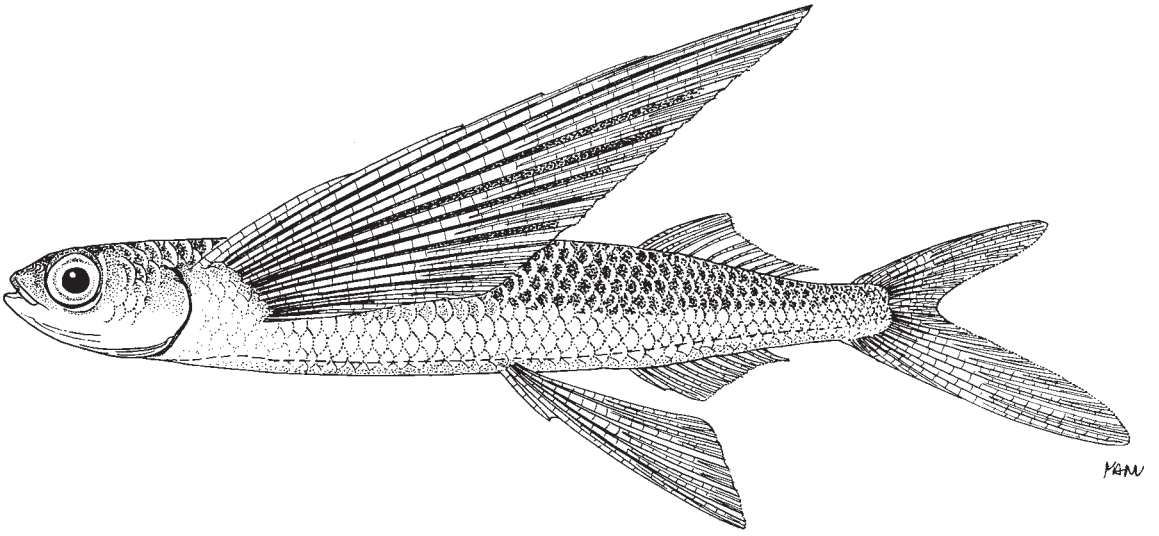
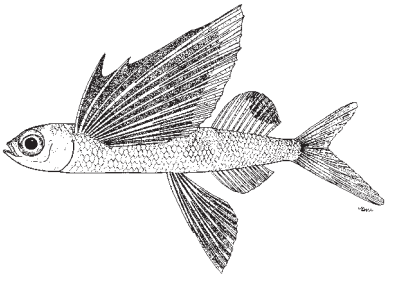
Hirundichthys rondeletii (Valenciennes, 1846) HDR

Frequent synonyms / misidentifications: None / None.

FAO names: En - Blackwing flyingfish; **Fr** - Exocet aile noire; **Sp** - Volador aleta negra.





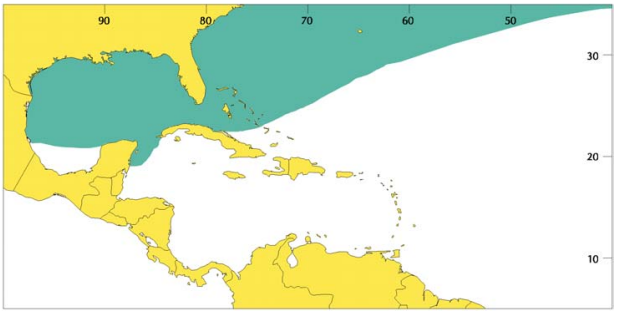
juvenile

Diagnostic characters: Body elongate, nearly rectangular in cross-section, almost flat ventrally. Depth 5.7 to 6.5 in standard length. Head length 4.5 to 5.0 in standard length. Eye 3.1 to 3.3 in head length. Jaws subequal. Jaw teeth conspicious, conical. **Palatine teeth absent**. Gill rakers on first arch 21 to 29. Dorsal fin low, with 10 to 12 soft rays. **Anal fin** with 11 to 13 soft rays, **originating slightly before, or 1 or 2 rays behind dorsal-fin origin. Pectoral fins 1.3 to 1.4 in standard length, with** 17 to 19 soft rays, **first 2 rays unbranched. Pelvic fins 2.8 to 3.4 in standard length, inserted slightly nearer to posterior margin of opercle than origin of caudal-fin base**. Juveniles not barbelled. Predorsal scales 26 to 31. Scales in transverse row 6 to 7.5. Vertebrae 44 to 47. **Colour:** body dark above, pale below. Dorsal and caudal fins greyish; anal fin transparent; pectoral fins black without unpigmented crossband and with a narrow light outer margin; pelvic fins usually with black spot. Juveniles less than 50 mm standard length with a few dark transverse vertical bands on body; dorsal, pectoral, and pelvic fins mottled with dark spots and bands.

Size: Maximum to 24 cm standard length (about 30 cm total length).

