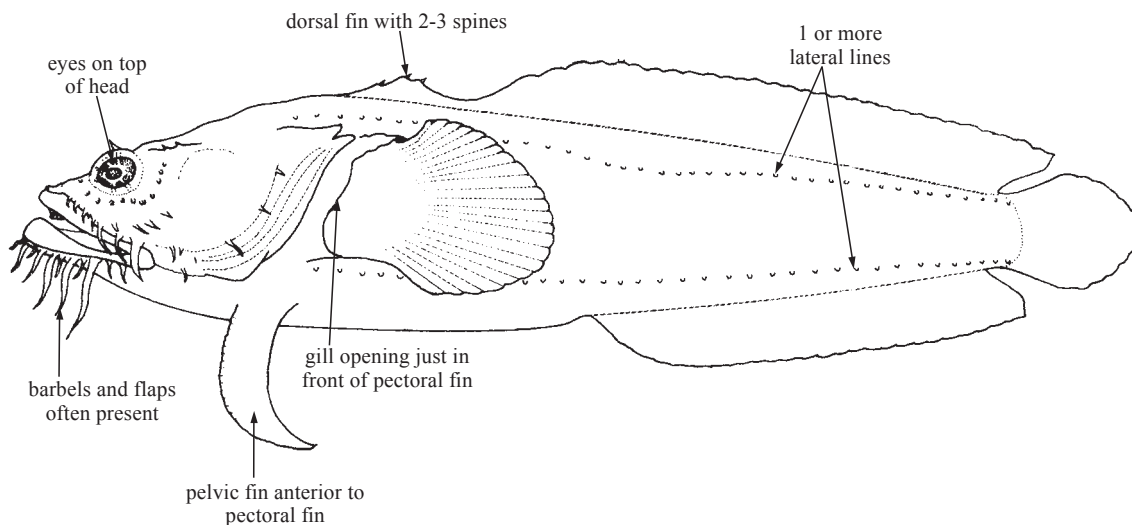


Order **BATRACHOIDIFORMES****BATRACHOIDIDAE****Toadfishes**

by B.B. Collette, National Marine Fisheries Service, National Museum of Natural History, Washington D.C., USA

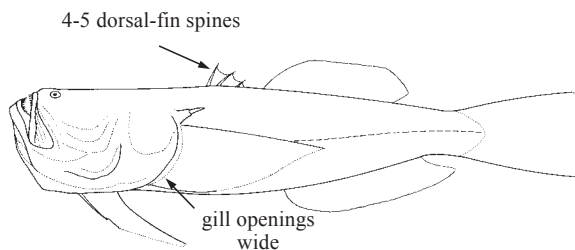
Diagnostic characters: Small to medium-sized fishes (to 57 cm) easily recognized by their characteristic shape. **Head broad and flattened, often with barbels and/or fleshy flaps; eyes on top of head, upward-directed; mouth wide. Gill openings restricted to sides, just in front of pectoral-fin base.** Two dorsal fins, the first consisting of 2 or 3 strong, sharp spines; the second consisting of a large number of soft rays; pelvic fins jugular, inserted well in advance of pectoral fins, with 1 spine and 2 or 3 soft rays. One to several lateral lines on head and body. Body naked or covered with small, cycloid (smooth) scales. **Colour:** mostly drab brown with spots or saddles of black, although at least 1 coral reef species, *Sanopus splendidus*, is brightly coloured. One subfamily, the Porichthyinae, is characterized by having photophores (light-emitting organs) in rows along lateral lines on head and body.



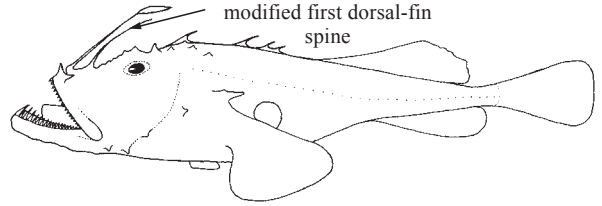
Habitat, biology, and fisheries: Toadfishes are bottom-dwellers ranging from shallow inshore areas to deep waters; several species enter rivers, and some migrate regularly between shallow and deep waters. They are sluggish in their movements and are ambush predators, feeding mainly on molluscs and crustaceans. They may bite when handled. The subfamily Thalassophryninae, or 'venomous toadfishes', includes species with hollow spines in the first dorsal fin and on the opercles; the spines are connected to venom glands that can force a poison into a wound. Although no catch statistics are reported, larger species of toadfish are commonly found in local markets. Some species are eaten and may fetch fairly high prices in Venezuela and French Guiana.

Similar families occurring in the area

Uranoscopidae (stargazers): gill openings wide, branchiostegal membranes nearly separate, free from isthmus (on underside of head); pelvic fins with 1 spine and 5 soft rays (1 spine and 2 or 3 soft rays in Batrachoididae); also, species of Uranoscopidae in Area 31 either lack the spiny dorsal fin or have 4 or 5 dorsal-fin spines (2 or 3 in Batrachoididae).

**Uranoscopidae**

Lophiidae: body and head more strongly depressed; first dorsal-fin spine modified into a long fishing rod with a fleshy bait.



Lophiidae

Key to the species of Batrachoididae occurring in the area

- 1a. Dorsal-fin spines 2; subopercular spines absent (Fig. 1a); body scaleless; no axillary pore behind pectoral fins; canine-like teeth and photophores present or absent → 2
- 1b. Dorsal-fin spines 3; 1 or 2 subopercular spines present (Figs 1b, c); body with or without scales; axillary pore (Fig. 1d) behind pectoral fins present or absent; canine-like teeth and photophores absent → 8

