

Deepwater Fish Field Guide

Queensland Deepwater Fin Fish Fishery (L8)

August 2006

Flame snapper



*For use with the Queensland Reef
Line Multi-Hook Fin Fish Fishery
Logbook for commercial fishers
operating within the L8 fishery*



Queensland Government
Department of **Primary Industries and Fisheries**

Deepwater Fish Field Guide

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Fin Fish Fishery (L8)**

August 2006

*A Department of Primary Industries and Fisheries guide for
the Queensland Reef Line Multi-Hook Fin Fish Fishery (L8)
August 2006*

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About this guide

This book can be used in conjunction with the *Queensland Reef Line Multi-Hook Fin Fish Fishery Logbook*. This publication provides you with a map with coordinates of the areas accessible under the L8 symbol, along with an identification guide that includes an explanation of fish structural features used to identify the various species taken from waters greater than 200 metres. Photos and descriptions are given for common species likely to be caught in the Reef Line Multi-Hook Fin Fish Fishery.

FOR QUERIES ABOUT THE LOGBOOK PROGRAM OR ANY INFORMATION CONTAINED IN THIS DOCUMENT PLEASE CONTACT (07) 3227 6299.

Permit AND licencing requirements to engage in multiple hook fishing off the coast of Queensland

Fishing under the L8 symbol allows for the taking of fish in waters managed under Queensland fisheries legislation deeper than 200 metres using drop lines or bottom set long lines with a maximum of three hundred (300) hooks. The authorisation prohibits the capture and retention of certain fish including coral trout, red emperor and snapper using L8 fishing apparatus (more than six hooks, 300 hooks or less).

The conduct of activity using multiple hook apparatus within both the Great Barrier Reef Marine Park (GBRMP) and other Commonwealth waters outside the Queensland fisheries jurisdiction requires authorisation in addition to the L8 symbol.

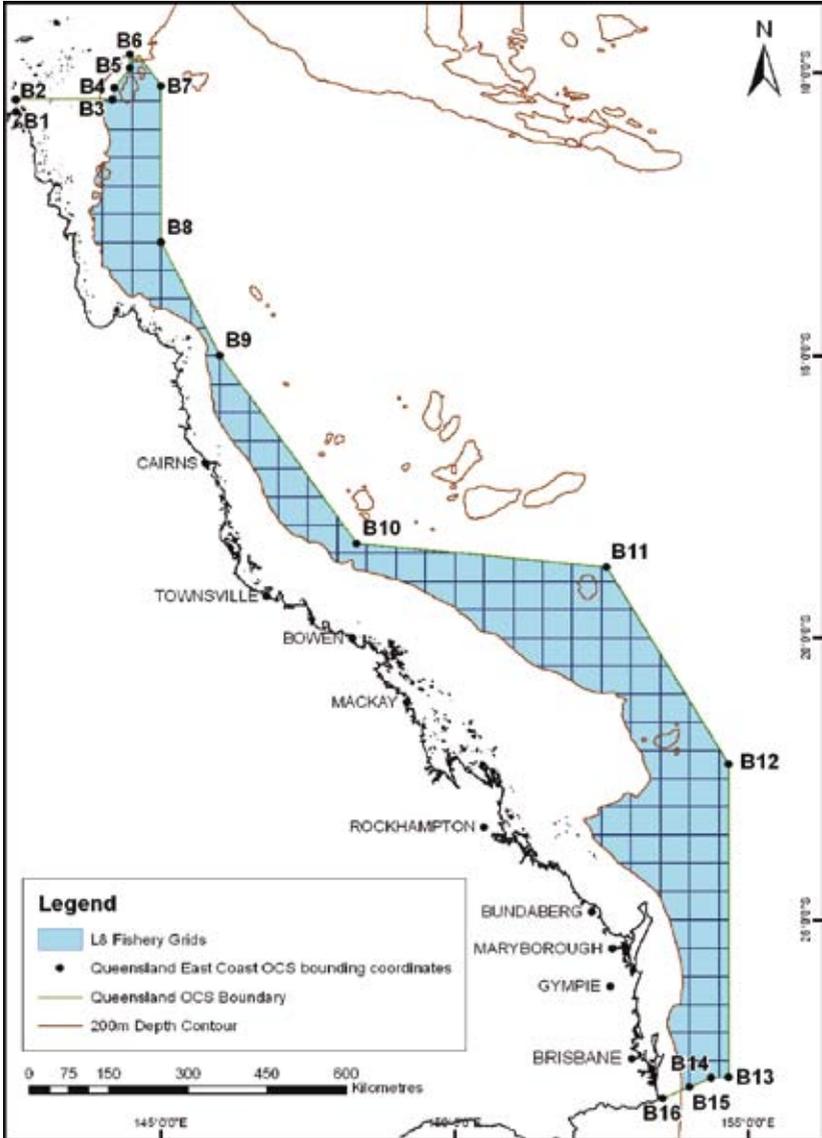
For example, if you intend fishing using multiple hook gear (more than six hooks and less than 300 hooks) and you are within the boundary of the GBRMP, you will require both an L8 authority (symbol on licence) issued by DPI&F, and a permit from the Great Barrier Reef Marine Park Authority.

