

# COMMERCIAL HOLOTHURIANS OF THE TROPICAL PACIFIC

## Actinopyga



**Deepwater redfish**  
*Actinopyga echinites*  
Value: ☆ ☆  
Map showing distribution in the Pacific region.

**Habitat:** Coastal reefs, in rubble, seagrass beds, or sand between corals. Depth: 0–3 m.  
**Key ID:** Brown, darker on dorsal surface, which also has pimples texture. Dorsal papillae long and slender. Anus terminal with 5 teeth. Often covered with sand. Commonly to 15 cm; max. 36 cm.



**Surf redfish**  
*Actinopyga mauritiana*  
Value: ☆ ☆  
Map showing distribution in the Pacific region.

**Habitat:** Oceanic-influenced reefs in wave-exposed zones. Depth: 0–10 m.  
**Key ID:** Rusty brown with whitish blotches and spots. Rigid body with trapezoidal section; ventral surface with numerous podia. Anus terminal with 5 teeth. Commonly to 24 cm; max. 38 cm.



**Hairy blackfish**  
*Actinopyga milaris*  
Value: ☆ ☆  
Map showing distribution in the Pacific region.

**Habitat:** Sandy lagoons and reef flats. Depth: 1–10 m, but mostly less than 4 m.  
**Key ID:** Dark brown with lighter ventral surface. Stout, cylindrical body. Anus terminal with 5 conical teeth. Numerous long, thin papillae. Contracts to a ball shape when disturbed. Commonly to 20 cm; max. 30 cm.



**(not yet named)**  
*Actinopyga nov. sp.*  
Value: ☆ ☆  
Map showing distribution in the Pacific region.

**Habitat:** Protected and depositional sandy-muddy bays, mostly in seagrass beds. Often recorded with the brown curryfish (*Stichopus vastus*). Depth: 0.2–2 m.  
**Key ID:** Beige to dark brown with fine black stripes. Stout, cylindrical body. Anus terminal with 5 creamy conical teeth. Numerous long, thin papillae. Contracts to a ball shape when disturbed. Commonly to 17 cm; max. 21 cm.

## Actinopyga



**Stonefish**  
*Actinopyga lecanora*  
Value: ☆ ☆  
Map showing distribution in the Pacific region.

**Habitat:** Areas with live coral and coral rocks, and reef ledges. Depth: 0.5–7 m.  
**Key ID:** Whitish to yellow with fine dark-brown spots, less numerous near anus. Slippery texture. Cylindrical body, flattened ventrally. Anus terminal with five conical teeth. Commonly to 22 cm; max. 24 cm.



**Burying blackfish (New Caledonia blackfish)**  
*Actinopyga spinea*  
Value: ☆ ☆  
Map showing distribution in the Pacific region.

**Habitat:** Muddy-sand lagoons and reef flats. Depth: 1–12 m.  
**Key ID:** Rusty brown to dark brown, often with fine sand dorsally. Sub-cylindrical body, more elongate than hairy blackfish (*A. milaris*). Anus subsdorsal with nodular teeth. Small thin papillae. Commonly to 30 cm; max. 40 cm.



**Deepwater blackfish (Panning's blackfish)**  
*Actinopyga palauensis*  
Value: ☆ ☆  
Map showing distribution in the Pacific region.

**Habitat:** Reef passes and forereef pavement. Depth: 4–18 m.  
**Key ID:** Brownish-black over entire body. Bumpy dorsal surface, with sand covering. Relatively long, sub-cylindrical body. Anus terminal with serrated or nodular teeth. Small papillae. Commonly to 30 cm; max. 35 cm.

## Bohadschia



**Tigerfish (Leopardfish)**  
*Bohadschia argus*  
Value: ☆ ☆  
Map showing distribution in the Pacific region.

**Habitat:** Commonly on sand at base of reef slopes or on reef flats and in lagoons. Depth: 1–30 m, but mostly found in shallow waters.  
**Key ID:** Light grey, brown or mauve, with characteristic eye-like spots with dark centre. Cylindrical body, flattened ventrally. Anus nearly dorsal; everts tubules readily. Commonly to 37 cm; max. 60 cm.

