



Pacific  
Community  
Communauté  
du Pacifique

# *Offshore fish identification cards for small-scale line fisheries*



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

Project co-ordination was done by the Oceanic Fisheries Programme Fisheries Monitoring Section and the Fisheries Information Section, SPC. Most of the colour illustrations are by Les Hata. Others are by Hazel Adams (p. 8, 9, 12, 13, 32, 33, 45, 46, 47 and 48), Jipé Le-Bars (p. 4 and 5) and Rachel O'Shea (p. 27); black and white illustrations courtesy of the Food and Agriculture Organization of the United Nations (FAO).

This publication is based on the *Marine species identification manual for horizontal longline fishermen* by Chapman et al. (2006).

© Pacific Community, 2017

Original text: English

Pacific Community Cataloguing-in-publication data

Offshore fish identification cards for small-scale line fisheries / Pacific Community

1. Marine fishes – Classification – Oceania.
2. Fishery management – Oceania.
3. Fishes – Identification – Oceania.

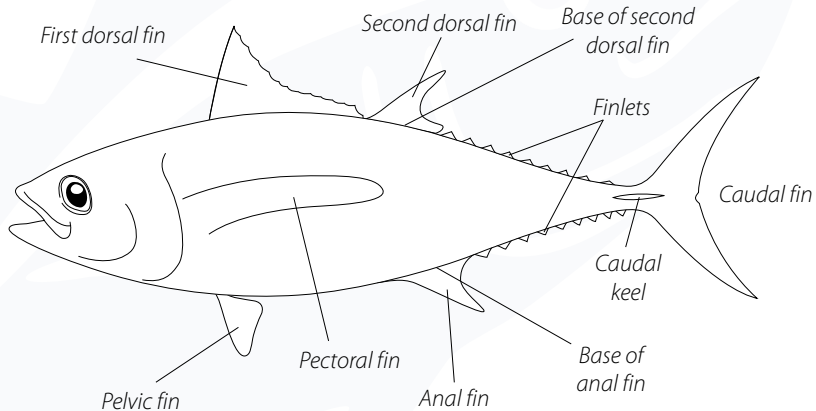
I. Title II. Pacific Community

338.3720995

ISBN: 978-982-00-1082-6

AACR2

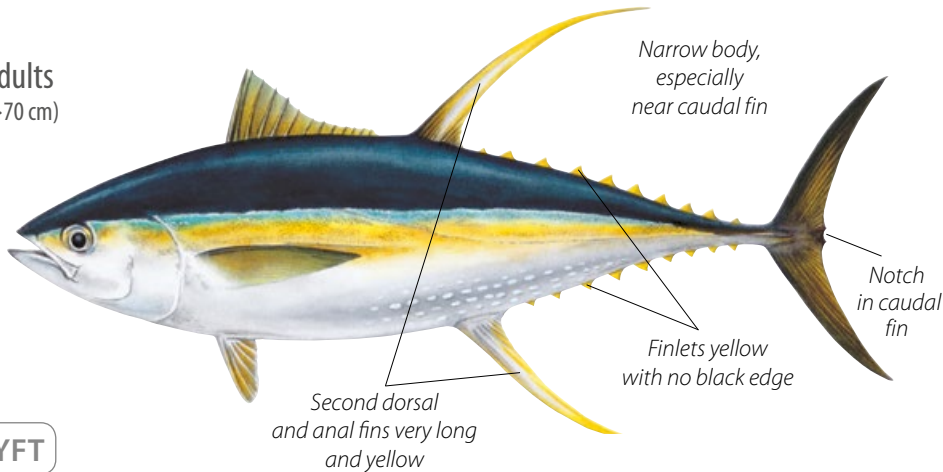
# *Tunas and other scombrids*



# Yellowfin tuna

*Thunnus albacares*

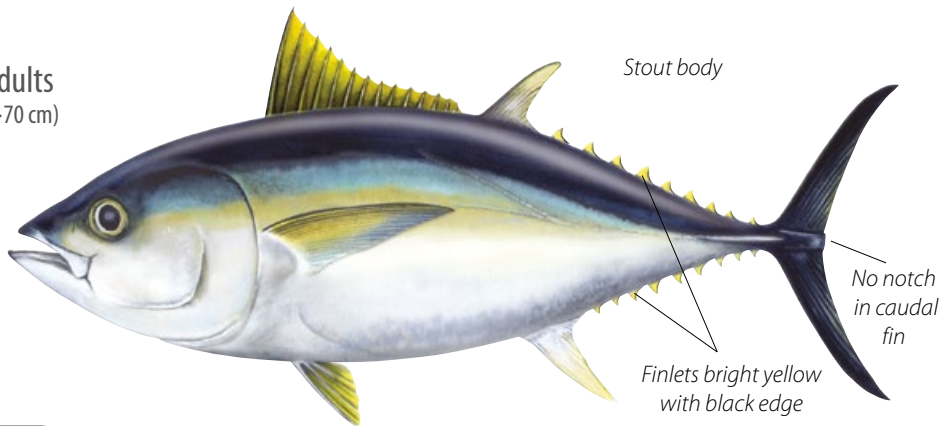
Adults  
(>70 cm)



# Bigeye tuna

*Thunnus obesus*

Adults  
(>70 cm)



BET

# Yellowfin tuna

*Thunnus albacares*

Juveniles  
(40–70 cm)

 < 120 cm  
Pectoral fins blade-like

Narrow body,  
especially  
near caudal fin

Small  
notch in  
caudal fin

Pectoral fin tip  
rounded

Pectoral fin  
reaches base of  
second dorsal fin

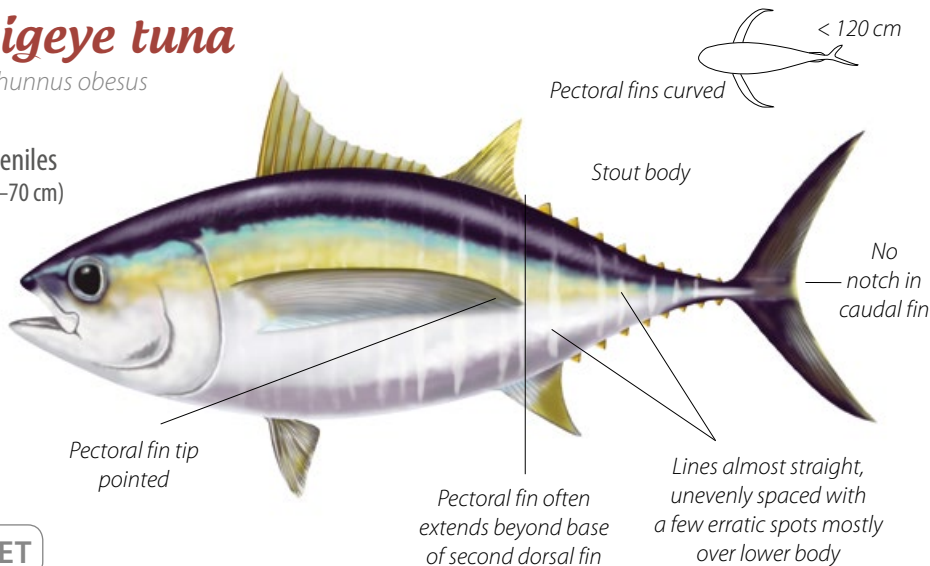
Lines slightly curved,  
evenly spaced,  
separated by lines  
of spots over most of body

YFT

# Bigeye tuna

*Thunnus obesus*

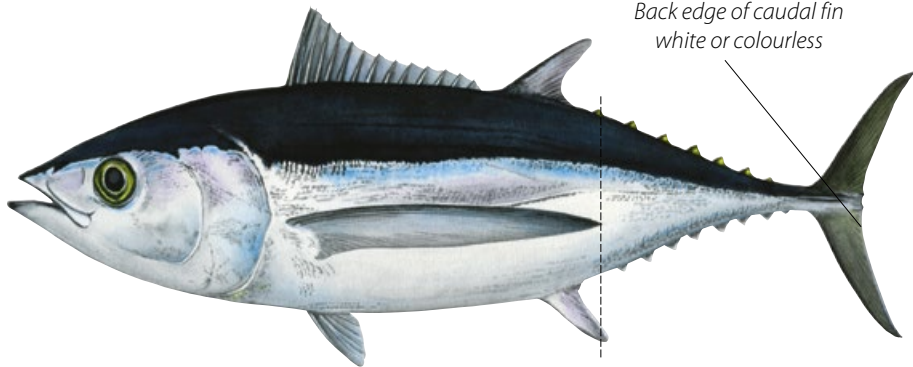
Juveniles  
(40–70 cm)