If you are outside the GBRMP and inside Queensland jurisdiction (see page 2) then you will require only an L8 authority issued by DPI&F to operate within the Multiple Hook fishery.

However, if you are intending to fish outside Queensland jurisdiction then you will require authorisation to fish in Commonwealth waters and would need a permit to do so from the Australian Fisheries Management Authority (AFMA).

If you intend to retain any coral reef fin fish, as listed in the *Fisheries (Coral Reef Fin Fish) Management Plan 2003*, you will need to have an RQ fishery symbol and quota attached to your L8 licence. These species are listed in the guide with (RQ) after the common name. Fish other than coral reef fin fish have been marked as (Non-RQ) after the common name. There are a number of species that cannot be taken by L8 fishers, regardless of whether or not the L8 fishers have an RQ symbol. These species include barramundi, coral trout, red emperor, snapper and Spanish mackerel.

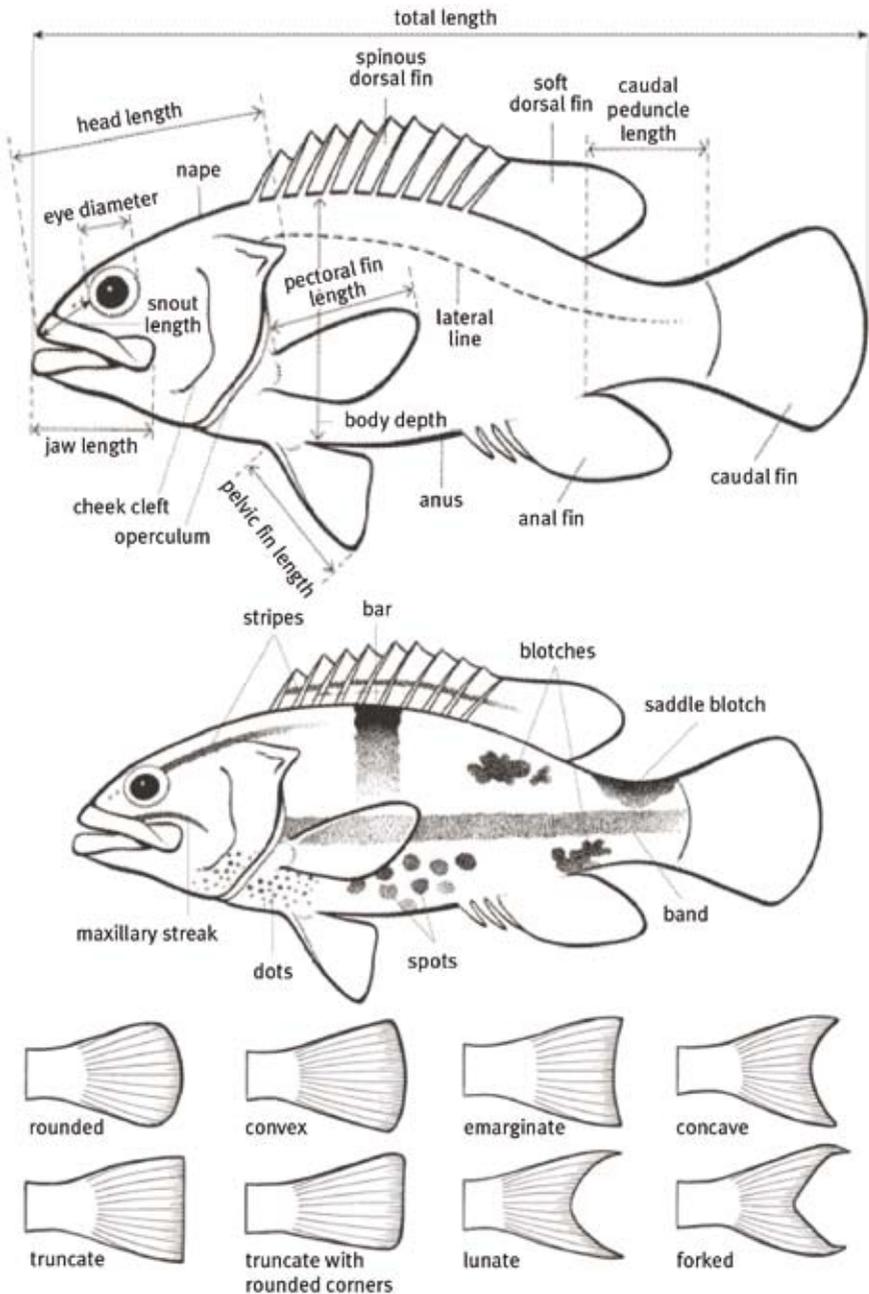
Jurisdictional areas



Queensland Jurisdiction

Source: Queensland Government Gazette No. 23
10 February 1995

Structural features of fish



Glossary of terms

| | |
|---------------------------|--|
| Abdomen | the belly of the fish containing the internal organs |
| Adipose fin | small fleshy fin-like projection on the back of some fishes between the dorsal fin and the caudal fin (tail) |
| Anal fin | fin on belly behind the anus |
| Anus | external opening to the intestine |
| Belly | the lower part of the body |
| Caudal fin | the tail fin |
| Caudal peduncle | the base of the tail between the anal fin and the caudal fin |
| Compressed | flattened laterally, from side to side |
| Dorsal fin | the median fin on the upper part of the body |
| Emarginate | slightly concave |
| Lateral line | sensory canal system usually consisting of specialised scales that runs along the sides of all fish |
| Median fins | the dorsal, anal and caudal fins |
| Nape | the region of the head above and behind the eyes, before the dorsal fin |
| Pelvic fin | paired fins on the belly before the anal fin |
| Rays soft/spinous | the rigid or flexible struts that support the fins |