Habitat, biology, and fisheries: Feeds on zooplankton. Eggs demersal. Of no importance to fisheries.

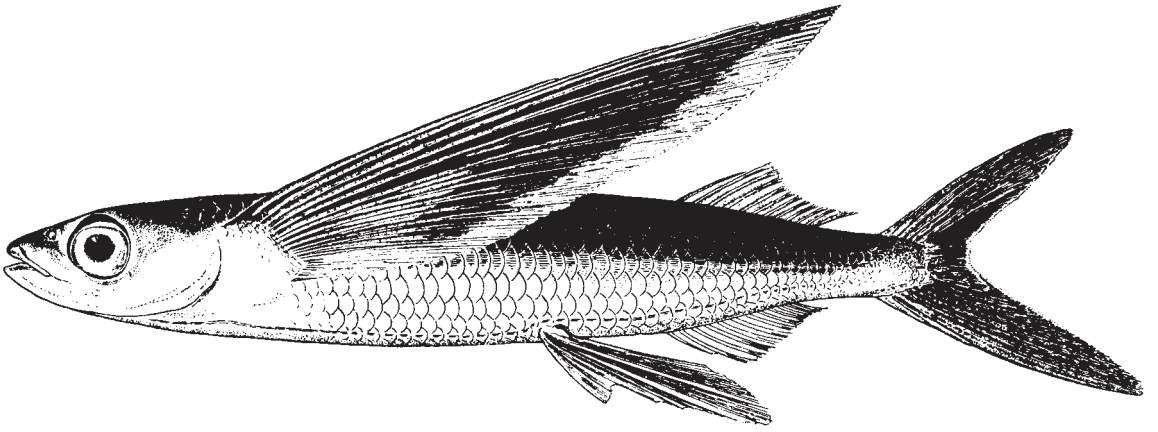
Distribution: The Gulf of Mexico and the Atlantic north of about 30 N. Also in the subtropical waters of the North Pacific and the Southern Hemispere.

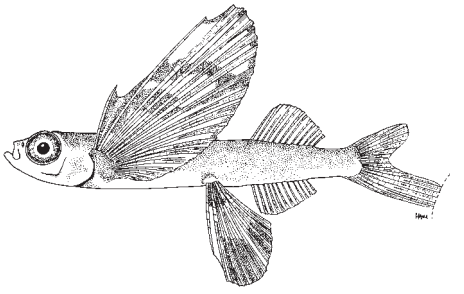


Hirundichthys speculiger (Valenciennes, 1846)

Frequent synonyms / misidentifications: None / None.

FAO names: En - Mirrorwing flyingfish; **Fr** - Exocet miroir; **Sp** - Volador espejo.





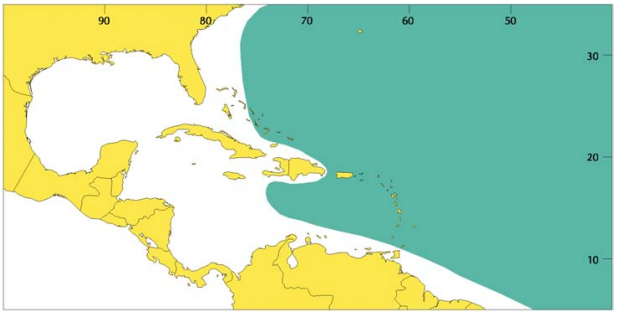
juvenile

Diagnostic characters: Body elongate, nearly rectangular in cross-section, almost flat ventrally. Depth 5.8 to 6.7 in standard length. Head length 3.9 to 4.2 in standard length. Eye 2.9 to 3.3 in head length. Jaws subequal. Jaw teeth conspicious, conical. **Palatine teeth present**. Gill rakers on first arch 21 to 29. Dorsal fin low, with 10 to 13 soft rays. **Anal fin** with 11 to 13 soft rays, **originating slightly before, or 1 to 2 rays behind dorsal-fin origin. Pectoral fins 1.4 to 1.5 in standard length, with** 17 to 20 soft rays, **first ray unbranched. Pelvic fins 3.5 to 3.8 in standard length, inserted slighty nearer to posterior margin of opercle than origin of caudal-fin base**. Juveniles not barbelled. Scales in transverse row 5 to 7. Predorsal scales 28 to 33. Vertebrae 45 to 47. **Colour:** body dark above, pale below. Dorsal and caudal fins greyish; anal fin transparent; pectoral fins dark grey with unpigmented triangular crossband and broad outer margin; pelvic fins light. Juveniles with pectoral and pelvic fins mottled with dark spots and bands.

Size: Maximum to 25 cm standard length (about 31 cm total length).

Habitat, biology, and fisheries: Oceanic species. Feeds on zooplankton. Eggs demersal, laid on floating objects. Of no importance to fisheries.