BET

# Albacore tuna

*Thunnus alalunga*



Back edge of caudal fin  
white or colourless

Pectoral fin reaches way past base  
of second dorsal and anal fins

ALB



# Longtail tuna

*Thunnus tonggol*

Second dorsal fin  
taller than  
first dorsal fin

Body slender, especially  
towards caudal fin

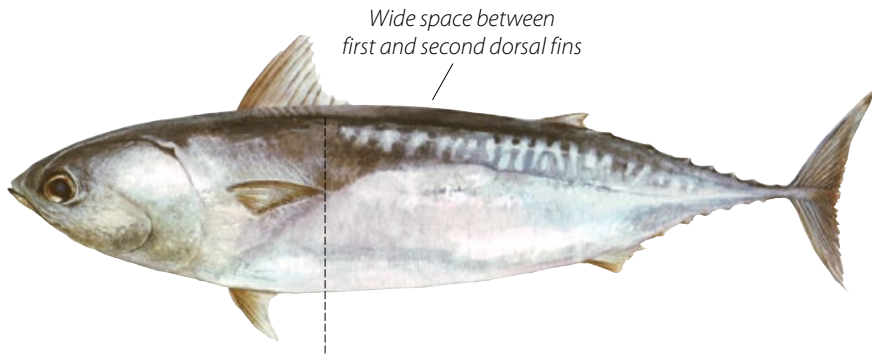
Faint rows of colourless  
spots along belly

Pectoral fin rarely reaches  
space between dorsal fins

LOT

# Bullet tuna

*Auxis rochei rochei*



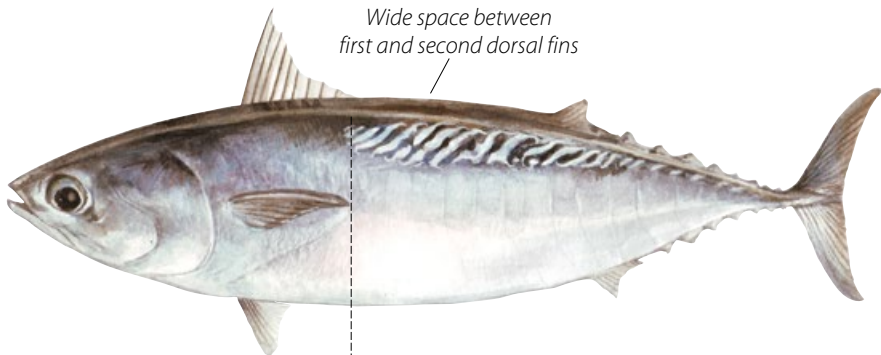
Wide space between  
first and second dorsal fins

Pectoral fin tip does not reach  
front edge of patterned area

BLT

# *Frigate tuna*

*Auxis thazard thazard*



Wide space between  
first and second dorsal fins

Pectoral fin tip reaches beyond  
front edge of patterned area

FRI

# *Skipjack tuna*

*Katsuwonus pelamis*

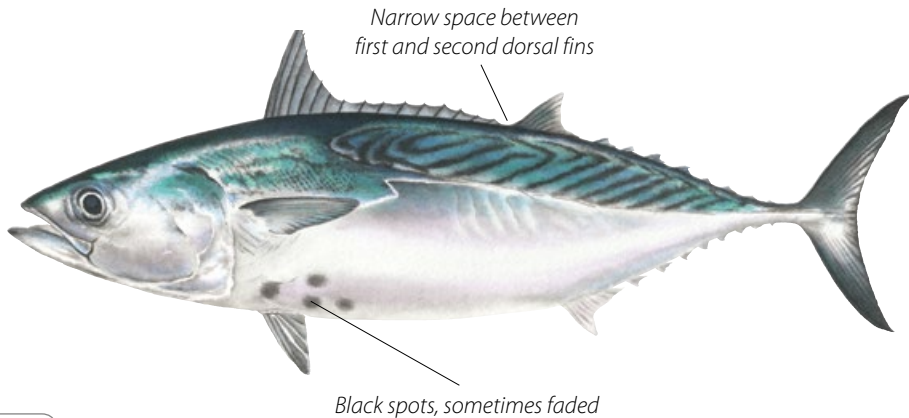


*Three to five stripes along belly*

SKJ

# Kawakawa

*Euthynnus affinis*

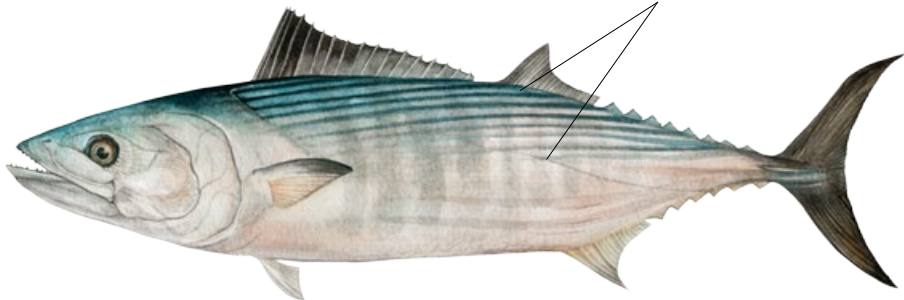


KAW

# Striped bonito

*Sarda orientalis*

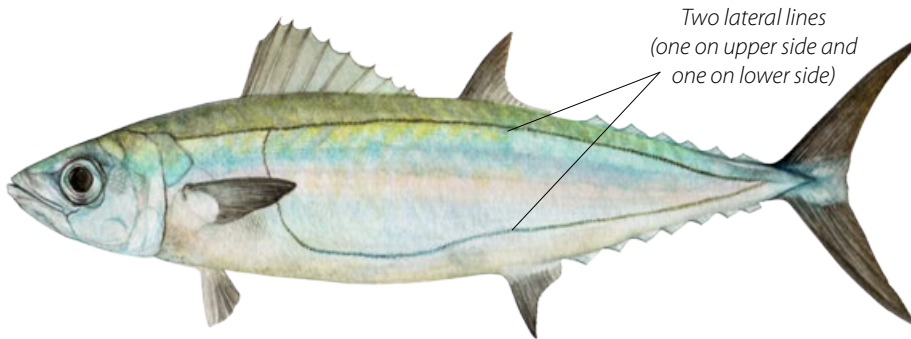
Numerous stripes, black on upper side, fading on lower side



BIP

# Double-lined mackerel

*Grammatorcynus bilineatus*

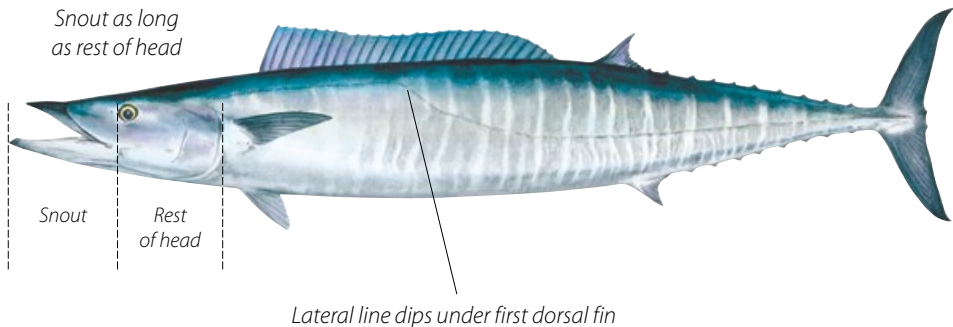


DBM

A similar and less common species, *Grammatorcynus bicarinatus* (not shown), has small black spots along the belly.