| Scutes | modified spiny scales that form hard plates along the tails of some fish |
| Snout | the part of the head in front of the eye |
| Soft dorsal fin | dorsal fin supported by flexible rays rather than rigid spines |
| Spine | a sharp and stiff projection |
| Spinous dorsal fin | dorsal fin supported by rigid spines |
| Total length | the greatest distance from the tip of the snout to the end of the tail |

Identification guide

Cods and Gropers

Family Serranidae

Epinephelus ergastularius

Description: Juveniles are brown with seven broad dark bars that run vertically. Adults are pinkish grey with no trace of the dark bars. Fins darker than body, with white margins (except on spinous part of dorsal fin).

Total length: Attains at least 157 cm

Depth range: Adult: 110–370 m
Juvenile: 15–130 m



Pat Tully ©NSW DPI

Epinephelus morrhua

Description: Head and body have dark brown bands beginning as fork at rear edge of eye. The upper branch extends up to the lower gill cover, and continues on body as a mid-lateral band that forks above pectoral fin.

Total length: Attains at least 90 cm

Depth range: 80–370 m



DPI&F Observer Program

Eight bar groper (RQ)



DPI&F Observer Program

Epinephelus octofasciatus

Description: Juveniles have eight broad dark brown bars running vertically (similar in appearance to the Bar Cod). On adults, these bands tend to fade out and the fish become a dark grey colour. However, the last dark band tends to remain producing a saddle-like marking at the base of the tail.

Total length: Attains at least 130 cm

Depth range: Adult: 150–300 m
Juvenile: shallower waters

Oblique-banded groper (RQ)



DPI&F Observer Program

Epinephelus radiatus

Description: Caudal fin convex to moderately round. Small adults have five dark edged pale bands. Large adults with dark edged bands replaced by a series of dark spots. Dorsal and caudal fins covered with spots.

Total length: Attains at least 70 cm

Depth range: Adults: 80–380 m
Juveniles found at 20 m

Epinephelus magniscuttis

Description: Generally pale brown, with small dark brown or greyish green spots scattered on body and dorsal and caudal fins. No spots below pectoral fin. Juveniles have six or seven dark horizontal lines running along body that disappear with age.