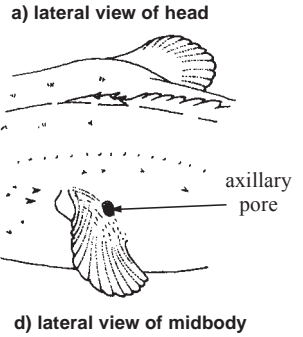
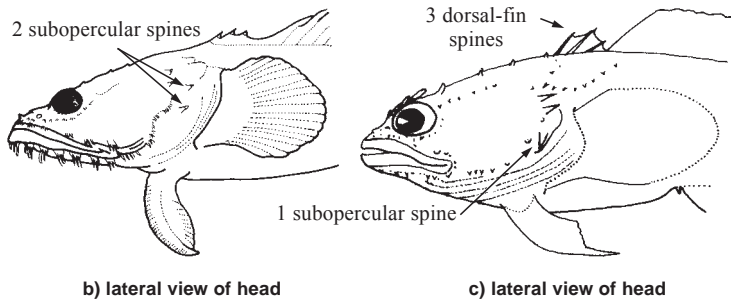
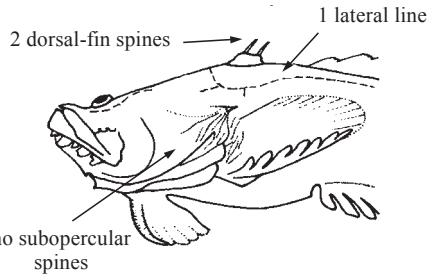


Fig. 1

- 2a. Dorsal-fin spines and opercular spine hollow, with venom glands; a single lateral line (Fig. 1a); no photophores; no canine-like teeth; no distinct glands on pectoral fins but glandular tissue scattered distally on fins (Fig. 2); second dorsal fin with 17 to 21 soft rays; anal fin with 16 to 20 soft rays (*Thalassophryne*) → 3
- 2b. Dorsal-fin spines solid, without venom glands; 4 lateral lines on body (Fig. 3); photophores present along lateral lines; canine-like teeth present; discrete glands present on the inner surface of pectoral fins between the upper fin rays; second dorsal fin with 29 to 39 soft rays; anal fin with 27 to 37 soft rays (*Porichthys*) → 5

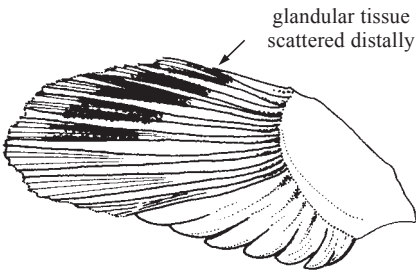


Fig. 2 *Thalassophryne* (pectoral fin)

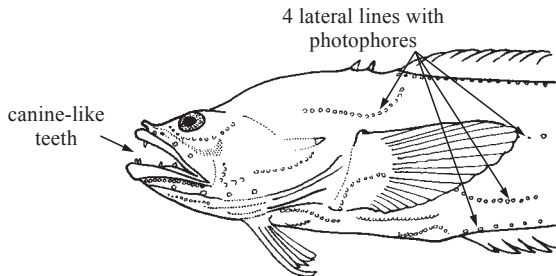


Fig. 3 *Porichthys*

- 3a. Dorsal, anal, pectoral, and caudal fins with pale distal margins *Thalassophryne nattereri*
- 3b. Dorsal, anal, pectoral, and caudal fins pigmented to distal margins → 4

- 4a. No prominent spots on body or fins; pectoral-fin rays 13 to 15, usually 14; eye very large, 54 to 67 (mean 62) thousandths of standard length *Thalassophryne megalops*
- 4b. Body colour variable with small and large spots, frequently with large blotches; pectoral-fin rays 14 to 17, usually 15 or 16; eye moderately large, 35 to 78 (mean 54) thousandths of standard length *Thalassophryne maculosa*

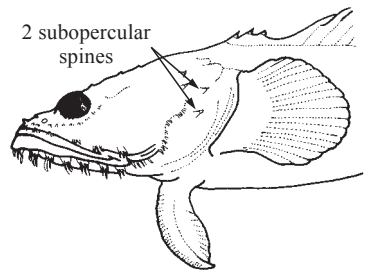
- 5a. Branchiostegal series of photophores united in a broad V, without a forward-directed commissure at the apex; dorsal-fin rays 29 to 32; anal-fin rays 27 to 30 → 6
- 5b. Branchiostegal series of photophores with a U-shaped forward-directed commissure at the apex; dorsal-fin rays 33 to 39; anal-fin rays 30 to 36, usually 31 to 34 → 7

- 6a. Back and head with 6 or 7 well-defined saddle marks; no spots present on body; opercular spine often spear-shaped; pectoral-fin rays 14 to 16, usually 14 or 15; total gill rakers on first arch usually 8 occasionally 9 *Porichthys pauciradiatus*
- 6b. Six fairly well-defined blotches of pigment on back and nape, coalescing so as to form saddle marks in larger specimens; numerous small spots and 'worm-bore' markings present on upper part of head and anterodorsal part of back, more numerous in former region; opercular spine not spear-shaped; pectoral-fin rays 16 or 17; total gill rakers on first arch 12 or 13 *Porichthys oculo frenum*

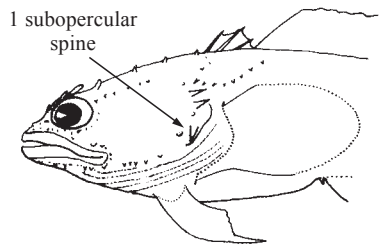
- 7a. Entire body darkly pigmented; 4, 5, or 6 irregularly shaped dark blotches on upper part of body; pectoral-fin rays usually 16 or 17, occasionally 15 or 18; in relatively deep water, 200 to 300 m *Porichthys bathoiketes*
- 7b. Body variously pigmented, but rarely as dark as in *P. bathoiketes*; upper part of head and body variously spotted, but with more than 5 or 6 blotches; pectoral-fin rays 17 to 19, occasionally 16; usually in relatively shallow water, less than 200 m *Porichthys plectrodon*

- 8a. Two subopercular spines (Fig. 4a); body covered with small embedded scales (*Batrachoides*) → 9
- 8b. A single subopercular spine (Fig. 4b); body naked → 11

- 9a. Scales on head extending beyond supratemporal canal to middle of head (Fig. 5a); dorsal-fin rays 28 to 30; anal-fin rays 25 to 27; pores in lower lateral line 48 to 66 *Batrachoides surinamensis*
- 9b. Scales on head not reaching supratemporal canal (Fig. 5b); dorsal-fin rays 21 to 26; anal-fin rays 19 to 23; pores in lower lateral line 24 to 40 → 10