# Wahoo

*Acanthocybium solandri*



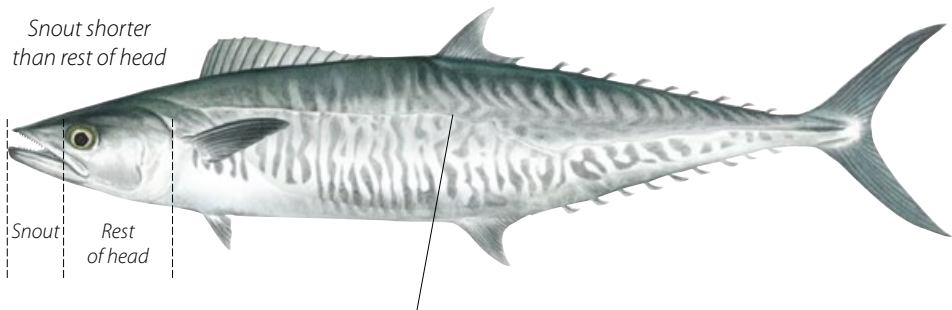
WAH



# Spanish mackerel

*Scomberomorus commerson*

Snout shorter  
than rest of head



Snout

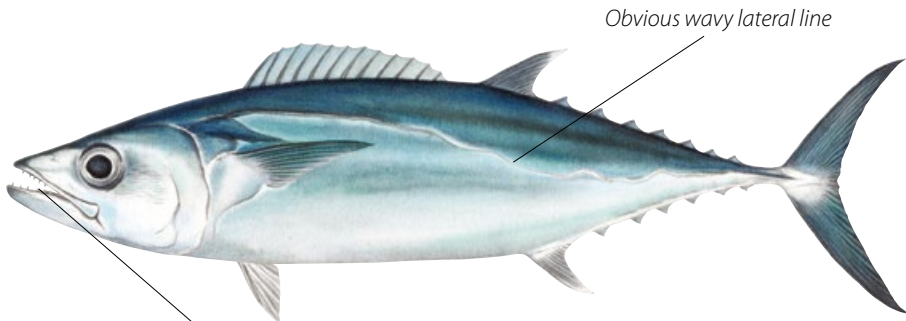
Rest  
of head

Lateral line dips after first dorsal fin

COM

# Dogtooth tuna

*Gymnosarda unicolor*

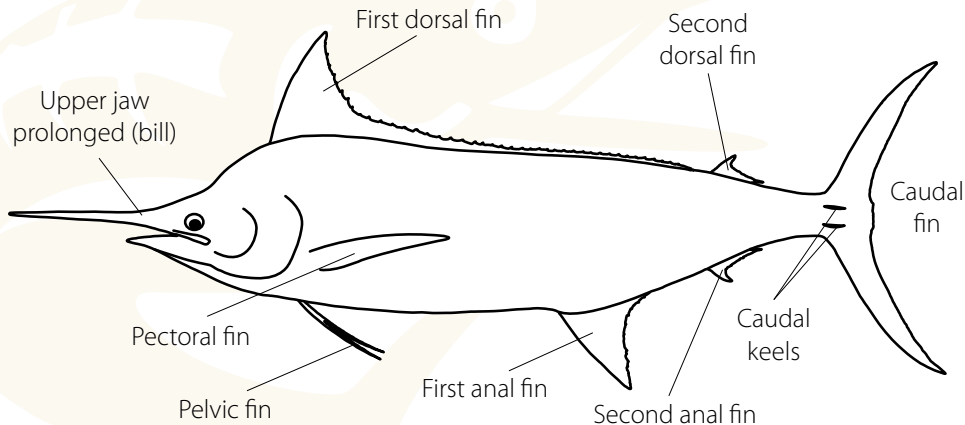


Obvious wavy lateral line

Cone-shaped (dog-like) teeth  
in a large mouth

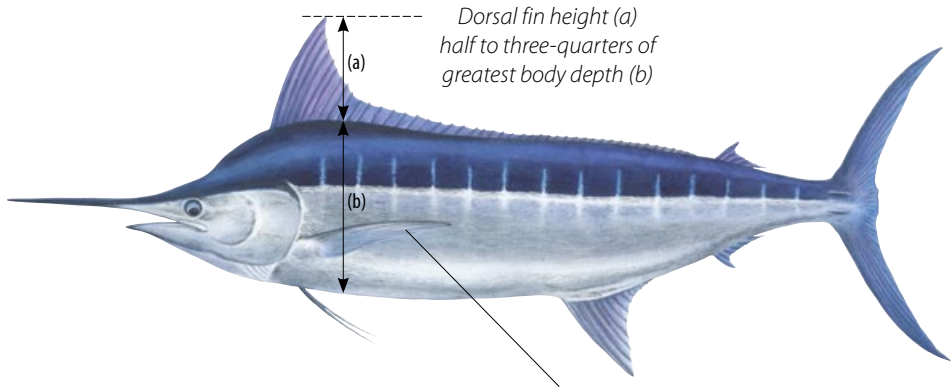
DOT

# Billfish



# Blue marlin

*Makaira nigricans*



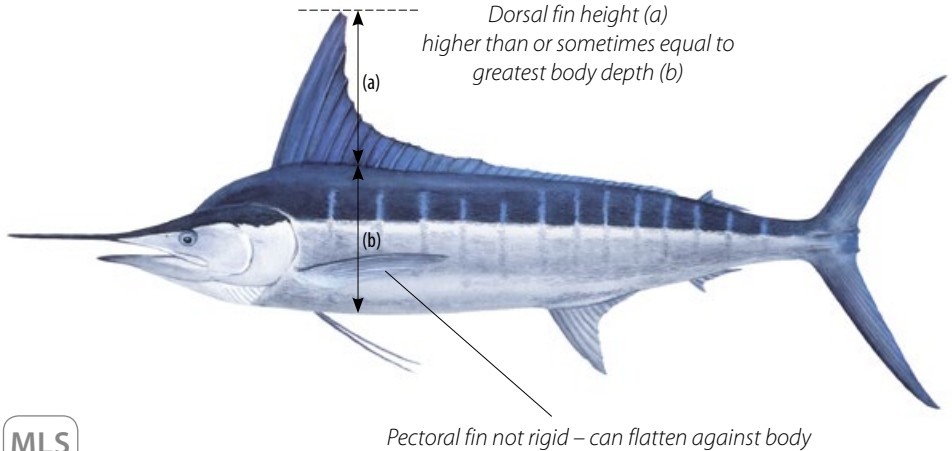
Dorsal fin height (a)  
half to three-quarters of  
greatest body depth (b)

