Deep-bottom fish identification cards for small-scale fishermen
These identification cards are produced by the Secretariat of the Pacific Community (SPC) to help improve catch data and statistics from small-scale vessels that regularly target deep-bottom fish species. With a better understanding of small-scale vessel catches, regional fisheries managers can ensure that stocks are better managed throughout their range and that small-scale fishermen get more recognition and support for their contribution to food security and employment at the local level. The most likely users of these cards are small-scale fishers who actively target deep-bottom fish stocks, along with fishery officers who are tasked with monitoring these fisheries. Fisheries training institutions are other potential users.

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This publication is based on the *Fish species identification manual for deep-bottom snapper fishermen* by Chapman et al. (2008).

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Dorsal spines
Snout
Cheek
Cheek cleft
Gill cover
Pectoral fin Pelvic fin
Anal fin
Caudal fin
Head
Body
Caudal fin
Dorsal spines
Opercular spine
Snout
Cheek
Cheek cleft
Gill cover
Pectoral fin Pelvic fin
Anal fin
Caudal fin
Lateral line

Different caudal fin types
Rounded
Truncate
Emarginate
Lunate
Forked
Ruby snapper
Etelis carbunculus

- Dorsal fin deeply notched
- Distinct yellowish lateral line
- Small black markings on upper lobe of caudal fin
- Rounded opercular spine (behind skin)
- White tip on lower lobe of caudal fin

ETA

max. length: 125 cm

ETA

80–400 m
Marshi snapper
*Etelis marshi*

- **Distinct yellowish lateral line**
- **Dorsal fin deeply notched**
- **No black markings on upper lobe of caudal fin**
- **White tip on lower lobe of caudal fin**
- **Pointed opercular spine (behind skin)**

**max. length:** 70 cm

**F96**

**80–400 m**
**Scarlet snapper**
*Etelis radiosus*

- Gills silverish
- Forked caudal fin with notch in centre

90–360 m
Flame snapper
Etelis coruscans

Tips of upper and lower caudal fin elongated to form filaments, often black

90–400 m
Rusty jobfish
Aphareus rutilans

- Lower jaw projecting
- Dorsal and anal rays greatly prolonged
- Caudal fin lunate
- Gills silver
- Pectoral fin long, reaching to above the anus

ARQ
40–330 m
Randall’s snapper
Randallichthys filamentosus

- Dark to black margin on first half of dorsal fin
- Yellowish-orange on upper half of body
- Dark to black margin on pelvic fin

150–380 m
**Crimson jobfish**

*Pristipomoides filamentosus*

- Top of head has yellow lines and blue spots
- Crimson to reddish margin on dorsal and caudal fins
- Line drawn from upper lip to fork in caudal fin passes below eye
Lavender jobfish
Pristipomoides sieboldii

- Large eye for size of fish
- Dorsal fin has orange margin
- Caudal fin has pale margin
- Tooth patch on tongue
- Line drawn from upper lip to fork in caudal fin passes through centre of eye

100–360 m
**Scalemouth jobfish**
*Parapristipomoides squamimaxillaris*

- Upper lobe of caudal fin yellow
- Lower lobe of caudal fin pink

**PQM**

130–460 m
Sharptooth jobfish
Pristipomoides typus

Wavy yellow lines on dorsal fin

Silverish belly

LRU
40–120 m
**Golden eye jobfish**

*Pristipomoides flavipinnis*

- Top of head has reticulated speckles
- Yellow margin on spiny dorsal fin
- Yellowish margin on caudal fin when fresh

Range: 60–360 m
Goldbanded jobfish
Pristipomoides multidens

Gold bands edged in blue on snout and cheeks below eye

Pale-bluish and yellowish spots on dorsal fin
**Ornate jobfish**  
*Pristipomoides argyrogrammicus*

Upper body has pink and yellow blotches and irregular blue markings
Oblique-banded snapper
Pristipomoides zonatus

Four distinct yellow oblique bars on upper body

Lower lobe of caudal fin yellow

70–300 m
Goldflag jobfish
Pristipomoides auricilla

‘Herringbone’ pattern of pale-yellow and purple stripes along body

Upper lobe of caudal fin yellow with grey-blue margin

LWA
80–360 m
Cocoa snapper
Paracaesio stonei

Four narrow dark-brown bands extending across whole body

Forehead rounded
**Saddle-back snapper**

*Paracaesio kusakarii*

- Four broad saddle-like dark brown bars on back extending to or below lateral line
- Forehead humped in larger adults
- Upper lobe of caudal fin white

LRK

60–310 m
**Vanuatu snapper**

*Paracaesio gonzalesi*

Yellow band along lateral line from back of gill cover to halfway along dorsal fin

Pectoral fin yellow

LRG

140–250 m
**Tang’s snapper**
*Lipocheilus carnolabrum*

Upper lip thick with a fleshy protrusion at anterior end

Upper body golden-olive to greenish-yellow
Mozambique large-eye bream

Wattsia mossambica

- Lips whitish to yellow
- Dark patch at base of pectoral fin
- Caudal fin slightly forked with broadly rounded lobes
- Depth range: 60–220 m
Japanese large-eye bream
Gymnocranius euanus

- Large eye
- Scattered black spots, at most covering a single scale
- All fins clear to reddish
- Rounded lobes on caudal fin

