SYMPHYSANODONTIDAE

Bunquelovelies (wampeejawed fishes, shelf beauties, slopefishes)

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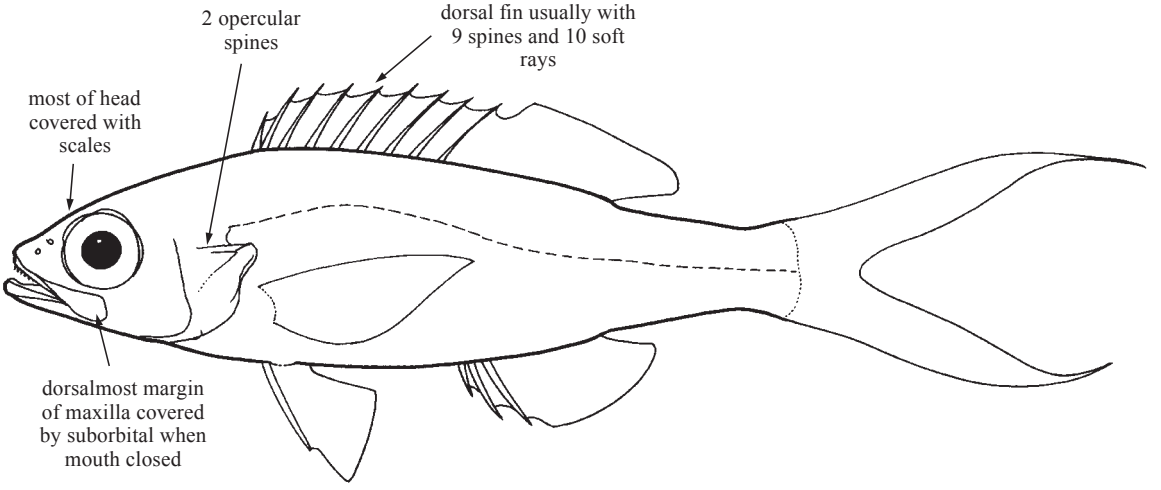
Diagnostic characters: Small fishes (to about 15 cm standard length); body slender to moderately deep, somewhat compressed. Head moderate. Eye moderate to large, its diameter longer than snout. Snout relatively blunt. **Anterior ends of premaxillae incised, forming conspicuous symphysial notch that receives anterior ends of dentaries. Mouth terminal and oblique; jaws about equal. Extreme dorsalmost margin of maxilla covered by very narrow suborbital with mouth closed**. Premaxilla with small teeth, usually larger anteriorly; symphysial notch toothless. Dentary with small teeth usually extending from posterior elevation of the bone almost to symphysis; teeth on and near posterior elevation usually larger; **usually a number of relatively large exserted teeth at anterior ends of dentaries, these teeth fitting into symphysial notch in premaxillae with mouth closed**. No teeth on vomer, pterygoids, or tongue; teeth usually absent on palatines. **Most of head, including maxillae and dentaries, covered with scales. Suborbital extremely narrow, its height (width) about 1% standard length. Opercular spines 2**. Branchiostegal rays 7. Gill rakers on first arch 9 to 14 on upper limb and 24 to 29 on lower limb, total on first arch 34 to 42. Dorsal fin continuous, not incised at junction of spinous and soft rays. Caudal fin deeply forked. Both lobes of caudal fin and pelvic fin well to extremely elongated in larger males of *Symphysanodon berryi*. Dorsal and anal fins without scales, but with scaly sheaths at their bases. Pelvic axillary scales and scaly interpelvic process well developed. **Dorsal fin usually with 9 spines and 10 soft rays**. Anal fin with 3 spines and 7 or 8 soft rays. Principal caudal-fin rays 17 (9 in upper lobe, 8 in lower lobe); branched caudal-fin rays 15 (8 in upper lobe, 7 in lower lobe). Pectoral fin with 16 to 18 rays. Pelvic fin thoracic, inserted beneath pectoral fin, with 1 spine and 5 soft rays. Scales moderate in size, ctenoid. Tubed lateral-line scales 45 to 52. Vertebrae 25 (10 precaudal + 15 caudal). **Colour:** where known, mainly orange.