## Bohadschia



**Brown sandfish**  
*Bohadschia vietensis*  
Value: ☆  
Map showing distribution in the Pacific region.

**Habitat:** Calm waters of coastal lagoons and inner reef flats with soft sediments. Depth: 1–7 m.  
**Key ID:** Whitish to yellow with fine dark-brown spots, less numerous near anus. Slippery texture. Cylindrical body, flattened ventrally. Anus nearly dorsal; everts tubules readily. Commonly to 31 cm; max. 42 cm.



**Chalkfish (Brownspeckled sandfish)**  
*Bohadschia similis*  
Value: ☆  
Map showing distribution in the Pacific region.

**Habitat:** Coastal lagoons and inner reef flats with soft sediments. Mainly nocturnal. Depth: 0.5–3 m.  
**Key ID:** Beige dorsal surface with brown patches, white ventral surface. Slippery texture. Numerous long papillae. Cylindrical body, flattened ventrally. Anus nearly dorsal; everts white tubules readily. Commonly to 22 cm; max. 32 cm.

## Holothuria



**Lollyfish**  
*Holothuria atra*  
Value: ☆  
Map showing distribution in the Pacific region.

**Habitat:** Sandy lagoons and reef flats. Depth: 0–30 m.  
**Key ID:** Black. Thin cylindrical body. Large specimens without sand covering, small specimens usually with sand covering and bare spots. Anus terminal to sub-dorsal. Very short papillae. Skin produces reddish-purple toxic dye when rubbed. Commonly to 23 cm; max. 65 cm.



**Pinkfish**  
*Holothuria edulis*  
Value: ☆  
Map showing distribution in the Pacific region.

**Habitat:** Rubble-covered reef flats, lagoons and reef fronts. Depth: 0–24 m.  
**Key ID:** Black or purple dorsal surface with pink ventral surface and ventral flanks. Thin cylindrical body. Usually fine covering of sand. Anus terminal. Very short papillae. Commonly to 24 cm; max. 38 cm.

## Holothuria



**Sandfish**  
*Holothuria scabra*  
Value: ☆ ☆ ☆  
Map showing distribution in the Pacific region.

**Habitat:** Muddy-sand seagrass beds and reef flats. Depth: 0.5–3 m.  
**Key ID:** Brownish-grey, brownish-green or dark grey with tiny black dots; lighter-coloured ventral surface. Sub-cylindrical body with deep wrinkles on dorsal surface. Anus terminal. Very short papillae. Commonly to 24 cm; max. 32 cm.



**Golden sandfish**  
*Holothuria scabra var. varicosula*  
Value: ☆ ☆ ☆  
Map showing distribution in the Pacific region.

**Habitat:** Sandy reef flats and lagoons. Depth: 1–8 m.  
**Key ID:** Variable: black to beige, with or without black blotches; grey or cream ventral surface. Stout, sub-cylindrical body. Very shallow, or no body wrinkles. Anus terminal. Short papillae, but longer than those of the sandfish (*H. scabra*). Commonly to 32 cm; max. 46 cm.



**Elephant trunkfish**  
*Holothuria fuscipunctata*  
Value: ☆  
Map showing distribution in the Pacific region.

**Habitat:** Sandy lagoons and reef flats. Depth: 2–33 m.  
**Key ID:** Yellow to golden-orange dorsal surface with black spots and deep transverse wrinkles; white ventral surface. Usually thickly covered with sand. Arched dorsally, flattened ventrally. Short papillae. Commonly to 48 cm; max. 66 cm.



**Red snakefish**  
*Holothuria flavomaculata*  
Value: ☆  
Map showing distribution in the Pacific region.

**Habitat:** Sandy reef flats and under rocks. Depth: 1–3 m.  
**Key ID:** Reddish brown with red to yellowish tips to papillae. Long slender body. Flanged mouth with dark brown to black tentacles. Commonly to 35 cm; max. 43 cm.

