COMMON BAITFISH SPECIES

USED IN SOLOMON ISLANDS
SKIPJACK POLE-AND-LINE FISHERY
These identification cards provide information on the main
baitfish species utilized in the skipjack pole-and-line fishery of
Solomon Islands. They were developed to complement the
baitfish data logsheet for the monitoring and management of
the baitfish fishery in the waters of Solomon Islands. In addition
to identification features, these cards provide some general
information on baitfish species biology and environment.

The species are presented in their approximate order of
importance, based on catch data of the bagan fishing trials
conducted in Solomon Islands and on other available information
related to their contribution to the skipjack fishery.

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FAMILY ENGRAULIDAE (anchovies)

Characteristics

- Small silvery schooling fish
- Mostly associated with estuarine and coastal waters
- One species, *Encrasicholina punctifer*, sometimes found in schools far offshore
- A brilliant silver mid-lateral band is the common feature of this family
Oceanic anchovy
Encrasicholina punctifer

Description
- Silver lateral band very broad
- Upper jaw curved upwards
- Head rounded when viewed from above

Size
- Up to 7 cm

Quality
- Excellent bait
- Very strong

Blue anchovy
Encrasicholina heteroloba

**Description**
- Silver lateral band usually with clear dark blue line defining its top edge
- Back blue

**Size**
- Up to 9 cm

**Quality**
- Very good bait
- Moderately strong

Image: David Maynard for FFA
Gold anchovy

Encrasicholina devisi

Description
- Gold lateral band with less distinct edge than this of the blue anchovy, especially near head
- Back golden

Size
- Up to 7 cm

Quality
- Very good bait
- Moderately strong

Image: David Maynard for FFA
Yellowtail anchovy

*Stolephorus waitei*

**Description**
- Various similar species in a complex, some of which are important food fish

**Size**
- Up to 10 cm

**Quality**
- Poor live bait
- Fragile

Image: David Maynard for FFA
Little priest
Thryssa baelama

Description
- Orange fins and tail
- Very hardy with strongly adherent scales

Size
- Up to 10 cm

Quality
- May swim away from vessel, so some doubts as bait unless stunned

FAMILY DUSSUMIERIIDAE
(sprats)

Characteristics

- More rounded in cross section than anchovies
- No scutes on the belly
- Small terminal mouth
- Maxilla with two supplemental bones
- Scales large, cycloid, and easily shed

Note: Sprats are placed in the family Dussumieriidae by FishBase, but in the family Clupeidae by FAO and WoRMS.
Silver sprat
*Spratelloides gracilis*

**Description**
- Distinct silver lateral band with distinct top edge
- Back steely blue

**Size**
- Up to 7 cm

**Quality**
- Good active bait
- Moderately strong given good handling

Image: Antony D. Lewis
Lewis’ round herring
Spratelloides lewisi

**Description**
- Distinguished from other species mainly by the silver band with turquoise hues on the flanks, which fades anteriorly at about tips of pectoral fins and lacks a distinct upper edge

**Size**
- Up to 6 cm

**Quality**
- Good bait
- More fragile than the silver sprat

Image: Antony D. Lewis
Blue sprat
Spratelloides delicatulus

Description
➤ No silver band along side
➤ Four black bands on tail base

Size
➤ Up to 7 cm

Quality
➤ Very good active bait
➤ Needs careful handling

Image: David Maynard for FFA
FAMILY CLUPEIDAE
(sardines, herrings)

Characteristics

- A diverse family of mostly small (10–20 cm) silvery fish
- Body shape from elongated to strongly compressed (oval)
- Scutes located along the belly
- Lower jaw short and deep
- Upper jaw (maxilla) with two supplemental bones (supramaxillae)
- Anal fin longer than dorsal fin and usually blue/green on back with silvery sides
Spotted sardine
Amblygaster sirm

Description

- Narrow body
- Row of blue/gold spots along side

Size

- Up to 23 cm

Quality

- Good bait if small
- Adults not strong, scales easily lost

Image: Antony D. Lewis
Gold spot herring
_Herklotsichthys quadrimaculatus_

**Description**
- Two orange spots on edge of gill cover
- Blue stripe along side

**Size**
- Up to 14 cm

**Quality**
- Good bait
- Strong
- Not often a dominant species

Image: David Maynard for FFA
Indian pellona
Pellona ditchela

**Description**
- Silvery white from midbody to the pelvic area
- Dorsal fin origin near midpoint of body
- Eye large

**Size**
- Up to 16 cm

**Quality**
- Excellent bait, skipping across the surface
- Very hardy

Image: David Maynard for FFA
**FAMILY SCOMBRIDAE**
(tunas, mackerels, bonitos)