Pectoral fin not rigid – can flatten against body

BUM

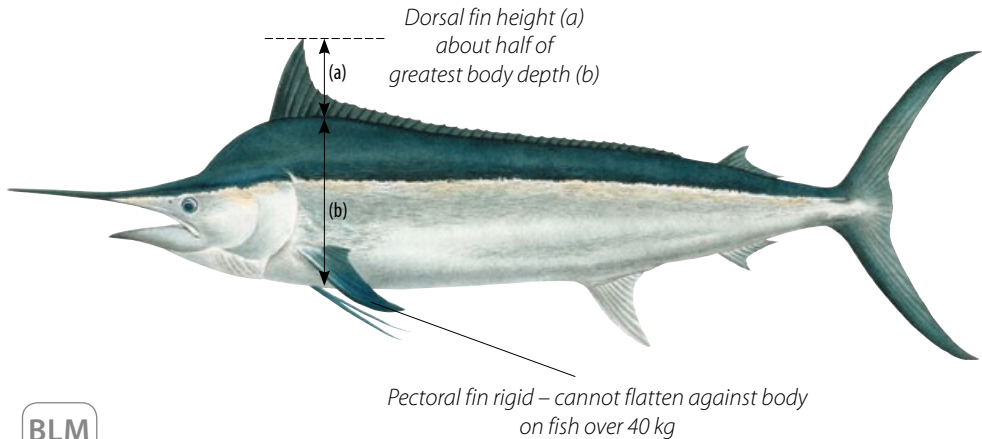
# Striped marlin

*Tetrapturus audax*



# Black marlin

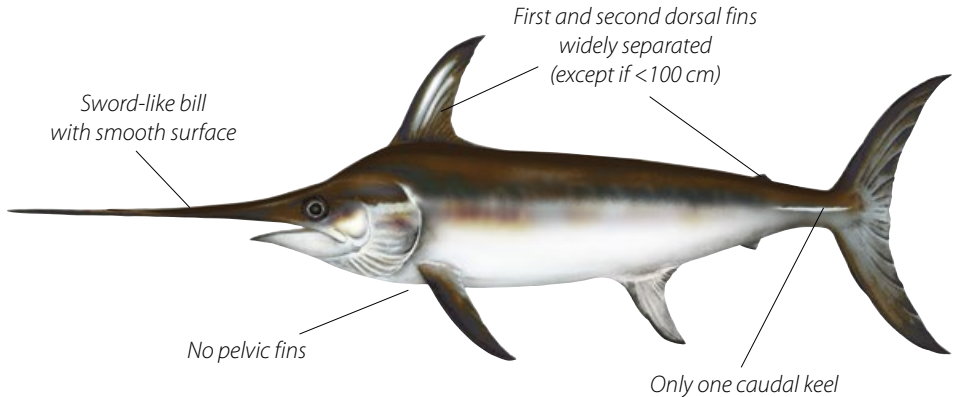
*Istiompax indica*



BLM

# Swordfish

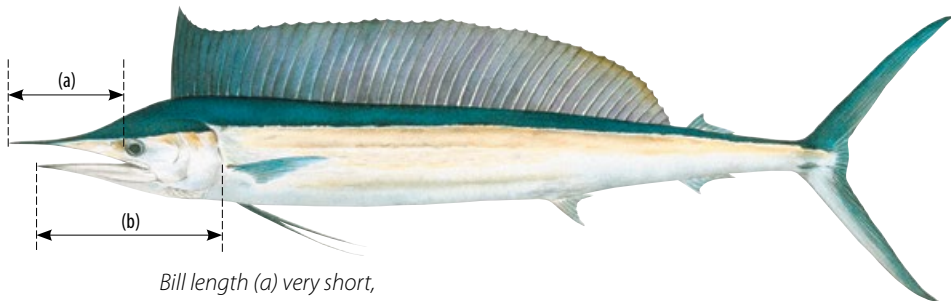
*Xiphias gladius*



# Shortbill spearfish

*Tetrapturus angustirostris*

*Dorsal fin about same height as body depth*



*Bill length (a) very short,  
equal to or shorter than head length (b)*

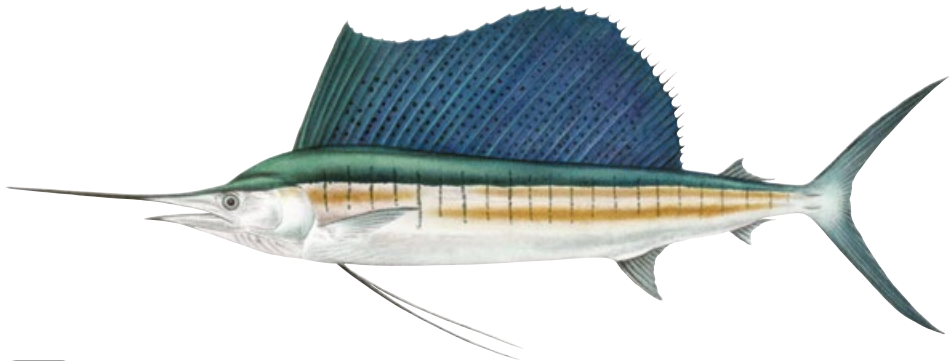
SSP



# Sailfish

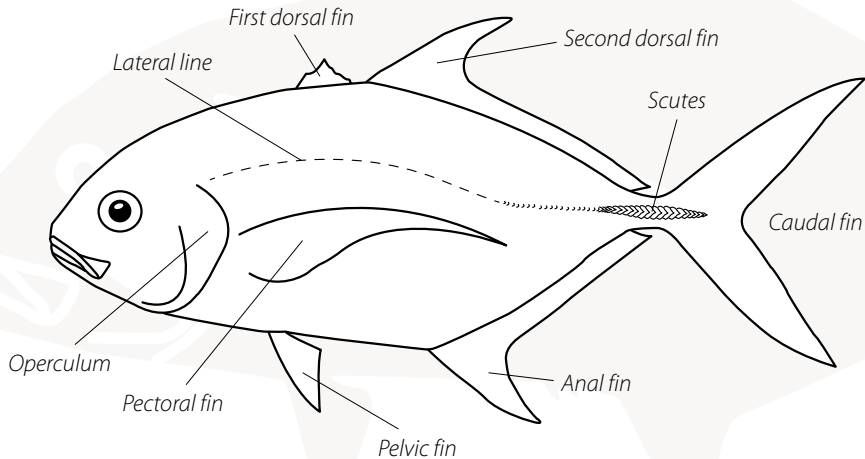
*Istiophorus platypterus*

*Dorsal fin very tall (more than two times body depth)*



SFA

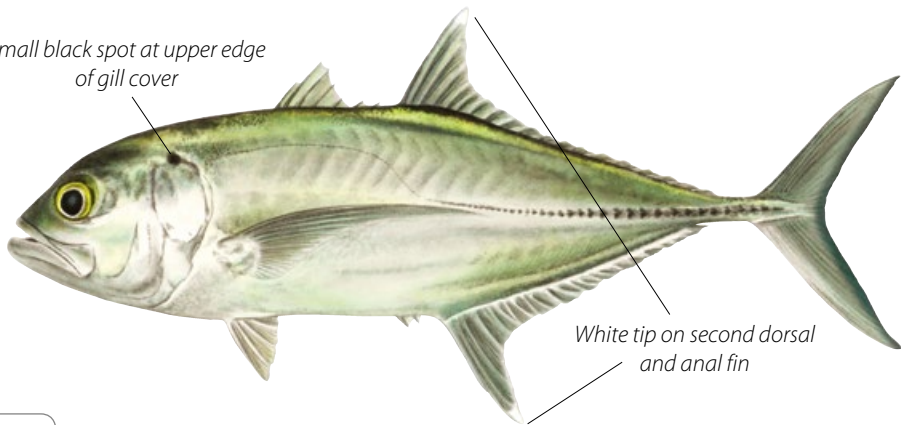
# Jacks



# Bigeye trevally

*Caranx sexfasciatus*

Small black spot at upper edge  
of gill cover

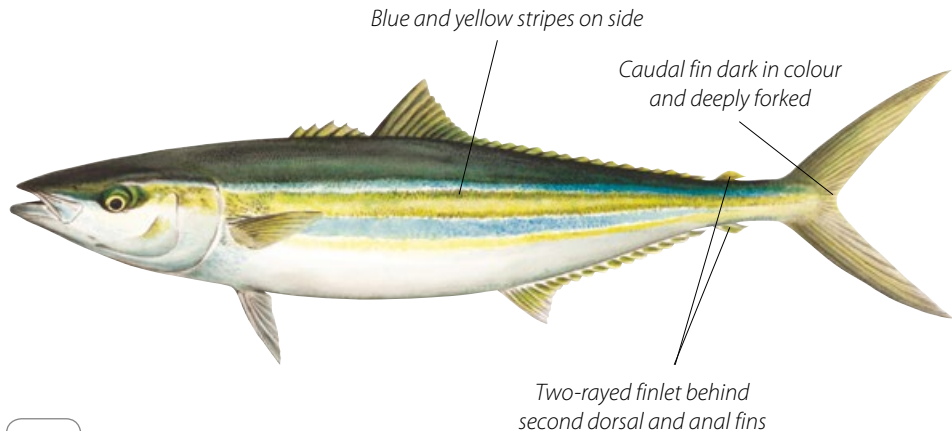


White tip on second dorsal  
and anal fin

CSX

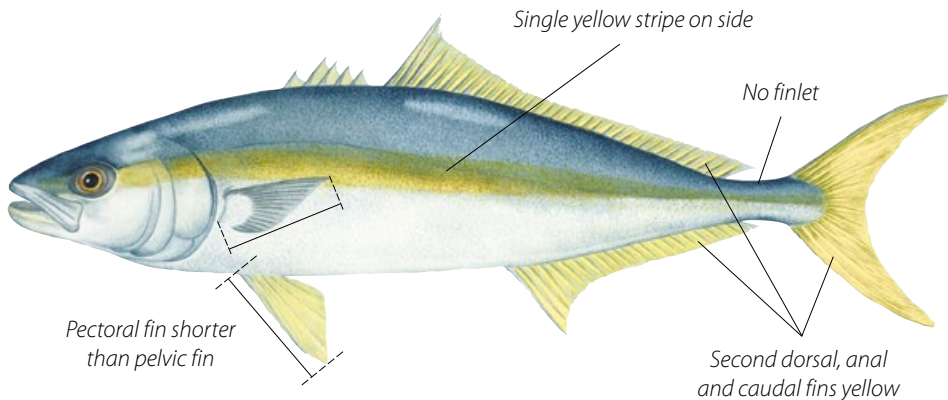
# Rainbow runner

*Elagatis bipinnulata*



# Yellowtail amberjack; Kingfish

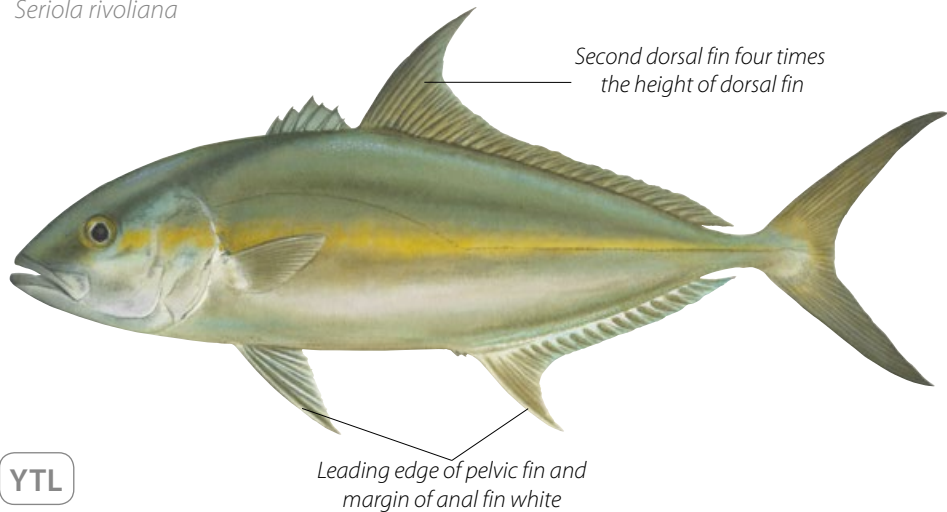