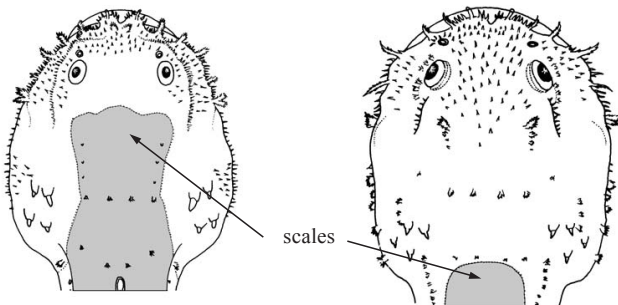


a) lateral view of head (*Batrachoides*)



b) lateral view of head

Fig. 4



a) *Batrachoides surinamensis*

b)

Fig. 5 dorsal view of head

- 10a. Anal-fin rays 19 to 21; dorsal-fin rays 21 to 23, rarely 24; usually fewer than 34 pores in lower lateral line *Batrachoides manglae*
- 10b. Anal fin rays 22 or 23; dorsal-fin rays 24 to 26; usually 34 or more pores in lower lateral line *Batrachoides gilberti*

- 11a. Discrete glands present between the upper rays on inner surface of pectoral fins (Fig. 6) → 12
- 11b. No glands present between pectoral-fin rays → 17

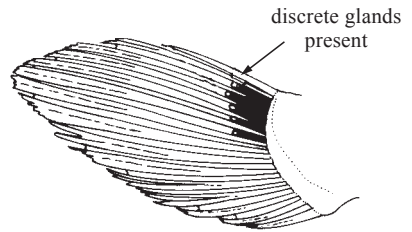


Fig. 6 pectoral fin

- 12a. Axillary pore absent; second dorsal fin with 17 to 21 soft rays; anal fin with 13 to 17 soft rays *Triathalassothia gloverensis*
- 12b. Axillary pore present on body behind pectoral fins; second dorsal fin with 23 to 27 soft rays; anal-fin with 19 to 23 soft rays (*Opsanus*) → 13

- 13a. Second dorsal-fin rays 23 to 25, rarely 26; pectoral-fin rays usually 17 or 18, occasionally 19; precaudal vertebrae 10; head narrow, 195 to 301 thousandths of standard length; lower half of mouth usually darkly pigmented in specimens over 70 mm standard length → 14
- 13b. Second dorsal-fin rays 25 to 27, usually 26; pectoral-fin rays usually 20 or 21, occasionally 19; precaudal vertebrae 11; head wide, 246 to 366 thousandths of standard length; neither upper nor lower half of mouth pigmented → 15

- 14a. Interorbital distance 43 to 79 thousandths of standard length, about equal to orbit length (52 to 92 thousandths of standard length); both upper and lower halves of mouth usually pigmented in specimens over 80 mm standard length *Opsanus phobetron*
- 14b. Interorbital distance 29 to 65 thousandths of standard length, less than orbit diameter (60 to 104 thousandths of standard length); posterior part of lower half of mouth usually pigmented in specimens over 70 mm standard length *Opsanus dichrostomus*

- 15a. Background body pigmentation light, overlain with brown spots as large as pupil or a little larger on head, body, and fins, those on dorsal and anal fins arranged in more or less oblique rows; snout to anal fin distance longer, 586 to 648 thousandths of standard length *Opsanus pardus*
- 15b. Background body pigmentation dark, crossbands on body instead of dark spots on a light background; snout to anal fin distance shorter, 551 to 609 thousandths of standard length → 16

- 16a. Pectoral fin with definite crossbars, which are not composed of a series of round or nearly round light spots, the light areas continuous across the fin; sides and belly with brownish to blackish reticulations, or finely mottled, especially on sides of belly; no round light spots on sides of body; pectoral-fin rays usually 20 or 21; second dorsal-fin rays 25 or 26, usually 26 . *Opsanus tau*
- 16b. Pectoral fin with definite light crossbars made up of a series of distinct nearly round light spots; darkish background pigment of sides with small light spots; sides and belly without any trace of reticulations; pectoral-fin rays 18 or 19; second dorsal-fin rays 24 or 25. . . *Opsanus beta*

- 17a. No axillary pore on body behind pectoral fins (Fig. 7a); a prominent plumose supraorbital tentacle present (Fig. 7b) *Amphichthys cryptocentrus*
- 17b. Axillary pore present (Fig. 8); no prominent plumose supraorbital tentacle, although some filaments may be present in interorbital region (*Sanopus*) → 18

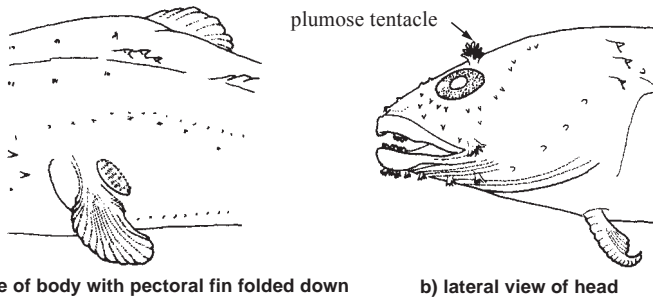


Fig. 7 *Amphichthys cryptocentrus*

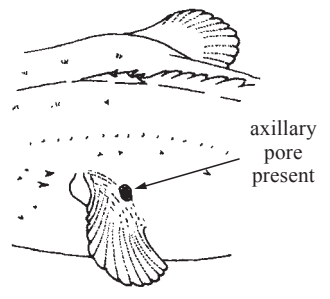


Fig. 8 *Sanopus*

- 18a. All chin barbels branched; dorsal-fin rays 29 to 32, usually 30 or fewer → 19
- 18b. Only 1 or 2 median chin barbels branched; dorsal-fin rays 31 to 34, usually 32 or more → 21

- 19a. Reticulate pattern on body and head *Sanopus reticulatus*
- 19b. Body and head dark, not reticulate; lines or light spots may be present on head → 20