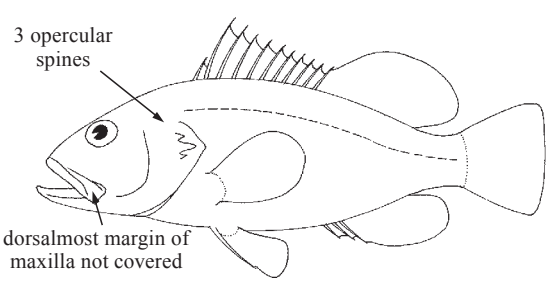
Habitat, biology, and fisheries: Bottom-associated fishes, collected over the continental shelf and upper continental slope and around islands. Probably planktivorous. Due to their small size, of no interest to fisheries, but most likely important as food for larger species of fishes.

Remarks: Have been considered by various workers to be members of either the family Serranidae or the family Lutjanidae, but species of Symphysanodontidae possess characters that clearly distinguish them from serranids and lutjanids and lack characters that would associate them with either of those groups of fishes. Counts of gill rakers are of those on the first arch, including rudiments, when present. Counts of lateral-line scales are of tubed scales.

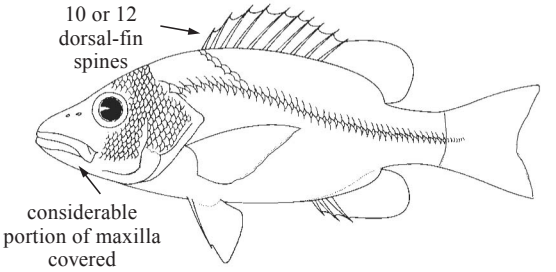
Similar families occurring in the area

Serranidae: 3 opercular spines (2 in Symphysanodontidae); dorsalmost margin of maxilla not covered by suborbital when mouth closed; vertebrae usually 24 or 26 (25 in Symphysanodontidae).

Lutjanidae: maxilla covered to considerable degree by suborbital when mouth closed; anterior ends of premaxillae not incised to form conspicuous symphysial notch that receives anterior ends of dentaries when mouth closed; usually 10 or 12 dorsal-fin spines (almost always 9 dorsal-fin spines in Symphysanodontidae); vertebrae 24 (25 in Symphysanodontidae).



Serranidae



Lutjanidae

Key to the species of Symphysanodontidae occurring in the area

1a. Body slender, depth of body 3.6 to 4.5 times in standard length (22 to 28% standard length); lateral-line scales 48 to 52; gill rakers on first arch 9 to 12 on upper limb and 24 to 28 on lower limb, total 34 to 39; anal-fin soft rays 7; length of pelvic fin 20 to more than 87% standard length; length of upper caudal-fin lobe 29 to more than 128% standard length; length of lower caudal-fin lobe 28 to more than 111% standard length; (individuals with well to extremely elongated pelvic and caudal fins are males) . . . . . ***Symphysanodon berryi***

1b. Body moderately deep, depth of body 2.8 to 3.0 times in standard length (33 to 36% standard length); lateral-line scales 45 or 46; gill rakers on first arch 12 to 14 on upper limb and 26 to 29 on lower limb, total 39 to 42; anal-fin soft rays usually 8 (7 in about 10% of specimens examined); length of pelvic fin 26 to 28% standard length; length of upper caudal-fin lobe 39 to more than 42% standard length; length of lower caudal-fin lobe 37 to 39% standard length . . . . . ***Symphysanodon octoactinus***

List of species occurring in the area

The symbol is given when species accounts are included.

Symphysanodon berryi Anderson, 1970.

Symphysanodon octoactinus Anderson, 1970.