**Characteristics**

- A large commercially important family but only two genera of mackerels are important as baitfish: *Scomber* and *Rastrelliger*
- *Scomber* are the blue mackerels common in temperate waters of Australia and New Zealand
- *Rastrelliger* are the chub mackerels of tropical waters
Indian mackerel
Rastrelliger kanagurta

Description
- Spots and stripes on sides

Size
- Up to 35 cm

Quality
- Reasonable bait if small
- Tend to swim away from vessel
- Moderately strong
**Short-bodied mackerel**
*Rastrelliger brachysoma*

**Description**
- Snout pointed
- Distinct fusiform body shape

**Size**
- Up to 34.5 cm

**Quality**
- Adult fish important food species
- Juveniles used for bait
- Generally not common in catches

Image: David Maynard for FFA
Faughn’s mackerel
Rastrelliger faughni

**Description**
- Spots and stripes on sides

**Size**
- Up to 35 cm

**Quality**
- Just fair bait, swim away from vessel
- Moderately strong
- Not distinguished from other mackerel species
- Not well known

Image: David Maynard for FFA
FAMILY CARANGIDAE (jacks, pompanos)

Characteristics

- Widely distributed mostly marine species, but some in brackish/estuarine waters
- Body generally compressed, although body shape extremely variable from very deep to fusiform
**Bigeye scad**
*Selar crumenophthalmus*

**Description**
- Yellow stripe alongside
- Scutes on lateral line not reaching second dorsal origin

**Size**
- Up to 30 cm

**Quality**
- Good food fish
- Good bait if small
- Strong

**Oxeye scad**

*Selar boops*

**Description**
- Bright orange rather than yellow stripe
- Scutes on lateral line reach front of second dorsal origin
- Very large eyes

**Size**
- Up to 25 cm

**Quality**
- Adults excellent food fish
- Good bait if small
- Strong

Image: David Maynard for FFA
Round scad
Decapterus macrosoma

Description
- Black spot on gill cover
- No blue lateral band

Size
- Up to 30 cm

Quality
- Good bait if small
- Strong

Image: Antony D. Lewis
Ocean scad

Decapterus macarellus

Description
- Black spot on gill cover
- Blue lateral band
- Adults typically occur offshore, juveniles inshore

Size
- Up to 30 cm

Quality
- Good bait if small
- Moderately strong

Image: Rui P. Freitas / FishBase
Yellow-stripe scad
*Sellaroides leptolepis*

**Description**
- Black spot on gill cover
- High yellow stripe

**Size**
- Up to 30 cm

**Quality**
- Moderately good bait
- Strong
- Rarely dominant in catches

FAMILY APOGONIDAE (cardinalfish)

Characteristics

- Small carnivorous fish found in a variety of habitats, but mostly common around coral reefs
- In most species, the male carry eggs and youth in its mouth
- Large head and mouth
- Usually protruding lower jaw
Swallow tail cardinal
*Rhabdamia cypselurus*

**Description**
- Pink-coloured flesh
- Strongly forked tail with bands on lobes
- Schooling in midwater
- Mouth breeder

**Size**
- Up to 6 cm

**Quality**
- Moderately attractive bait

Image: John E. Randall / FishBase
Luminous cardinalfish
*Rhabdamia gracilis*

**Description**
- Lighter pink than the swallow tail cardinal
- Silvery head and abdomen
- May have black caudal tips

**Size**
- Up to 6 cm

**Quality**
- Moderately attractive bait

Image: John E. Randall / FishBase
Black-belted cardinalfish
Archamia zosterophora

**Description**
- Wide black band running across the second dorsal fin down to the pelvic fins
- Often black spot at caudal fin base

**Size**
- Up to 8 cm

**Quality**
- Minor contribution to bait catches

Image: John E. Randall / FishBase
Large toothed cardinalfish
Cheilodipterus macrodon

Description
➢ Juvenile with a large black blotch at the caudal peduncle
➢ Adults with wider stripes and darker interspace

Size
➢ Up to 25 cm

Quality
➢ Minor contribution to bait catches

Image: John E. Randall / FishBase
CAESIONIDAE (fusiliers)

Characteristics

- Small to moderate size fish often found in schools in the vicinity of coral reefs
- Usually brightly coloured
- Characterised by a single continuous dorsal fin with a distinctly forked tail
- Lateral line prominent
- Mouth small and terminal
- Upper body bluish
- Lower body white to pale bluish
- Golden band running from above the eye to caudal fin, extending to the tip of the upper lobe
- Dorsal and anal fins fully scaled
Red fusilier