- 20a. Chin barbels long and thin; branches on chin barbels long, thin, and few (Fig. 9a). . *Sanopus johnsoni*
- 20b. Chin barbels short and thick; branches on chin barbels short, thick, and many (Fig. 9b) *Sanopus barbatus*

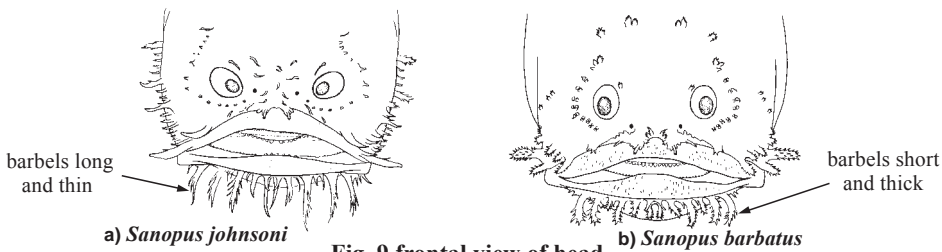


Fig. 9 frontal view of head

- 21a. Dorsal, anal, caudal, and pectoral fins broadly bordered with black and bright orange-yellow in life (white in preservative); upper lateral line papillae 30 to 34 . . . *Sanopus splendidus*
- 21b. Body dark with prominent light markings, no bright colours or black borders to fins; upper lateral line papillae 36 to 41 → 22

- 22a.** Many light lines on head, 8 to 12 continuous light lines radiating out from eyes (Fig. 10a)
 *Sanopus greenfieldorum*
- 22b.** Head and interorbital region with many small light spots and few short light lines (Fig. 10b)
 *Sanopus astrifer*

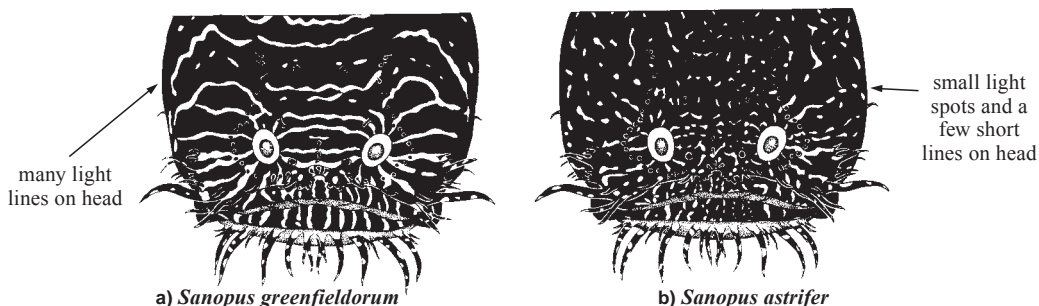


Fig. 10 frontal view of head

List of species occurring in the area

The symbol  is given when species accounts are included.

-  *Amphichthys cryptocentrus* (Valenciennes, 1837).
-  *Batrachoides gilberti* Meek and Hildebrand, 1928.
-  *Batrachoides manglae* Cervigón, 1964.
-  *Batrachoides surinamensis* (Bloch and Schneider, 1801).
-  *Opsanus beta* (Goode and Bean, 1880).
-  *Opsanus dichrostomus* Collette, 2001.
-  *Opsanus pardus* (Goode and Bean, 1880).
-  *Opsanus phobetron* Walters and Robins, 1961.
-  *Opsanus tau* (Linnaeus, 1766).
-  *Porichthys bathoiketes* Gilbert, 1968.
-  *Porichthys oculo-frenum* Gilbert, 1968.
-  *Porichthys pauciradiatus* Caldwell and Caldwell, 1963.
-  *Porichthys plectrodon* Jordan and Gilbert, 1882.
-  *Sanopus astrifer* (Robins and Starck, 1965).
-  *Sanopus barbatus* (Meek and Hildebrand, 1928).
-  *Sanopus greenfieldorum* Collette, 1983.
-  *Sanopus johnsoni* Collette and Starck, 1974.
-  *Sanopus reticulatus* Collette, 1983.
-  *Sanopus splendidus* Collette, Starck and Phillips, 1974.
-  *Thalassophryne maculosa* Günther, 1861.
-  *Thalassophryne megalops* Bean and Weed, 1910.
-  *Thalassophryne nattereri* Steindachner, 1876.
-  *Triathalassothia gloverensis* Greenfield and Greenfield, 1973.

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Collette, B.B. 1983. Two new species of coral toadfishes, family Batrachoididae, genus *Sanopus*, from Yucatan, Mexico, and Belize. *Proc. Biol. Soc. Wash.*, 96:719-724.

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Gilbert, C.R. 1968. Western Atlantic batrachoid fishes of the genus *Porichthys*, including three new species. *Bull. Mar. Sci.*, 18:671-730.

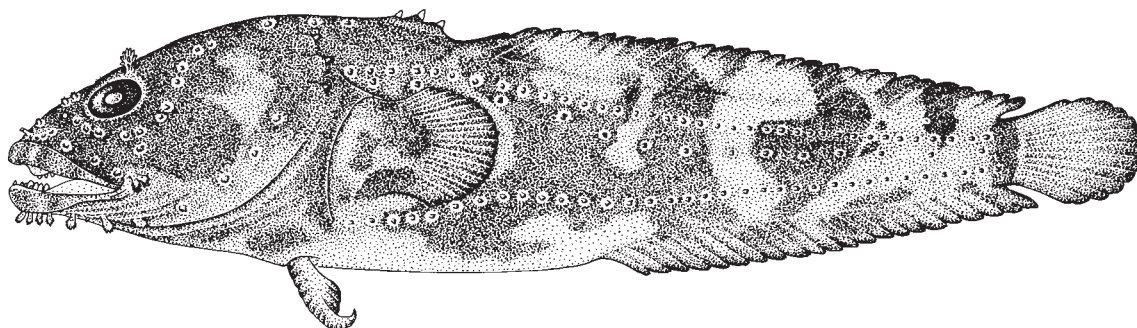
Greenfield, D.W. and T. Greenfield. 1973. *Triathalassothia gloverensis*, a new species of toadfish from Belize (= British Honduras) with remarks on the genus. *Copeia*, 1973:560-565.