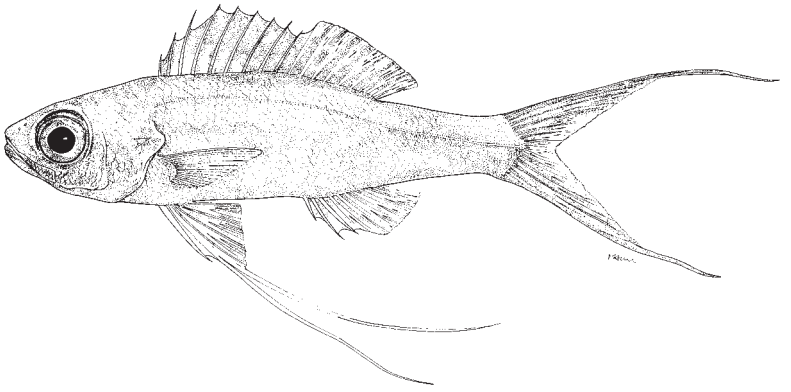
Reference

Anderson, W.D., Jr. 1970. Revision of the genus *Symphysanodon* (Pisces: Lutjanidae) with descriptions of four new species. *Fish. Bull.*, 68:325-346.

Symphysanodon berryi Anderson, 1970 YMY

Frequent synonyms / misidentifications: None / None.

FAO names: En - Slope bass.



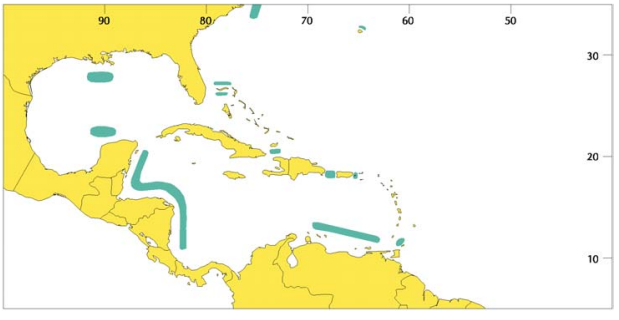
Diagnostic characters: Body slender, depth 22 to 28% standard length. Gill rakers on first arch 9 to 12 on upper limb and 24 to 28 on lower limb, total 34 to 39. Caudal fin deeply forked; **both lobes of fin produced into filaments in large males, increasing in length with increase in standard length. Length of upper caudal-fin lobe 29 to more than 128% standard length, varying from 30 to more than 35% standard length in females more than about 80 mm standard length and from 34 to more than 128% standard length in males more than about 85 mm standard length. Length of lower caudal-fin lobe 28 to more than 111% standard length, varying from 30 to more than 34% standard length in females more than about 80 mm standard length and from 32 to more than 111% standard length in males more than about 85 mm standard length. Pelvic fin usually not extending to vent in females; first pelvic-fin soft ray noticeably elongated in males more than about 85 mm standard length, increasing in length with increase in standard length, extremely filamentous in large individuals; medial branch of first pelvic-fin soft ray reaching past fork of caudal fin in some large males. Length of pelvic fin 20 to more than 87% standard length, varying in females from 21 to 25% standard length and in males from 30 to more than 87% standard length in specimens more than about 85 mm standard length**. Dorsal fin with 9, very rarely 8, spines and 10, very rarely 9 or 11, soft rays. **Anal fin with 3 spines and 7 soft rays**. Pectoral fin with 16 to 18, usually 17, rays. **Tubed scales in lateral line 48 to 52. Colour:** head and body mostly bright orange; iris of eye with considerable orange.

Size: Maximum standard length to about 15 cm, commonly to 11 cm.

Habitat, biology, and fisheries: Collected from depths of 100 to 475 m. No other information available.

Distribution: Known in the western Atlantic from off North Carolina, Louisiana, the Bahamas, Cuba, Dominican Republic, Puerto Rico, Tobago, Mexico (Yucatán and Quintana Roo), Belize, Honduras, Nicaragua, and Venezuela, from the central Atlantic off Ascension Island; and from the eastern Atlantic off the Island of Pagalu. A juvenile (53.4 mm standard length) has been collected by midwater trawl (fished between the surface and 575 m) over very deep water in the northern Sargasso Sea near Bermuda, and 2 specimens (134 and 144 mm standard length), indistinguishable from this species, have been obtained off the Maldives, southwest of Sri Lanka in the Indian Ocean.