*Seriola lalandi*



YTC

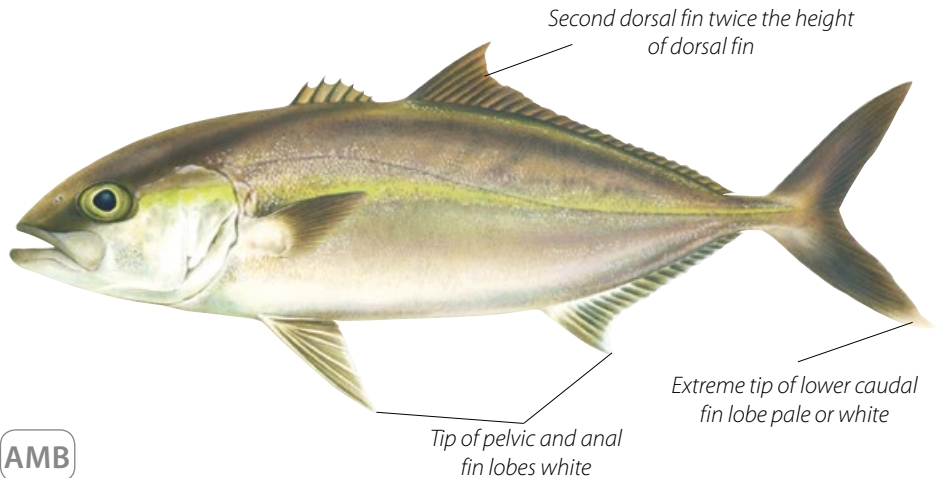
# Longfin yellowtail

*Seriola rivoliana*



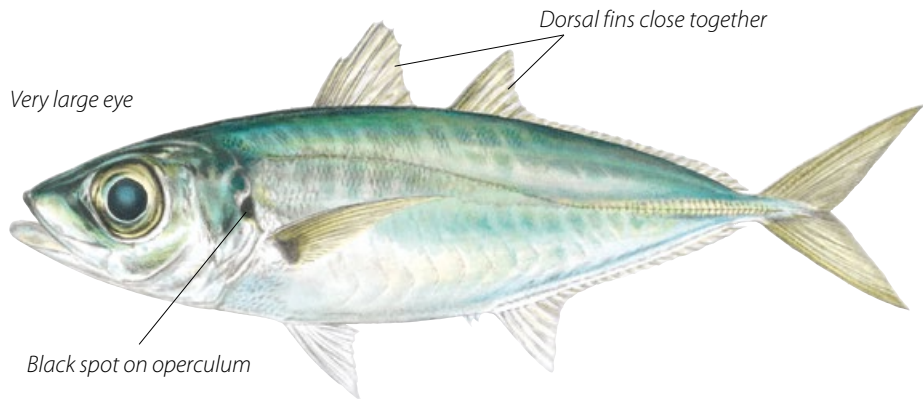
# Greater amberjack

*Seriola dumerili*



# Bigeye scad

*Selar crumenophthalmus*



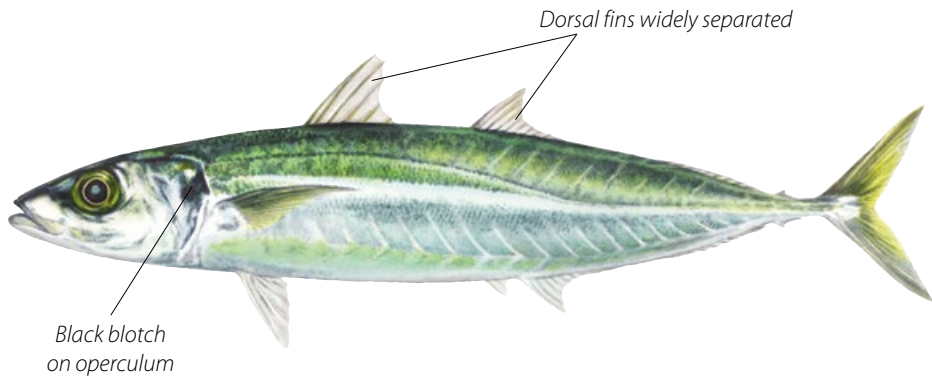
Maximum length: 50 cm

BIS



# *Mackerel scad*

*Decapterus macarellus*



Maximum length: 40 cm

MSD

# Golden trevally

*Gnathanodon speciosus*



Dark tips on tail

GLT

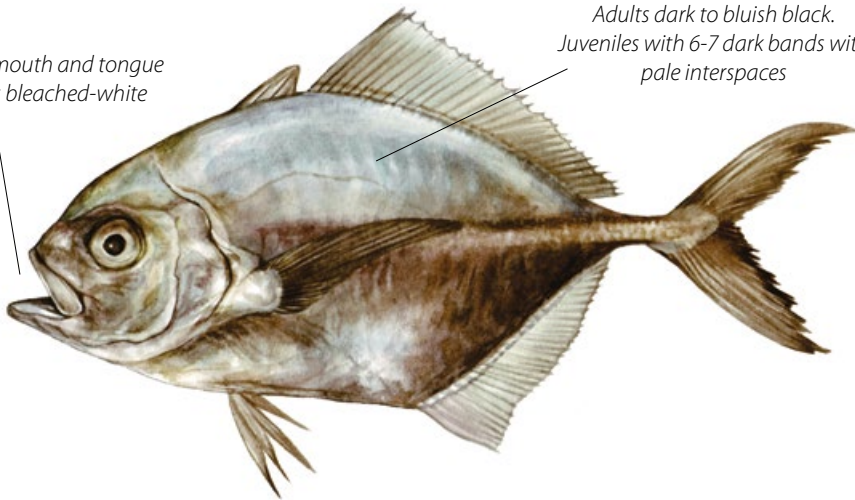
Juveniles bright yellow with 7–11 black bars.  
Adults silver with golden belly.

# Cottonmouth jack

*Uraspis secunda*

Inside of mouth and tongue  
appears bleached-white

Adults dark to bluish black.  
Juveniles with 6-7 dark bands with  
pale interspaces



USE

# Jacks (other)

Carangidae (other)



*Carangoides* spp.



*Caranx* spp.



*Uraspis* spp.



*Selar* spp.



*Decapterus* spp.



*Trachinotus* spp.



*Scomberoides* spp.

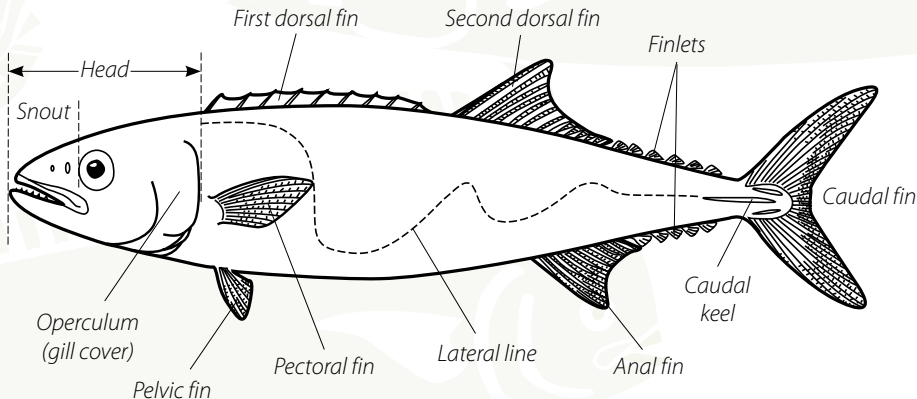


*Seriola* spp.