*Pterocaesio pisang*

**Description**
- Usually reddish
- Distinct blood-red or blackish caudal tips

**Size**
- Up to 21 cm

**Quality**
- Good and strong bait
- Most common of the *Pterocaesio* species

Image: John E. Randall / FishBase
Slender fusilier

Gymnoecaesio gymnopterus

Description

➢ Greenish red
➢ Narrow stripe along lateral line
➢ Usually dusky dorsal tips
➢ Dorsal fin scaleless

Size

➢ Up to 18 cm

Quality

➢ Very strong
➢ Not favoured as bait (inactive or dives)

Image: David Maynard for FFA
Mottled fusilier

*Dipterygonotus balteatus*

**Description**
- Brownish-red nearshore pelagic species
- Several narrow paler stripes along body
- Naked dorsal and anal fins

**Size**
- Up to 14 cm

**Quality**
- Moderately strong
- Not very active (may dive)

Banded fusilier

*Pterocaesio digramma*

**Description**
- Two distinct yellow lines on side, one roughly following below the lateral line, the other well above the lateral line

**Size**
- Up to 30 cm

**Quality**
- Minor bait species as juvenile

Image: Ian V. Shaw - Reef Life Survey
**Blue-back fusilier**

*Pterocaesio tile*

**Description**
- Dark streak through each caudal lobe
- Prominent black mark in the pectoral axil
- Distinct brown-olive mid-lateral band

**Size**
- Up to 30 cm

**Quality**
- Minor bait species as juvenile

Image: Ian V. Shaw - Reef Life Survey
Gold and blue fusilier

*Caesio caerulea*

**Description**
- Upper body bluish
- Lower body white to pale bluish
- Golden band running from above eye to caudal fin, extending to tip of upper lobe
- Dorsal and anal fins fully scaled

**Size**
- Up to 35 cm

**Quality**
- Good food fish
- Minor bait species as juvenile

Image: John E. Randall / FishBase
OTHER SPECIES

Characteristics

- May occur but never dominant in baitfish catches
- Generally only fair quality as bait
**Fijian silverside**

*Hypoatherina ovalaua* (Atherinidae)

**Description**
- Bluish green
- Silvery mid-lateral stripe with a thin bluish line on upper margin
- Fins clear to dusky

**Size**
- Up to 8 cm

**Quality**
- Fair bait fish
- Hardy but not very active

Robust silverside, hardyhead

*Atherinomorus lacunosus* (Atherinidae)

**Description**
- Body green, light yellow or brownish
- Upper body darker

**Size**
- Up to 13 cm

**Quality**
- Fair bait fish
- Hardy but not active

Image: John E. Randall / FishBase
**Toothed ponyfish**

*Gazza minuta* (Leiognathidae)

**Description**
- Body silvery
- Anterior part of anal fin yellow
- Dorsal, pectoral and pelvic fins colorless

**Size**
- Up to 21 cm

**Quality**
- Fair bait when juvenile

Image: David Maynard for FFA
Orangefin ponyfish
"Photopectoralis bindus" (Leiognathidae)

Description
- Silver body
- Snout with a dark band
- Dorsal and anal fins with orange tips

Size
- Up to 11 cm

Quality
- Fair bait

Image: Gregorio V. Hermosa / FishBase
Common ponyfish
Leiognathus equulus (Leiognathidae)

Description
- Body silvery
- Anal fin yellowish
- Protracted mouth pointed downwards

Size
- Up to 28 cm

Quality
- Fair bait

Image: Sahat Ratmuangkhwang / FishBase
Deep pugnose ponyfish
Secutor ruconius (Leiognathidae)

Description
- Body silvery
- Protracted mouth pointed upwards

Size
- Up to 8 cm

Quality
- Fair bait

Image: David Maynard for FFA
Useful publications for or more information on baitfish species, their identification and their biology:


- Volume 3: Bony fishes part 1 (Elopidae to Linophrynidae) includes the Engraulidae and Clupeidae
- Volume 4: Bony fishes part 2 (Mugilidae to Carangidae) includes the Atherinidae and Carangidae
- Volume 5: Bony fishes part 3 (Menidae to Pomacentridae) includes the Caesionidae
- Volume 6: Bony fishes part 4 (Labridae to Latimeriidae) includes the Scombridae


USEFUL WEBSITES

- **FishBase** ([www.fishbase.org](http://www.fishbase.org))
  FishBase is a relational database with information to cater to different professionals such as research scientists, fisheries managers, zoologists and many more. FishBase on the web contains practically all fish species known to science.

- **WoRMS** ([http://www.marinespecies.org/](http://www.marinespecies.org/))
  The World Register of Marine Species (WoRMS) provides an authoritative and comprehensive list of names of marine organisms, including information on synonymy. WoRMS has an editorial management system where each taxonomic group is represented by an expert who has the authority over the content, and is responsible for controlling the quality of the information.

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