Amphichthys cryptocentrus (Valenciennes, 1837)

BAY

Frequent synonyms / misidentifications: *Marcgravia cryptocentra* (Valenciennes, 1837); *Amphichthys hildebrandi* (Breder, 1925) / None.

FAO names: En - Bocon toadfish; Fr - Crapaud goulu; Sp - Sapo bocón.

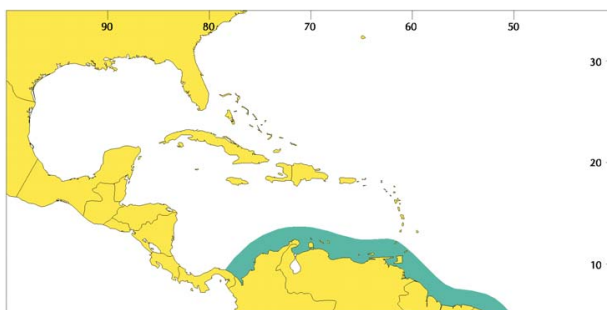


Diagnostic characters: Head and anterior part of body greatly depressed. Barbels present on head, especially on lower jaw; **a large branched tentacle on upper margin of eye**; **2 solid opercular spines** (not associated with venom glands) and **1 subopercular spine**. Large molar-like teeth present in both jaws; no canine-like teeth. First dorsal fin consisting of 3 solid spines without associated venom glands; second dorsal fin with 29 soft rays, **anal fin with 23 to 25 soft rays** and pectoral fins with 20 to 23 rays; **no glands between upper pectoral-fin rays**; **glandular tissue present in axil of pectoral fin but no axillary pore**. Two lateral lines, 32 to 40 pores in upper and 27 to 34 pores in lower. Number of vertebrae 36 to 38. Body scaleless. **Color:** upper side usually brownish yellow with diffuse mottlings, belly whitish. Head often with small orange spots and its lower portion brown with white reticulations; a dark transverse bar across nape followed by a second one, slightly wider. Dorsal fin with alternating oblique yellow and brown stripes; anal fin almost uniform yellowish brown. Some individuals are nearly uniform brownish red.

Size: Maximum to 34 cm, commonly to 25 cm.

Habitat, biology, and fisheries: A very sluggish inhabitant of littoral waters, usually found on sandy or rock bottom; even large specimens may be found in waters less than 1 m deep hiding in crevices or caves; rarely entering lagoons. Feeds mostly on molluscs and crustaceans. Separate statistics are not reported for this species, but it is moderately abundant and regularly consumed by local fishermen. Caught in traps and by special types of hooks (garrapinos). Marketed mainly fresh.

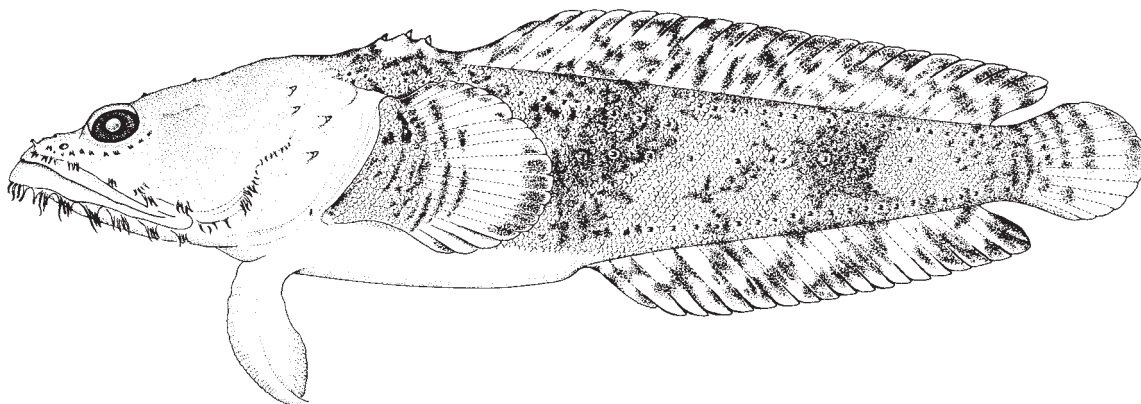
Distribution: North coast of South America, from Panama to Brazil.



Batrachoides manglae Cervigón, 1964

Frequent synonyms / misidentifications: None / None.

FAO names: **En** - Cotuero toadfish; **Fr** - Crapaud lagunaire; **Sp** - Sapo lagunero.

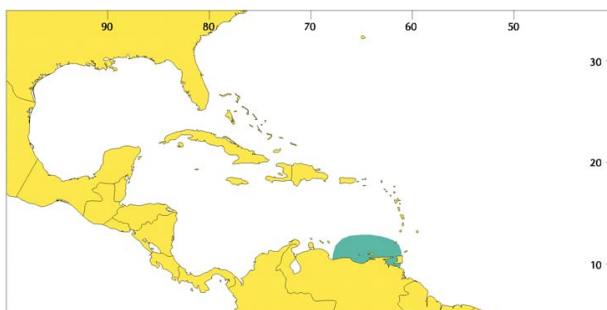


Diagnostic characters: Head and anterior part of body greatly depressed. Head long, 39.5 to 43.5% of standard length, bearing many barbels, especially on lower jaw; **no tentacles present above eyes, dorsal surface of head scaleless, mostly covered with fine filaments; eye large, 5.0 to 7.0% of standard length; 2 solid opercular spines** (not associated with venom glands) and **2 subopercular spines**. Large molar-like teeth in both jaws; no canine-like teeth. First dorsal fin consisting of 3 solid spines without associated venom glands; second dorsal fin with 21 to 24 soft rays, anal fin with 19 to 21 soft rays and pectoral fin with 18 to 21 rays; **6 to 11 discrete glands present on the inner surface of pectoral fins between the bases of upper rays**; axil of pectoral fins (behind pectoral-fin base) also with glandular tissue, but without an axillary pore. Two lateral lines, 31 to 40 pores in the upper, 29 to 37 in the lower. **Body covered with small, embedded scales**. Number of vertebrae 31 to 33. **Colour:** back and sides brown with a yellow or greenish tinge and several irregular dark crossbars; belly whitish, sometimes mottled with brown; fins with alternating dark and pale stripes.