Total length: Attains at least 150 cm

Depth range: 50–300 m

Speckled groper (RQ)



JE Randall

Family Polyprionidae

Polyprion moeone (americanus?)

Description: Body broad for its length, almost oval shaped. Snout rounded, lower jaw not markedly protruding. Eyes relatively large and set near top of head. Caudal peduncle relatively short, tail convex. Lateral line not prominent. Fairly uniform in colour, very dark brown to black on back, grading to slightly lighter on belly.

Total length: Attains at least 210 cm

Depth range: 40–600 m

Bass groper (RQ)



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Hapuku (RQ)



CSIRO Marine and Atmospheric Research

Polyprion oxygeneios

Description: Body narrow for its length. Snout pointed, lower jaw protrudes well forward of upper jaw. Eyes small, set lower in head. Tail slightly concave with angular tips. Prominent lateral line. Back mostly blue/grey (rarely very dark), with distinct change in colour near lateral line to light grey/cream on belly.

Total length: Attains a maximum of 180 cm

Depth range: 50–600 m

Snappers and Sea Perches

Family *Lutjanidae*

Paracaesio kusakarii

Description: Caudal fin emarginate with pointed cleft developing in the middle of the tail in adults. Head and body silvery white with four broad, vertical bars on upper side. Fins greyish, whitish or slightly yellow.

Total length: Attains at least 76+ cm

Depth range: 100–310 m

Saddleback snapper (RQ)



Darren Roy, DPI&F

Lipocheilus carnolabrum

Description: Caudal fin forked. Ten dorsal spines and 10 soft dorsal rays. Mouth large, adults with thick, fleshy protrusion at end of upper lip. Pectoral fins long reaching beyond level of anus.

Total length: Attains at least 77 cm

Depth range: 90–340 m

Tangs snapper (non-RQ)



DPI&F Observer Program

Flame snapper (RQ)



DPI&F Observer Program

Etelis coruscans

Description: Body slender and elongate. Small head, large eyes. Caudal fin deeply forked. Back and upper sides deep pink to red. Lower sides and belly pink. Fins pink to red.

Total length: Attains at least 130+ cm

Depth range: 90–335 m

Goldband snapper (RQ)



DPI&F Observer Program

Pristipomoides multidens

Description: Caudal fin forked. Yellowish to rosy, with about six broken golden stripes on sides. Side of snout **below the eye** has two to three golden stripes bordered with blue. Top of head has yellow bands and dorsal fin covered with yellowish stripes or rows of spots.

Total length: Up to 90 cm.
Common to 50 cm

Depth range: 40–245 m

Sharptooth jobfish (RQ)



DPI&F Observer Program

Pristipomoides typus

Description: Pectoral fins long, caudal fin forked. Body and fins rosy red. Brownish yellow bands on head **above the eye** and on spiny dorsal fin.

Total length: Up to 70 cm.
Common to 40 cm

Depth range: 40–120 m

Note: Often mistaken for Goldband snapper

Pristipomoides flavipinnis

Description: Caudal fin forked. Back and upper sides pale lavender or pinkish. Lower sides and belly silvery. Network of dark spots on top of head. Dorsal fin yellow when fresh.

Total length: Attains at least 60 cm

Depth range: 90–360 m

Golden-eye jobfish (RQ)



JE Randall

Pristipomoides argyrogrammicus

Description: Caudal fin forked. Upper part of head reddish, nape and area above lateral line mainly yellow. Sides and belly silvery, sometimes pinkish. Body with many bright blue spots. Dorsal and caudal fins yellowish.

Total length: Attains at least 40 cm

Depth range: 70–335 m

Ornate jobfish (RQ)



DPI&F Observer Program

Etelis radiosus

Description: Body slender and elongated. Head small, eye large. Caudal fin forked. Mainly red, lighter on lower sides and belly.

Total length: Attains at least 60 cm

Depth range: 90–275 m

Pale snapper (RQ)



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Lavender jobfish (RQ)



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Pristipomoides sieboldii

Description: Lower jaw slightly protruding. Caudal fin forked. Silvery with lavender hue, dark spots on top of head, more conspicuous in young fish. Margin of dorsal fin orange. Caudal fin purplish with inner margin of fork pale.

Total length: Attains at least 60 cm. Common to 40 cm

Depth range: 180–360 m

Note: Often mistaken for Rosy jobfish, but tail fins differ.