Remarks: At the Museum of Comparative Zoology (Harvard University), there are many specimens of *Symphysanodon* from the western North Atlantic, mostly postlarvae obtained by midwater trawls, that may be representatives of this species. These specimens were captured at numerous localities: from Lat. 41.6°N (well to the southeast of Sable Island, Nova Scotia) southward along the east coast of the USA to the vicinity of Miami, off many of the islands of the West Indies, and through much of the Caribbean Sea.



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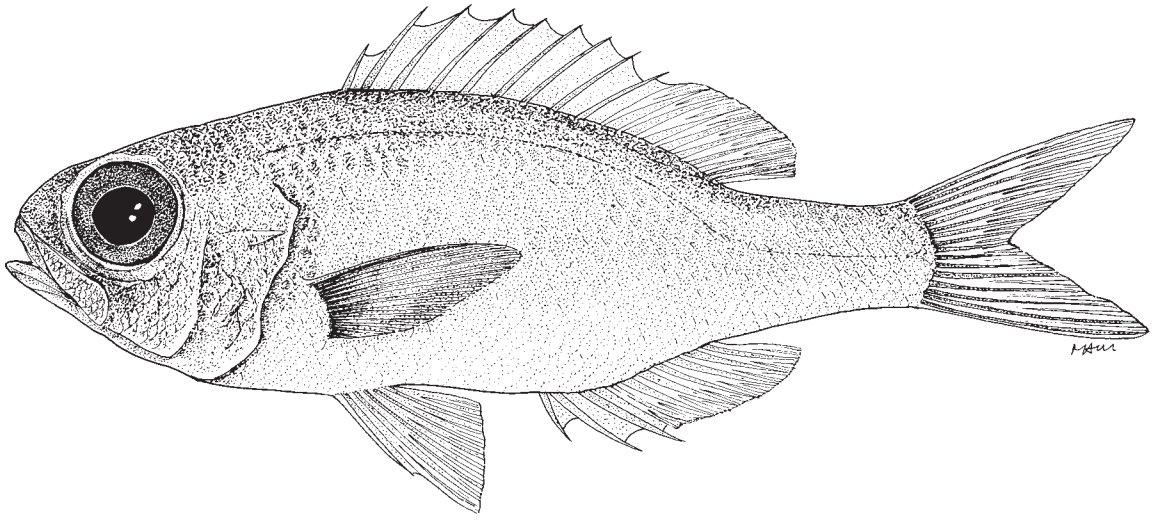
Symphysanodon octoactinus Anderson, 1970

Frequent synonyms / misidentifications: None / None.

FAO names: En - Insular bunquelovely.



Diagnostic characters: Body moderately deep, depth 33 to 36% standard length. Gill rakers on first arch 12 to 14 on upper limb and 26 to 29 on lower limb, total 39 to 42. Caudal fin deeply forked, **lobes of fin apparently never greatly produced** (however, caudal fin damaged on most specimens examined). Length of upper caudal-fin lobe 39 to more than 42% standard length. Length of lower caudal-fin lobe 37 to 39% standard length. **Length of pelvic fin 26 to 28% standard length**. Dorsal fin with 9 (rarely 10) spines, and 10 (rarely 9) soft rays. **Anal fin with 3 spines and 8 (occasionally 7) soft rays**. Pectoral fin with 16 (rarely 17) rays. **Tubed scales in lateral line 45 or 46. Colour:** no information is available on live coloration.

Size: Maximum standard length to about 13 cm.

Habitat, biology, and fisheries: Occurs in depths of 155 to 405 m. No other information available.

Distribution: Known from off the Bahamas, Cuba, Puerto Rico, Nicaragua, and Panama.