Size: Maximum to about 30 cm (350 g); commonly to 20 cm.

Habitat, biology, and fisheries: Inhabits muddy bottoms in shallow waters, especially abundant in mangrove-lined lagoons. Feeds mainly on small gastropod molluscs and crustaceans. Separate statistics are not reported for this species. Caught mainly with traps; also with bottom trawls. Marketed fresh, but the flesh is considered of low quality.

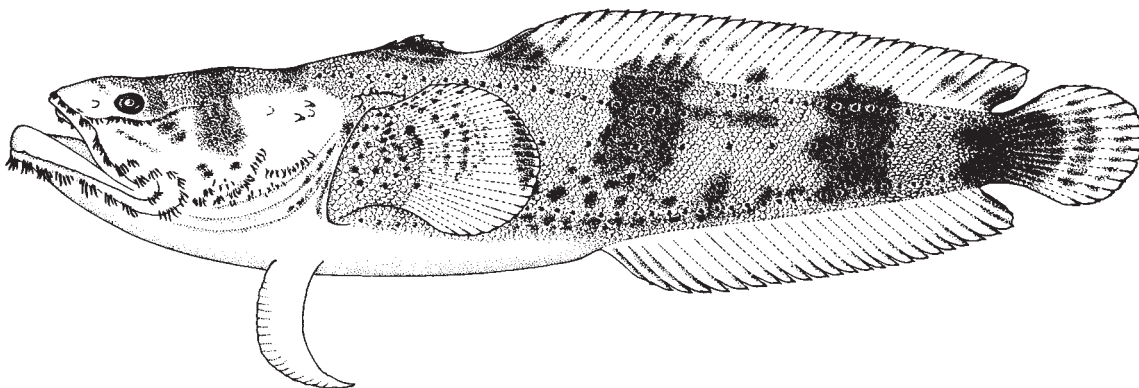
Distribution: Venezuela: Isla de Margarita, Isla de Cubagua, Peninsula de Araya.



Batrachoides surinamensis (Bloch and Schneider, 1801)

Frequent synonyms / misidentifications: None / None.

FAO names: **En** - Pacuma toadfish; **Fr** - Crapaud guyanais; **Sp** - Sapo guayanés.

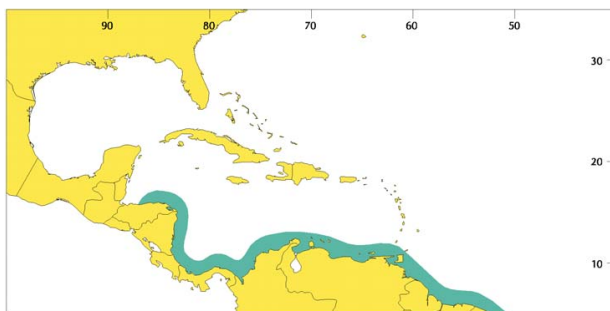


Diagnostic characters: Head and anterior part of body greatly depressed. Head short, 27.2 to 38.6% of standard length, bearing many barbels, especially on lower jaw; no tentacles present above eyes, **posterior half of dorsal surface of head covered with small embedded scales but no fine filaments present except anteriorly; eye very small, 2.0 to 4.1% of standard length**; 2 solid opercular spines (not associated with venom glands) and 2 subopercular spines. Large molar-like teeth in both jaws; no canine-like teeth. First dorsal fin consisting of 3 solid spines without associated venom glands; second dorsal fin with 28 to 30 soft rays, anal fin with 25 to 27 soft rays and pectoral fins with 20 to 22 rays; **3 to 11 discrete glands present on the inner surface of pectoral fins between the bases of upper rays**; axil of pectoral fins (behind pectoral-fin base) also with glandular tissue, but without an axillary pore. Two lateral lines, 54 to 67 pores in upper, 48 to 63 in the lower. **Body covered with small, more or less embedded scales.** Number of vertebrae 36 to 39. **Colour:** brown with several prominent dark transverse bands dorsally on head and sides of body; belly whitish.

Size: Maximum to about 340 mm standard length.

Habitat, biology, and fisheries: Inhabits muddy bottoms in shallow brackish waters of high temperature (up to 29.5 C). Feeds mainly on small gastropod molluscs and crustaceans. Separate statistics are not reported for this species. Caught mainly with bottom trawls. Marketed mostly fresh; a valued foodfish in Trinidad and French Guiana where it fetches high prices in markets. Of little or no commercial importance in Venezuela.

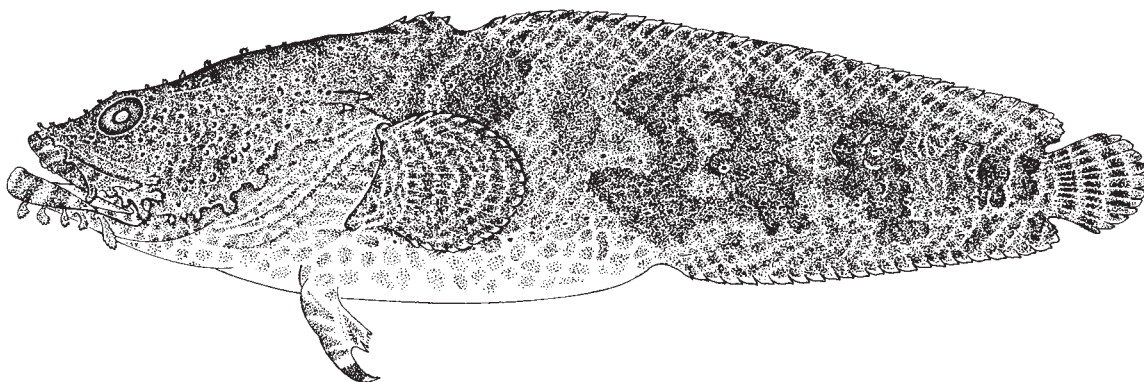
Distribution: Honduras to Brazil (southern limit: Rio de Janeiro) in the vicinity of estuaries in Colombia and the Gulf of Venezuela, absent along the north coast of Venezuela and present again from Trinidad southward.