TRE

Note: The Carangidae family (jacks) includes 32 genera and about 140 species of highly varied shapes. Jacks are open-water carnivorous fish, usually silvery in colour.

# *Other important species*

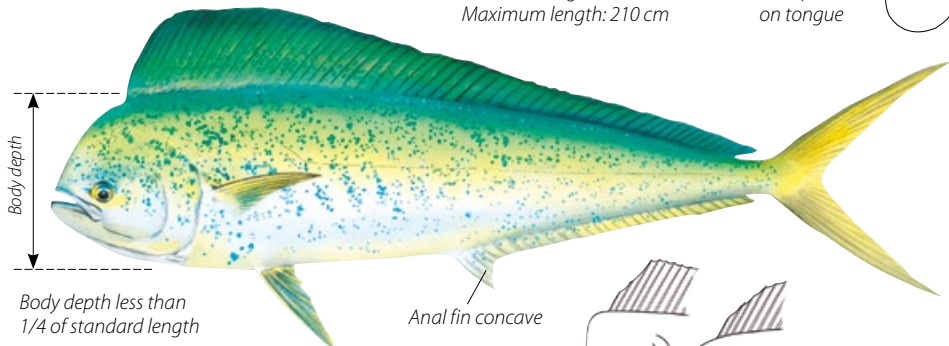


# Common dolphinfish; Mahi mahi

*Coryphaena hippurus*

Common length: 100 cm  
Maximum length: 210 cm

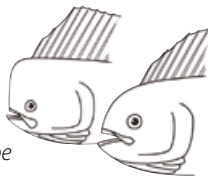
Roundish-shaped  
tooth patch  
on tongue



Body depth less than  
1/4 of standard length

Anal fin concave

Male  
head shape

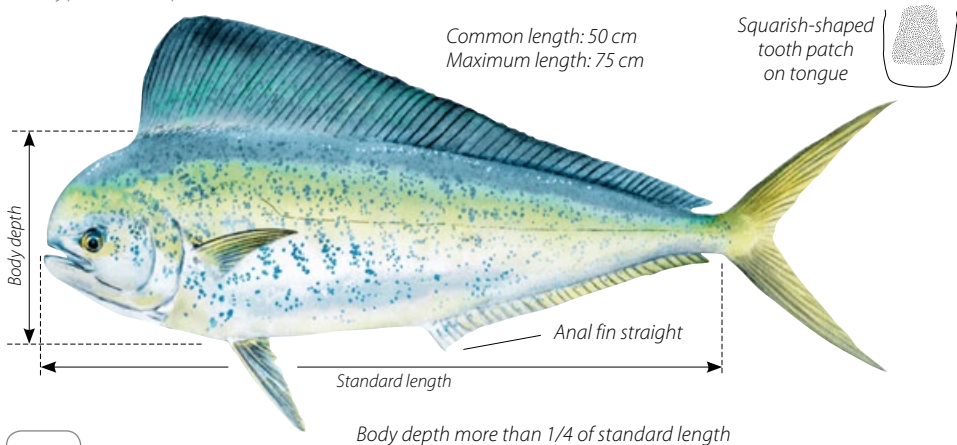


Female  
head shape

DOL

# Pompano dolphinfish

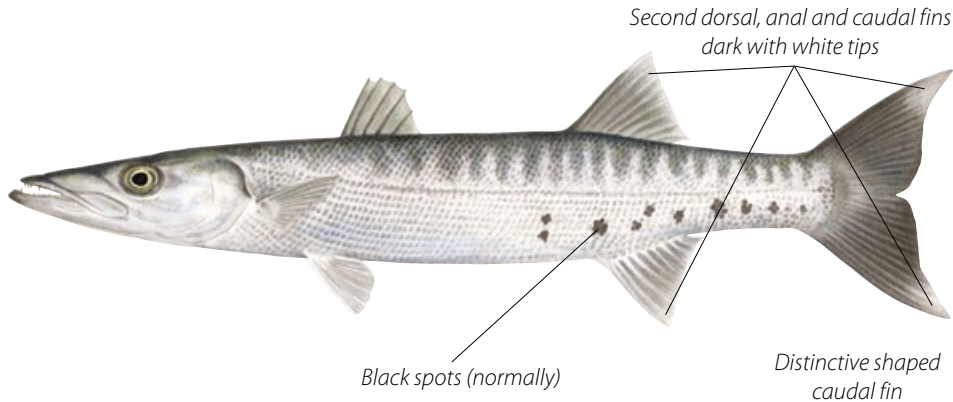
*Coryphaena equiselis*



CFW

# Great barracuda

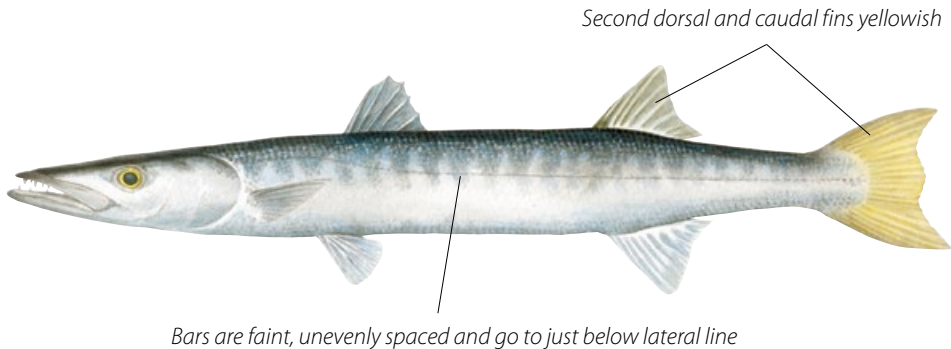
*Sphyraena barracuda*





# *Pickhandle barracuda*

*Sphyraena jello*



BAC

# *Blackfin barracuda*

*Sphyraena qenie*

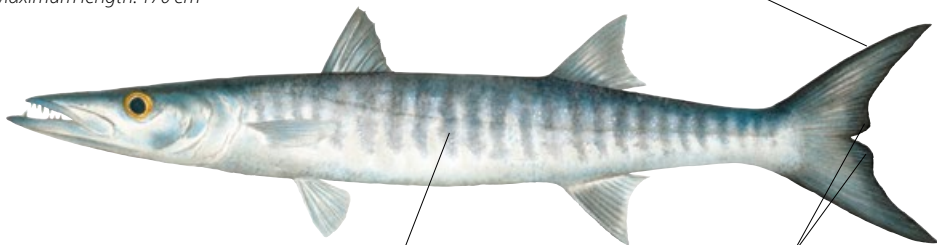
Common length: 80 cm  
Maximum length: 170 cm