## Holothuria



**White teatfish**  
*Holothuria fuscogilva*  
Value: ☆ ☆ ☆  
Map showing distribution in the Pacific region.

**Habitat:** Lagoons and passes on pavement or sand. Depth: 3–40 m.  
**Key ID:** Variable: dark brown or creamy-white, with or without blotches; light brown ventral surface. Dorsal surface coated with sand. Stout body with pointed lateral protrusions ('teats'). Rough texture; very short papillae. Anus terminal with small teeth. Commonly to 41 cm; max. 53 cm.



**Black teatfish**  
*Holothuria whitmaei*  
Value: ☆ ☆ ☆  
Map showing distribution in the Pacific region.

**Habitat:** Reef flats, fronts and passes on pavement or sand. Depth: 1–30 m.  
**Key ID:** Invariably black, coated with sand dorsally; dark grey ventral surface. Stout body with lateral protrusions ('teats'). Rough texture; very short papillae. Anus terminal with small teeth. Commonly to 34 cm; max. 54 cm.



**White threadfish**  
*Holothuria leucospilata*  
Value: ☆  
Map showing distribution in the Pacific region.

**Habitat:** Sandy reef flats, and often under rocks. Depth: 0.2–4 m.  
**Key ID:** Black. Long slender body. Thin black papillae. Black tentacles. Commonly to 21 cm; max. 28 cm.



**Snakefish**  
*Holothuria coluber*  
Value: ☆  
Map showing distribution in the Pacific region.

**Habitat:** Sandy reef flats, under rocks. Depth: 1–4 m.  
**Key ID:** Dark grey. Stout papillae with characteristic yellow tips. Tentacles creamy-yellow. Long body; wider in the front with flanged mouth. Contracts into crevices when disturbed. Commonly to 40 cm; max. 60 cm.

## Stichopus



**Curryfish**  
*Stichopus hermanni*  
Value: ☆ ☆  
Map showing distribution in the Pacific region.

**Habitat:** Coastal reefs and lagoons in rubble and muddy-sand bottoms. Depth: 1–30 m.  
**Key ID:** Yellow-orange with numerous conical warts in eight rows. Firm body with quadrangular section. Anus terminal. Commonly to 30 cm; max. 55 cm.



**Brown curryfish**  
*Stichopus vastus*  
Value: ☆  
Map showing distribution in the Pacific region.

**Habitat:** Shallow coastal muddy-sand areas. Depth: 0.5–2 m.  
**Key ID:** Green and yellow harlequin pattern. Firm body with quadrangular section. Commonly to 20 cm; max. 36 cm.



**Dragonfish (Selenka's sea cucumber)**  
*Stichopus horrens group*  
Value: ☆ ☆  
Map showing distribution in the Pacific region.

**Habitat:** Shallow coastal reef with rubble and boulders. Nocturnal species. Depth: 0–3 m.  
**Key ID:** Grey to light green-brownish. Rigid body with quadrangular section covered with irregular warts. Anus terminal. Commonly to 32 cm; max. 39 cm.



**Greenfish**  
*Stichopus chloronotus*  
Value: ☆ ☆  
Map showing distribution in the Pacific region.

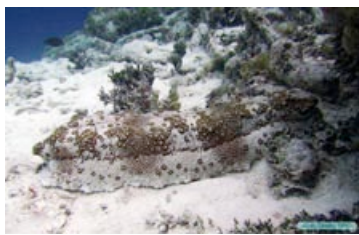
**Habitat:** Reef flat and upper slopes. Depth: 1–27 m, but mostly found in shallow waters.  
**Key ID:** Dark green with orange tips to stout dorsal papillae in two rows. Rigid body with quadrangular section. Anus terminal. Commonly to 23 cm; max. 38 cm.

## Thelenota



**Prickly redfish**  
*Thelenota ananas*  
Value: ☆ ☆  
Map showing distribution in the Pacific region.

**Habitat:** Lagoons, in areas with rubble, and passes. Depth: 1–35 m.  
**Key ID:** Dark pink to brownish-red. Large conical papillae over entire body, particularly at ventral flanks and ends. Arched dorsally, flattened ventrally. Anus terminal. Commonly to 55 cm; max. 70 cm.



