exmouth Gulf, a key commercial fishery for prawns.

Exmouth Gulf also supports an extensive mangrove system, which provides anglers with the opportunity to target popular creek species such as mangrove jack and mud crabs.

## OFFSHORE - BOTTOM DWELLING



### Baldchin groper

**Choerodon rubescens**

**Habitat:** Coral reefs and rock area.

**Grows to:** 90cm and 7kg. **Reproduction:** Matures as female at three to four years and 27cm. Changes sex to male at 10 to 12 years and 48 to 55cm.

**Features:** Abruptly pale white chin, blunt snout with short head and eyes set well above mouth.



### 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.



### Bluelined 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 hutchinsi**

**Habitat:** Coral reefs and lagoons, hard sandy seabed away from reefs. **Grows to:** 60cm and 3kg.

**Features:** Blue cheek spots, brown streak from the eye to the jaw.



### Long-nosed Emperor

**Lethrinus olivaceus**

**Habitat:** Coral and rocky inshore reefs.

**Grows to:** 100cm and 10kg. **Features:** Relatively slender body and long pointed snout. Dull greenish or olive colour with no distinctive markings.

## OFFSHORE - BOTTOM DWELLING

### Spangled Emperor (*Norwest 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.



### 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.



## OFFSHORE - BOTTOM DWELLING



### Coronation trout

*Variola louti*

**Habitat:** Inshore coral reefs and deeper offshore reefs to 100m. **Grows to:** 83cm and 12kg.

**Features:** Distinct lunar-shaped tail.



### Estuary Cod

*Epinephelus 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.



### Rankin Cod

*Epinephelus 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.



### 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.



### 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.

## OFFSHORE - BOTTOM DWELLING

### 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.



### Pink Snapper

#### *Pagrus auratus*

**Habitat:** Reefs, large bays or on the Continental Shelf. **Grows to:** 130cm and 19.5kg. **Reproduction:** Matures at 40cm and four years old. **Life span:** 35 years. **Features:** Top, tail and side fins are pink, and the bottom fins range from pale pink to creamy white. Bright blue spots on upper part of body.



### 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 - 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.



## OFFSHORE - PELAGIC



### 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.



### 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.



### 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

*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.

## OFFSHORE - PELAGIC

### 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.



### Yellowfin Tuna

*Thunnus albacares*

**Habitat:** Oceanic waters generally well offshore.

**Grows to:** 210cm and 176kg. **Reproduction:** Matures at 100cm and two years old.

**Life span:** Eight years. **Features:** Yellow dorsal and anal fins.



## INSHORE

### Blue Swimmer Crab

*Portunus pelagicus*

**Habitat:** Bays, estuaries, muddy or sandy bottoms, intertidal areas to 60m deep. **Grows to:** 20cm carapace, 80cm claw span and 1kg. **Reproduction:** Matures at 80 to 90mm carapace. **Life span:** Three to four years. **Features:** Mottled brown in males and mottled brown in females, broad carapace, long claws.



### 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.



### Chinaman Cod (*Charlie Court Cod*)

*Epinephelus rivulatus*

**Habitat:** Inshore coral and rock reefs, small coral heads or among weed. **Grows to:** 38cm and 1.5kg

**Reproduction:** Changes sex from female to male.

**Features:** Oblique brown/ reddish bars on sides, white blotches on head, large mouth.



## INSHORE



### Dart

**Trachinotus sp.**

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

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



### 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.



### 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.



### Gold-spotted Trevally

**Carangoides fulvoguttatus**

**Habitat:** Coastal waters. **Grows to:** 130cm and 18kg.

**Features:** Elongate shape with gold/ brassy spots on side and back.



### Longtom

**Family Belontiidae**

**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.

## INSHORE

### 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 - 55 cm and five to six years old. **Life span:** At least 52 years. **Features:** Tall dorsal fin, no stripes on side, no black on fins.



### Mulloway

***Argyrosomus hololepidotus***

**Habitat:** Coastal embayments and estuaries, off beaches and inshore reefs. **Grows to:** 200cm and 74kg. **Reproduction:** Matures at 75cm and six years old. **Life span:** 30 years. **Features:** Silver/bronze sides, long dorsal fin and 'spade tail'.



### North-West Blowfish (Silver toadfish)

**POISONOUS**

***Lagocephalus sceleratus***

**Habitat:** Coastal waters. **Grows to:** 88cm and 6.5kg.

**Features:** Distinct silver stripe on side, pronounced incisor teeth. Can give a serious bite. Flesh is poisonous.



### 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.



### Sea Mullet

***Mugil cephalus***

**Habitat:** Coastal waters and lagoons. Mature fish migrate to open sea to spawn. **Grows to:** 79cm and 4kg. **Reproduction:** Matures at 30cm and three years.

**Life span:** 16 years **Features:** Large gelatinous eyelid and bluish spot on pectoral fin base.



## INSHORE



### Tailor

*Pomatomus saltatrix*

**Habitat:** Beaches, inshore reefs, estuaries.

**Grows to:** 110cm and 12kg. **Reproduction:** Matures at 34cm and two years old. **Life span:** Nine years.

**Features:** Prominent lower jaw, silver, elongated and compressed body.



### Tarwhine (Silver Bream)

*Rhabdosargus sarba*

**Habitat:** Coastal marine, estuaries and offshore reefs to 35m deep. **Grows to:** 80cm and 12kg.

**Reproduction:** Matures at 26cm. **Features:** Silvery with yellow lines matching scale rows, anal and pelvic fins vary from yellow to orange.



### 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.



### Western School Whiting

*Sillago vittata*

**Habitat:** Inshore marine. **Grows to:** 30cm and 0.2kg.

**Reproduction:** Matures at 13 to 16cm **Features:** Distinctive dark blotch at base of pectoral fin.



### Yellowfin Whiting

*Sillago schomburgkii*

**Habitat:** Shallow sandy areas near estuary mouths and inshore waters. **Grows to:** 42cm and 0.7kg.

**Reproduction:** Matures at 18 to 20cm and two years old. **Life span:** 12 years. **Features:** Yellow pelvic and anal fins, sides plain and silvery, pointed snout.

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.

All fish illustrations in this guide are ©R.A. Swainston/anima.net.au

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:

### DEPARTMENT OF FISHERIES

3rd Floor, The Atrium,  
168 St George's Terrace, Perth, 6000  
Ph: (08) 9482 7333  
Fax: (08) 9482 7389  
e-mail: headoffice@fish.wa.gov.au

### GASCOYNE REGIONAL OFFICE

59 Olivia Tce, Carnarvon  
PO Box 774, 6701  
Ph: (08) 9941 1185  
Fax: (08) 9941 1951

### DENHAM DISTRICT OFFICE

63 Knight Tce, Denham, 6537  
Ph: (08) 9948 1210  
Fax: (08) 9948 1154

### EXMOUTH DISTRICT OFFICE

Payne St, Exmouth, 6707  
Ph: (08) 9949 2755  
Fax: (08) 9949 1558



RECREATIONAL FISHING  
ADVISORY COMMITTEE



FISHWATCH



ILLEGAL FISHING REPORTS  
**1800-815-507**  
24 HOURS / 7 DAYS A WEEK



CUSTOMER  
FOCUS  
WESTERN AUSTRALIA

RF386  
MAY 2007