Dark caudal fin with black margin

Almost straight bars

Two small knobs at centre  
of caudal fin

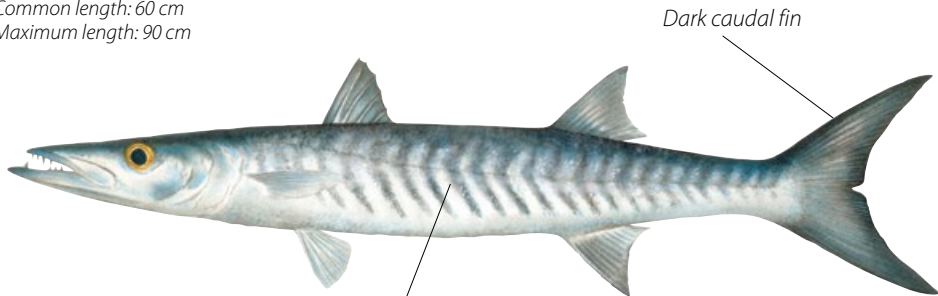
BAB



# Sawtooth barracuda

*Sphyraena putnamae*

Common length: 60 cm  
Maximum length: 90 cm



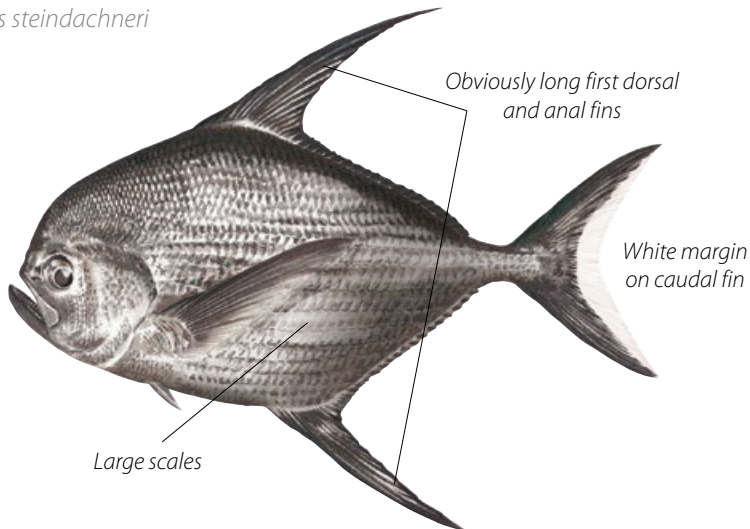
Dark caudal fin

Chevron-shaped bars  
extending well below lateral line

BAN

# *Sickle pomfret*

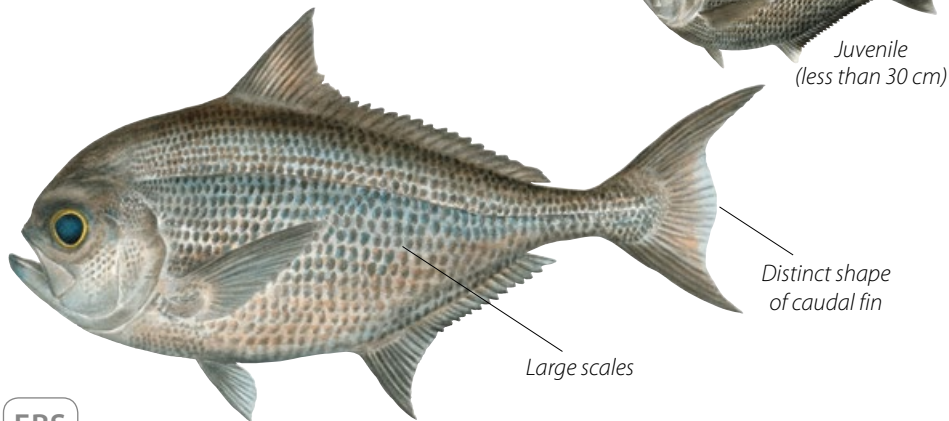
*Taractichthys steindachneri*



TST

# Brilliant pomfret

*Eumegistus illustris*



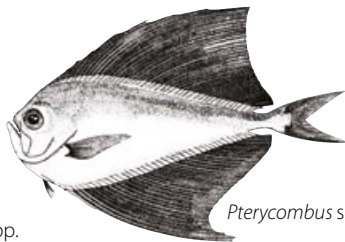
EBS

## Pomfrets (other)

Bramidae (other)



*Pteraclis* spp.



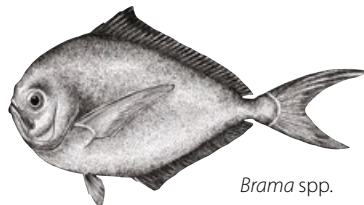
*Pterycombus* spp.

Species in this family have:

- Angle of jaw very slanted
- Single dorsal fin
- Caudal fin of adults strongly forked



*Taractes* spp.

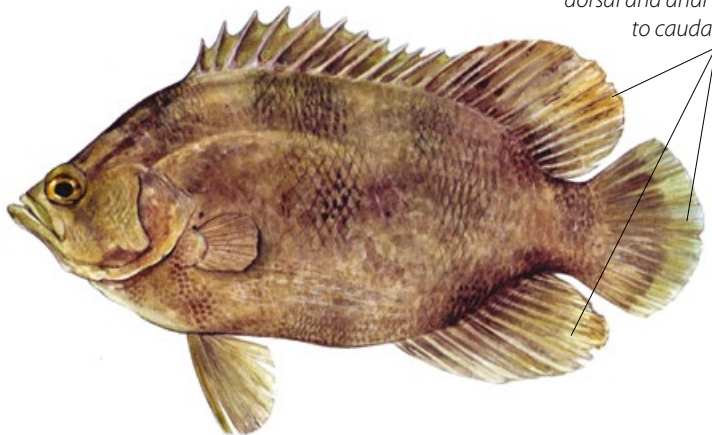


*Brama* spp.

# Triple tail

*Lobotes surinamensis*

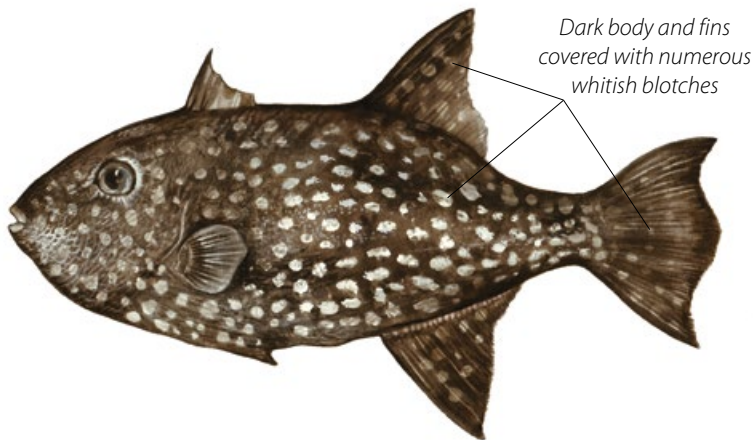
Large, rounded posterior lobes of dorsal and anal fins that are equal to caudal fin in size.