Sanopus barbatus (Meek and Hildebrand, 1928)

Frequent synonyms / misidentifications: *Opsanus barbatus* Meek and Hildebrand, 1928 / None.

FAO names: **En** - Bearded toadfish; **Fr** - Crapaud barbu; **Sp** - Sapo barbudo.

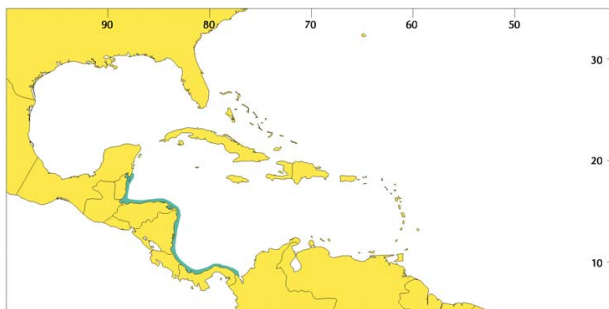


Diagnostic characters: Head and anterior part of body greatly depressed. Head covered with branched barbels, fleshy flaps, and cirri, but **no cirri present between the eyes**; 2 solid, strongly diverging opercular spines (not associated with venom glands) and **1 subopercular spine**, these spines hidden in the skin. Large molar-like teeth in both jaws; no canine-like teeth. First dorsal fin consisting of 3 solid spines without associated venom glands; second dorsal fin with 31 to 34 soft rays, and anal fin with 25 to 28 soft rays and pectoral fins with 20 to 22 rays; no glands or glandular tissue on pectoral fins; **axillary pore present behind pectoral-fin base**. Two lateral lines, 32 to 38 pores with short, wide papillae in upper, 27 to 34 in lower. Body scaleless. **Colour:** upper side brown, belly mottled brown over white; **caudal fin of adults with a varying number of eye-like spots**.

Size: Maximum to about 370 mm standard length; commonly to 300 mm total length.

Habitat, biology, and fisheries: Inhabits shallow waters around coral reefs. Separate statistics are not reported for this species. Caught on hook-and-line and with spears. Probably consumed fresh locally.

Distribution: Caribbean coast of Central America from Honduras to Panama.

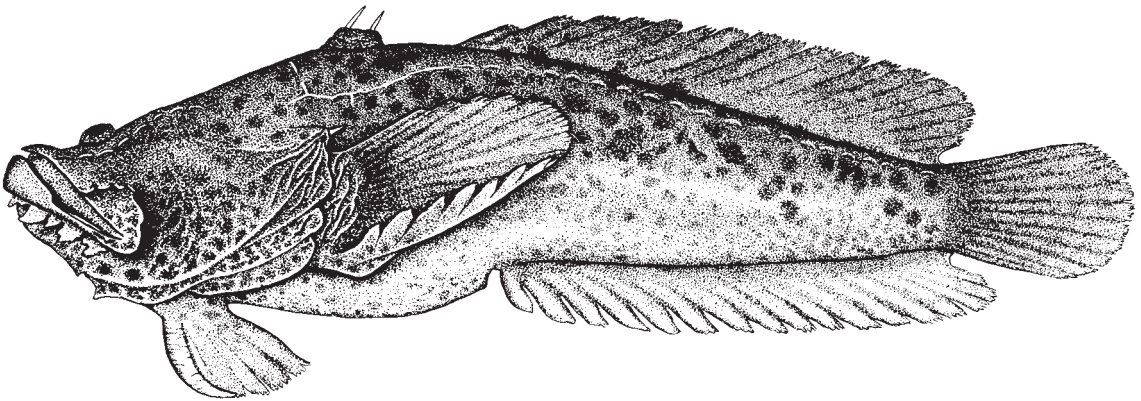


Thalassophryne maculosa Günther, 1861

BTM

Frequent synonyms / misidentifications: *Thalassophryne wehekindi* Fowler, 1931 / None.

FAO names: **En** - Caño toadfish; **Fr** - Crapaud tacheté; **Sp** - Sapo caño.

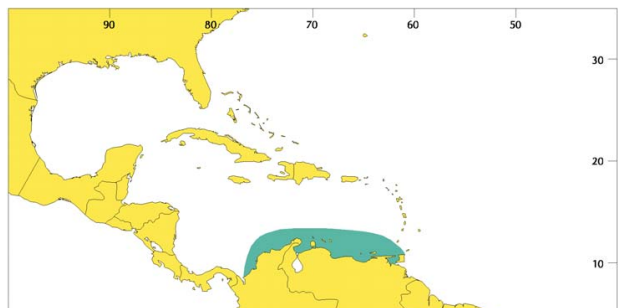


Diagnostic characters: Head and anterior part of body greatly depressed. **A sharp, hollow opercular spine connected to a venom gland; subopercular spines absent;** relatively few flat barbels on chin. Large molar-like teeth in both jaws; no canine-like teeth. **First dorsal fin consisting of 2 hollow spines connected to venom glands;** second dorsal fin with 17 to 20 soft rays, anal fin with 16 to 19 soft rays and pectoral fins with 14 to 16 rays; **no distinct glands between bases of pectoral-fin rays, but glandular tissue scattered distally on fin.** A single lateral line on body. Body scaleless. Number of precaudal vertebrae 7. **Colour:** small specimens tend to be pale with small to medium dark spots and blotches. Larger individuals tend to have a darker background colour with smaller spots which do not stand out as prominently as smaller individuals. Dorsal, anal, pectoral, and caudal fins pigmented to distal margins.

Size: Maximum to 150 mm standard length; commonly to 120 mm total length.

Habitat, biology, and fisheries: Lives partially buried in mud or sand to 200 m; capable of inflicting painful wounds with its venomous dorsal and opercular spines. Feeds on small gastropod molluscs. Separate statistics are not reported for this species. Caught with seines and in shrimp trawls. Consumed fresh in some localities, but generally considered undesirable. Usually not fished for, but occurs in seine and trawl hauls and is a danger to fishermen since it can inflict painful wounds.