15–250 m
Golden hind
Cephalopholis aurantia

Small red or yellow dots on head and back to end of spiny dorsal fin

Pale-blue margin on caudal fin

CFZ

20–250 m
Eightbar grouper
*Epinephelus octofasciatus*

Eight pale vertical bands across body extending over dorsal fin
Speckled grouper
Epinephelus magniscuttis

Body and head covered with distinct dark spots (speckles)

Spots on dorsal fin and top half of caudal fin

No spots on belly

No spots on pectoral, pelvic or anal fins

EEJ

50–340 m
**Comet grouper**

*Epinephelus morrhua*

Distinct oblique bands running from snout to upper body

Lower bands break into lines and blotches
Oblique-banded grouper
Epinephelus radiatus

Dots forming subtle lines between bands

Dark spots on soft dorsal fin and base of caudal fin

Bands made up of double lines and becoming more vertical towards caudal fin

80–390 m
Dot-dash grouper
Epinephelus poecilonotus

- Darkish oval blotch on back and spiny dorsal fin
- Four dark-brown bands (broken into spots) on side running concentric to oval blotch

EWP
45–375 m
Reticulate grouper
Epinephelus tuamotuensis

Irregular coarse dark-brown reticulum on body and back of head
**Red-tipped grouper**

*Epinephelus retouti*

- Spiny dorsal fin with deep-red tips
- Soft dorsal and upper part of caudal fin grey-brown
- Caudal fin truncate

Depth range: 40–220 m
**Brownspotted grouper**
*Epinephelus chlorostigma*

- Small dark-brownish spots over head, body and fins
- Caudal fin truncate with white margin

- Habitat: 4–300 m
Golden grouper
Saloptia powelli

- Upper body yellow with no spots
- Head orange
- Dorsal and caudal fins yellow

140–370 m
**Garish hind**
*Cephalopholis igarashiensis*

- Seven distinct irregular bright-yellow bands
- Body bright red

80–250 m
**Almaco jack**
*Seriola rivoliana*

- Second dorsal fin four times the height of first dorsal fin
- Leading edge of pelvic fin and margin of anal fin white

10–340 m
Greater amberjack
Seriola dumerili

- Second dorsal fin twice the height of first dorsal fin
- Extreme tip of lower caudal fin lobe pale or white
- Tip of pelvic fin and anal fin lobes white

Jacks

1–360 m
Black jack
Caranx lugubris

Small black spot at top of gill cover

Head profile concave at eye level
**Longnose trevally**
*Carangoides chrysophrys*

- Black spot on upper edge of gill cover
- No scales on breast, ventrally to behind pelvic fin

30–240 m
Black snoek
Thrysitoides marleyi

Lateral line starts level with back of gill cover, then splits into two around fourth dorsal spine

Body elongated and compressed

Well-developed pelvic fin, as long as pectoral fin
**Snake mackerel**

*Gempylus serpens*

- First dorsal fin very long, second dorsal fin short and followed by five or six finlets
- Two distinct lateral lines
- Body very long and skinny
- Very small pelvic fin

GES

1–330 m
Oilfish
Ruvettus pretiosus

- Very rough skin
- Sharp scaly keel
- Two anal finlets

100–800 m
**Roudi escolar**
*Promethichthys prometheus*

- **Single lateral line**
- **Small pelvic fin, represented by a single very small spine and soft ray**

*Snake mackerels*
Japanese rubyfish
Erythrocles schlegelii

- Rough scales
- Deeply notched dorsal fin
- Distinct ridge or caudal keel
- Mouth large and extends with flexible jaw

50–250 m
Golden kalikali
Erythrocles scintillans

Deeply notched dorsal fin

No trace of ridge or caudal keel

ERZ
250–350 m

Other deep-bottom fish
Ward’s tilefish
Branchiostegus wardi

Caudal fin has dark triangle on lower lobe and two yellow stripes above
**Roughear scad**

*Decapterus tabl*

- Upper body reddish-green
- First and second dorsal fins reddish
- Caudal fin bright red
- Small black spot on top edge of gill cover

Other deep-bottom fish

DCT

200–360 m
Silver eye
Polymixia japonica

Rounded snout
Tips of dorsal and caudal fins blackish
Two barbels under mouth

160–630 m
**Large-headed scorpionfish**
*Pontinus macrocephalus*

- Tentacles over eye
- Two spines on gill cover

*Other deep-bottom fish*
**Threetooth puffer**

*Triodon macropterus*

- Beak-like teeth
- Ventral flap very large
- Large black spot on upper part of ventral flap
- Ventral flap yellow with white spots

50–300 m

Other deep-bottom fish
Daggertooth pike conger
*Muraenesox cinereus*

- **Elongated snout**
- **Gill openings of the two sides nearly meet on ventral side**

*Other deep-bottom fish*
**Bluntnose sixgill shark**

*Hexanchus griseus*

- Snout broadly rounded
- No first dorsal fin
- Single white stripe along side
- Long upper lobe of caudal fin
- Six very long gill openings
- All fins have white margin

1–2500 m
**Shortnose spurdog**
*Squalus megalops*

Dorsal fins with black tips and white margins

Spine on leading edge of both first and second dorsal fins

30–750 m
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