LOB

# Rough triggerfish

*Canthidermis maculatus*

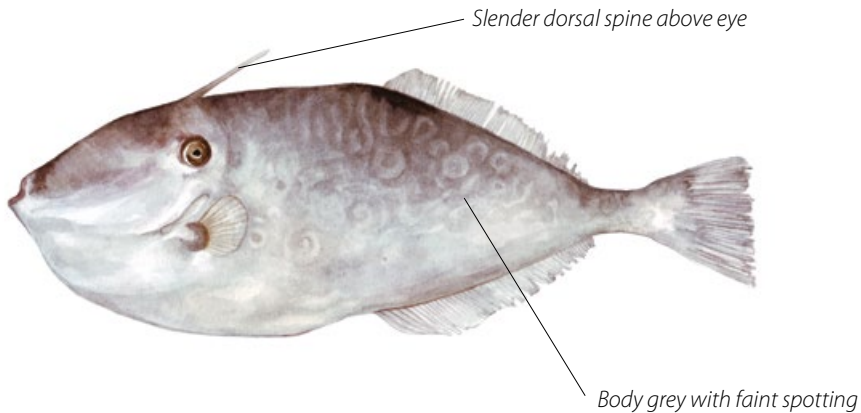


CNT



# Unicorn leatherjacket filefish

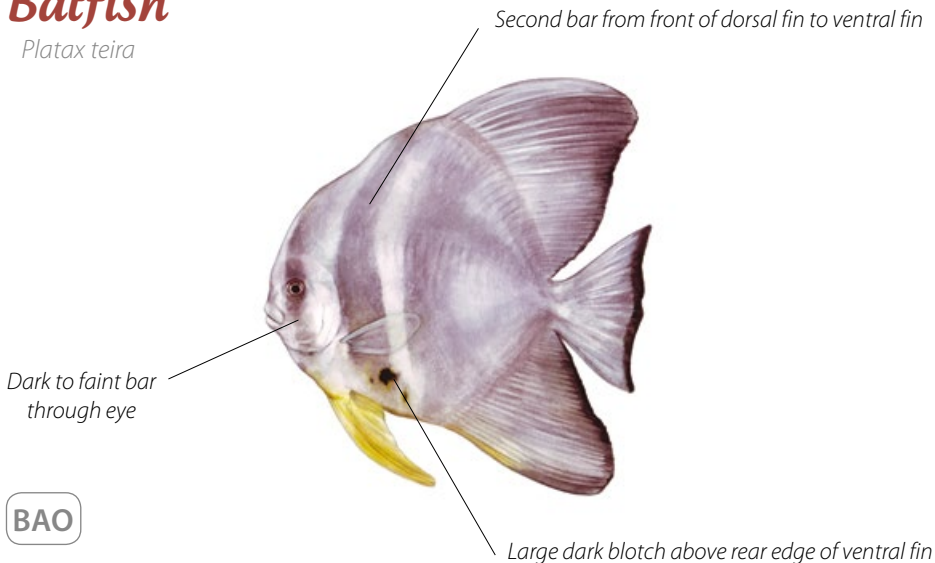
*Aluterus monoceros*



ALM

# Batfish

*Platax teira*



BAO

# *Slender sunfish*

*Ranzania laevis*

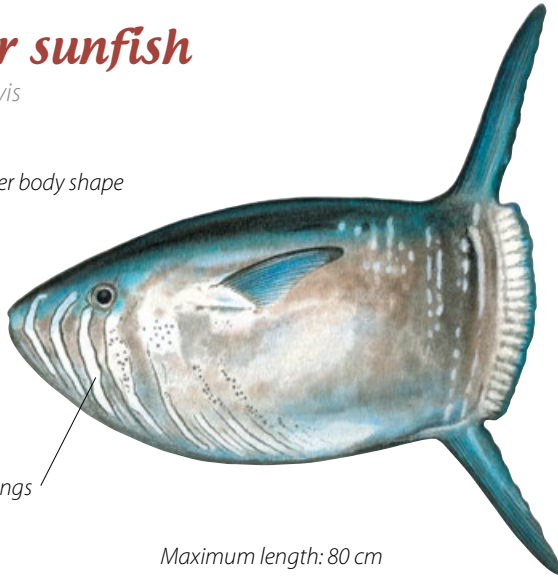
*Slender body shape*

*Distinct markings*

*No protruding "tail"*

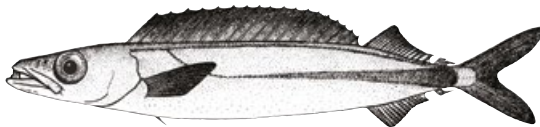
*Maximum length: 80 cm*

RZV

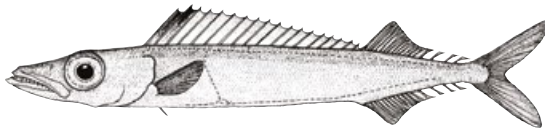


# Gemfish & snake mackerels

Gempylidae



*Rexea* spp.



*Rexichthys* spp.

Species in this family have:

- Large mouth with strong teeth
- Two dorsal fins, second shorter than first
- Pelvic fin very small, often just a single spine with a few or no soft rays



# *Index*

|                                     |       |
|-------------------------------------|-------|
| <i>Acanthocybium solandri</i> ..... | 14    |
| Albacore tuna .....                 | 6     |
| <i>Aluterus monoceros</i> .....     | 47    |
| <i>Auxis rochei rochei</i> .....    | 8     |
| <i>Auxis thazard thazard</i> .....  | 9     |
| Batfish .....                       | 48    |
| Bigeye scad .....                   | 30    |
| Bigeye trevally .....               | 25    |
| Bigeye tuna .....                   | 3 & 5 |
| Billfish .....                      | 17    |
| Black marlin.....                   | 20    |
| Blackfin barracuda.....             | 4     |
| Blue marlin.....                    | 18    |
| Bramidae (other) .....              | 44    |
| Brilliant pomfret.....              | 43    |
| Bullet tuna.....                    | 8     |
| <i>Canthidermis maculatus</i> ..... | 46    |
| <i>Caranx sexfasciatus</i> .....    | 25    |
| Common dolphinfish .....            | 36    |
| <i>Coryphaena equiselis</i> .....   | 37    |
| <i>Coryphaena hippurus</i> .....    | 36    |
| Cottonmouth jack.....               | 33    |
| <i>Decapterus macarellus</i> .....  | 31    |

|                                        |    |
|----------------------------------------|----|
| Dogtooth tuna .....                    | 16 |
| Double-lined mackerel .....            | 13 |
| <i>Elagatis bipinnulata</i> .....      | 26 |
| <i>Eumegistus illustris</i> .....      | 43 |
| <i>Euthynnus affinis</i> .....         | 11 |
| Frigate tuna.....                      | 9  |
| Gemfish & snake mackerels .....        | 50 |
| Gempylidae.....                        | 50 |
| <i>Gnathanodon speciosus</i> .....     | 32 |
| Golden trevally .....                  | 32 |
| <i>Grammatorcynus bilineatus</i> ..... | 13 |
| Great barracuda.....                   | 38 |
| Greater amberjack.....                 | 29 |
| <i>Gymnosarda unicolor</i> .....       | 16 |
| <i>Istiompax indica</i> .....          | 20 |
| <i>Istiophorus platypterus</i> .....   | 23 |
| Jacks.....                             | 24 |
| <i>Katsuwonus pelamis</i> .....        | 10 |
| Kawakawa .....                         | 11 |
| Kingfish .....                         | 27 |
| <i>Lobotes surinamensis</i> .....      | 45 |
| Longfin yellowtail .....               | 28 |
| Longtail tuna.....                     | 7  |

|                                      |    |
|--------------------------------------|----|
| Mackerel scad .....                  | 31 |
| Mahi mahi .....                      | 36 |
| <i>Makaira nigricans</i> .....       | 18 |
| Pickhandle barracuda .....           | 39 |
| <i>Platax teira</i> .....            | 48 |
| Pomfrets (other) .....               | 44 |
| Pompano dolphinfish .....            | 37 |
| Rainbow runner .....                 | 26 |
| <i>Ranzania laevis</i> .....         | 49 |
| Rough triggerfish .....              | 46 |
| Sailfish .....                       | 23 |
| <i>Sarda orientalis</i> .....        | 12 |
| Sawtooth barracuda .....             | 41 |
| <i>Scomberomorus commerson</i> ..... | 15 |
| <i>Selar crumenophthalmus</i> .....  | 30 |
| <i>Seriola dumerili</i> .....        | 29 |
| <i>Seriola lalandi</i> .....         | 27 |
| <i>Seriola rivoliana</i> .....       | 28 |
| Shortbill spearfish .....            | 22 |
| Sickle pomfret .....                 | 42 |
| Skipjack tuna .....                  | 10 |
| Slender sunfish .....                | 49 |
| Spanish mackerel .....               | 15 |

|                                          |       |
|------------------------------------------|-------|
| <i>Sphyraena barracuda</i> .....         | 38    |
| <i>Sphyraena jello</i> .....             | 39    |
| <i>Sphyraena putnamae</i> .....          | 41    |
| <i>Sphyraena genie</i> .....             | 40    |
| Striped bonito .....                     | 12    |
| Striped marlin .....                     | 19    |
| Swordfish .....                          | 21    |
| <i>Taractichthys steindachneri</i> ..... | 42    |
| <i>Tetrapturus angustirostris</i> .....  | 22    |
| <i>Tetrapturus audax</i> .....           | 19    |
| <i>Thunnus alalunga</i> .....            | 6     |
| <i>Thunnus albacares</i> .....           | 2 & 4 |
| <i>Thunnus obesus</i> .....              | 3 & 5 |
| <i>Thunnus tonggol</i> .....             | 7     |
| Triple tail .....                        | 45    |
| Tuna and other scombrids .....           | 1     |
| Unicorn leatherjacket filefish .....     | 47    |
| <i>Uraspis secunda</i> .....             | 33    |
| Wahoo .....                              | 14    |
| <i>Xiphias gladius</i> .....             | 21    |
| Yellowfin tuna .....                     | 2 & 4 |
| Yellowtail amberjack .....               | 27    |



Pacific  
Community  
Communauté  
du Pacifique

PACIFIC COMMUNITY  
BP D5 • 98848 NOUMEA CEDEX • NEW CALEDONIA  
Telephone: +687 26 20 00  
Facsimile: +687 26 38 18  
Email: [spc@spc.int](mailto:spc@spc.int) – Web: <http://www.spc.int>

Production of these cards was made possible through financial assistance provided by the Australian Government, and the Food and Agriculture Organization of the United Nations (FAO), the United Nations Development Program (UNDP) and the Global Environment Facility (GEF), via the project: Implementation of Global and Regional Oceanic Fisheries Conventions and Related Instruments in the Pacific Small Island Developing States (PIOFMP-II).



*Empowered lives.  
Resilient nations.*



Prepared for publication at: Pacific Community headquarters, Noumea, New Caledonia  
Printed by Stredder Print Ltd., New Zealand, 2017