Rosy jobfish (RQ)



DPI&F Observer Program

Pristipomoides filamentosus

Description: Pectoral fins long. Caudal fin forked. Back and sides variable, ranging from brownish to lavender or reddish-purple. Around snout are narrow yellow lines and blue spots. Dorsal and caudal fins light blue or lavender with reddish-orange margins.

Total length: Attains at least 90 cm

Depth range: 40–400 m

Ruby jobfish (RQ)



DPI&F Observer Program

Etelis carbunculus

Description: Caudal fin forked. Mainly pink to red, becoming white on lower sides and belly.

Total length: Attains at least 110+ cm

Depth range: 90–400 m

Aphareus rutilans

Description: Caudal fins deeply forked. Blue-grey or mauve to overall reddish. Fins yellowish to reddish, except pelvic and anal fins, which are sometimes whitish.

Total length: Attains at least 110 cm

Depth range: At least 100–330 m

Note: Also known as Ironjaw

Rusty jobfish (RQ)



Jean-Francois Helias

Family Glaucosomatidae

Glaucosoma scapulare

Description: The term ‘pearl perch’ may refer to all members of the genus *Glaucosoma* except for the West Australian Dhufish (*G. hebraicum*). Eight dorsal spines with 11 soft dorsal rays. One vertical band through eye which may disappear with an increase in size. Nine anal fin rays.

Total length: Attains at least 85 cm

Depth range: 30–150 m

Pearl perch (non-RQ)



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Emperors and Bigeyed Breams

Family Lethrinidae

Mozambique bream (RQ)



DPI&F Observer Program

Wattsia mossambica

Description: Caudal fin slightly forked with broadly rounded lobes. Overall silvery-grey with yellowish tinge. Indistinct dark blotches or bars are sometimes found on body. Fins yellow. Faint brown spotting may be present on dorsal, anal and caudal fins.

Total length: Attains at least 55+ cm

Depth range: 100–290 m

Trevallas
Family Centrolophidae

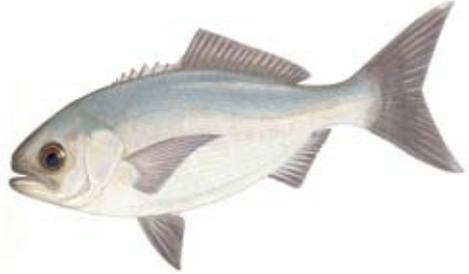
Blue eye trevalla (non-RQ)

Hyperoglyphe antarctica

Description: Snout blunt and head broad behind the eye. Upper jaw extends back to below the eye. Eight or nine unequal spines form a distinct first dorsal fin in front of the soft dorsal fin, which has 18 to 21 soft fin rays. Silver/grey to bronze on the back grading to lighter on the belly. Eye often has a deep blue hue.

Total length: Attains at least 140 cm

Depth range: 300–500 m



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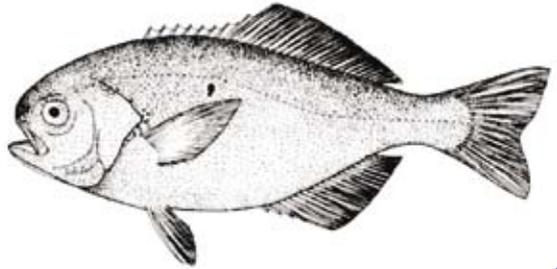
Schedophilus labyrinthicus

Description: Body much more laterally compressed. Head compressed with a very blunt snout and rounded forehead. Upper jaw shorter, barely extending past the forward margin of the eye. Eight to nine short spines precede a single dorsal fin with 26 to 29 soft rays, all of similar length. Dark blue/grey on back grading to very light, almost white on belly. Smaller fish may be much darker grey/black on the back sides, and appear to be less laterally compressed than the larger fish. The skin on the head has a purple hue.

Total length: Attains at least 90+ cm

Depth range: 200–600 m

Ocean blue eye trevalla (non-RQ)



FAO

Acknowledgements

Aphareus rutilans photo courtesy of Jean-Francois Helias—
<http://www.anglingthailand.com>

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Polyprion oxygeneios photo courtesy of CSIRO Marine and Atmospheric Research—
<http://www.marine.csiro.au>

Department of Primary Industries and Fisheries Queensland Observer Program/
Saul Pickett, Sam McCulloch and Gavin Leese

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