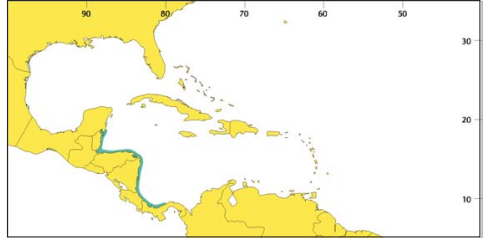
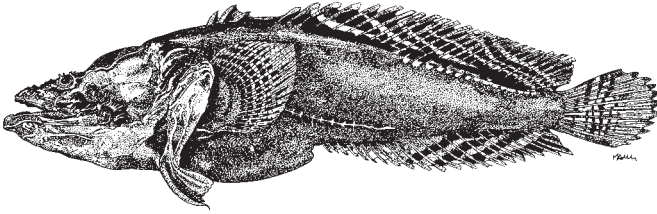
Distribution: Northern coast of South America off Colombia and Venezuela, including the islands of Aruba, Curacao, Margarita, Cubagua, Trinidad and Tobago, but not extending into the West Indies proper.



***Batrachoides gilberti* Meek and Hildebrand, 1928**

En - Gilbert's toadfish (AFS: Large-eye toadfish).

Maximum size 230 mm standard length. Occurs in shallow coastal waters and also enters fresh waters in Belize. Feeds on xanthid and portunid crabs, shrimps, gastropods, and small fishes. Caribbean side of the Yucatán Peninsula to the Panama Canal Zone.

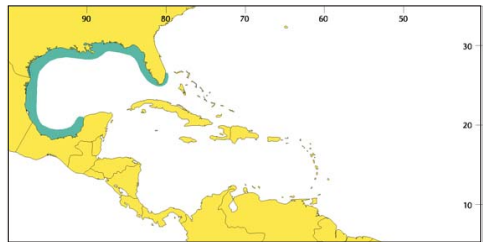
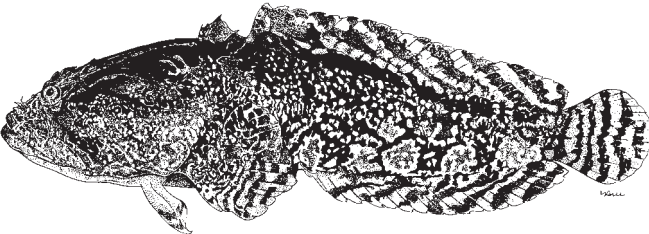


***Opsanus beta* (Goode and Bean, 1880)**

BOU

En - Gulf toadfish.

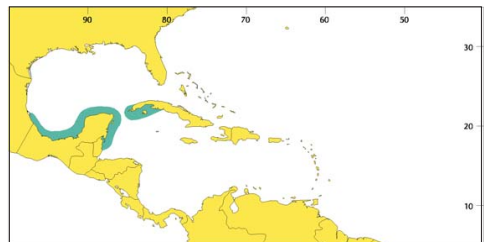
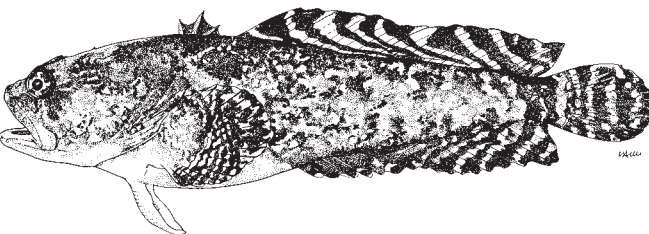
Maximum size to 324 mm standard length. Occurs in shallow seagrass beds and rocky areas near shore. Nests in a variety of cavities such as old conch shells, sponges, clam shells, and tin cans. Gulf of Mexico from Belize and the Campeche Banks through the Florida Keys north at least to Palm Beach.



***Opsanus dichrostomus* Collette, 2001**

En - Bicolor toadfish.

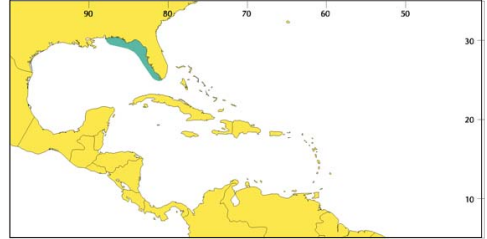
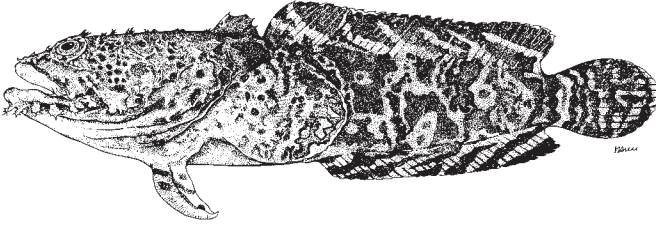
Maximum size to 126 mm standard length. Known from shallow waters of Campeche, the Yucatán Peninsula, and the Gulf of Batabanó, off the southwestern coast of Cuba.



Opsanus pardus (Goode and Bean, 1880)

En - Leopard toadfish

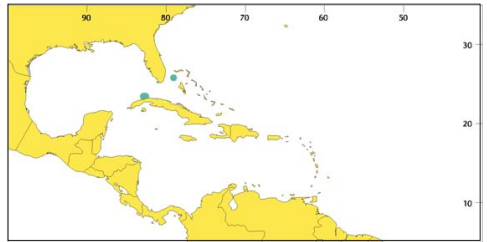
Maximum size to 324 mm standard length. Known from moderate depths on the fishing grounds and shrimp banks in the Gulf of Mexico.



Opsanus phobetron Walters and Robins, 1961

En - Scarecrow toadfish.

Maximum size to 129 mm standard length. Most specimens have been taken in old conch shells in shallow water. Bahamas and Cuba.



Opsanus tau (Linnaeus, 1766)

En - Oyster toadfish.

Maximum size to 381 mm standard length. The IGFA all-tackle gamefish record is 2.23 kg for a fish caught in North Carolina in 1994. Gulf of Maine south to Florida.