**Amberfish**  
*Thelenota anax*  
Value: ☆  
Map showing distribution in the Pacific region.

**Habitat:** Calm, sandy lagoons and sandy reef fronts. Depth: 2–40 m.  
**Key ID:** Light grey with pink spots in blotches. Squarish in cross-section. Papillae wart-like on dorsal surface and large on ventral flanks. Anus terminal. Commonly to 63 cm; max. 89 cm.



**Candycanefish**  
*Thelenota rubralineata*  
Value: ☆  
Map showing distribution in the Pacific region.

**Habitat:** Reef slopes with oceanic influence, close to high islands. Depth: commonly 15–35 m.  
**Key ID:** Creamy white with numerous fine red lines. Squarish in cross-section. Large conical papillae with yellowish pointed tips on dorsal surface and ventral flanks. Anus terminal. Length commonly 30–50 cm. Reported to be rare in many localities.



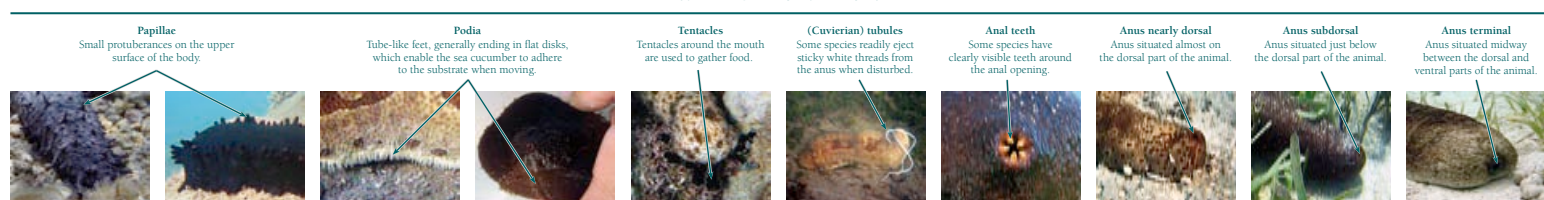
**Flowerfish (Blackspeckled sea cucumber)**  
*Pearsonothuria graeffii*  
Value: ☆  
Map showing distribution in the Pacific region.

**Habitat:** Reef slopes and coral platforms. Depth: 1–10 m.  
**Key ID:** Blotchy beige and brown, orange-brown and black spots. Small conical papillae with white tips. Warty dorsal surface. Black tentacles with white margins. Anus nearly dorsal. Commonly to 38 cm; max. 48 cm.

**Notes:**

- Habitat is the main habitat in which species can be found.
- Depth for each species is reported as the depth at which 90% of individuals were observed during SPC/PROCFish-C or WorldFish Center surveys in the Pacific region.
- First length (Commonly to ...) is the maximum length at which 90% of individuals were observed during SPC/PROCFish-C or WorldFish Center surveys in the Pacific region. Second length (max. ...) is the overall maximum length recorded for each species during the same surveys.
- The distribution maps relate only to distribution within the SPC area (marked by the dotted line) as observed during SPC/PROCFish-C surveys in the Pacific region, and to the north and eastern coasts of Australia as documented in various published records.

### SOME KEY IDENTIFICATION FEATURES



**For more information:**

Conand C. 1998. Holothurians, p. 1157–1190. In: Carpenter K.E. and Niem V.H. (eds). The living marine resources of the Western Central Pacific. Volume 2. Cephalopods, crustaceans, holothurians and sharks. Rome, FAO, 4218 p.

Friedman K., Purcell S., Bell J. and Hair C. 2008. Sea cucumber fisheries: a manager's toolbox. ACIAR Monograph No. 135. Canberra: Australian Centre for International Agricultural Research. 32 p.

Kinch J., Purcell S., Uthricke S. and Friedman K. 2008. Population status, fisheries and trade of sea cucumbers in the Western Pacific, p. 7–55. In: Toral-Granda V., Lovatelli A. and Vasconcelos M. (eds). Sea cucumbers: a global review on fisheries and trade. FAO Fisheries Technical Paper No. 516. Rome, FAO, 317 p.

SPC website: <http://www.spc.int/coastfish/>