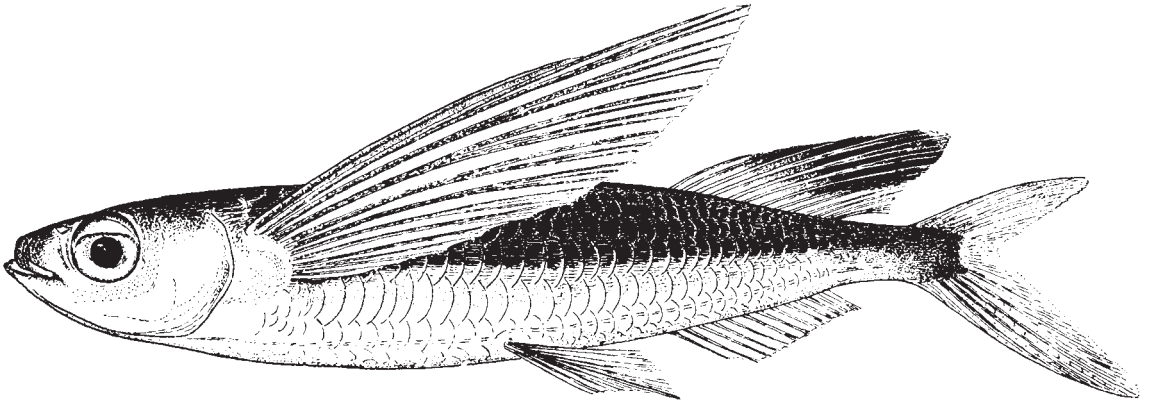
Distribution: In the western Atlantic between 40 N and 39 S, absent in the Gulf of Mexico and the western Caribbean Sea. Known also from the tropical eastern Atlantic, Indian, and Pacific Oceans.

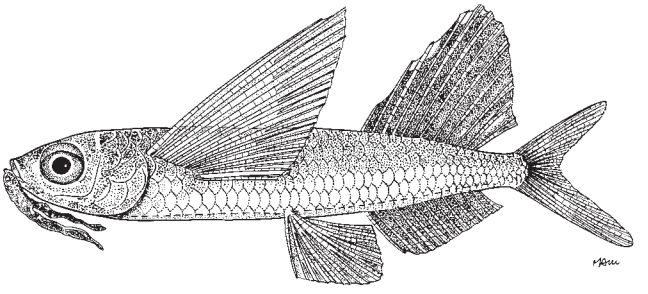


Parexocoetus hillianus (Gosse, 1851)

Frequent synonyms / misidentifications: *Parexocoetus brachypterus hillianus* (Gosse, 1851), *Parexocoetus brachypterus littoralis* (Breder,1938) / *Parexocoetus brachypterus* (Richardson, 1846).

FAO names: En - Sailfin flyingfish; **Fr** - Exocet voilier; **Sp** - Volador aletón.





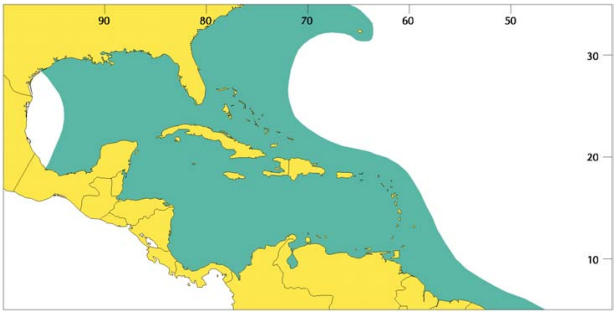
juvenile

Diagnostic characters: Body elongate, elliptic in cross-section, somewhat compressed. Depth 4.3 to 6.0 in standard length. Head length 3.9 to 4.9 in standard length. Eye 2.9 to 3.5 in head length. Snout blunt, shorter than eye. Jaws subequal, with small, conical teeth. Gill rakers on first arch 26 to 33. **Dorsal fin very high** (2.4 to 3.1 in standard length), with 9 to 14 soft rays. Anal fin with 10 to 14 soft rays, originating before second ray of dorsal fin. **Pectoral fins 1.7 to 2.1 in standard length**, extending to or beyond middle of dorsal-fin base with 11 to 13 soft rays, first ray unbranched. **Pelvic fins 4.5 to 5.5 in standard length**, inserted nearer posterior margin of opercle than caudal-fin base, barely or not reaching anal-fin origin. Juveniles similar to adults in general appearance, with paired, short chin barbels at less than 105 mm standard length (easily lost). Scales in transverse row 4.5 to 5.5. Predorsal scales 16 to 24. Pectoral branch of lateral line present. Vertebrae 36 to 40. **Colour:** body dark (iridescent bluish green in life) above, pale below. Dorsal fin with a large black blotch distally. All other fins transparent. In juveniles dorsal, pelvic, and anal fins bearing black pigment.

Size: Maximum to 12.5 cm standard length (about 15.5 cm total length).

Habitat, biology, and fisheries: Inhabits inshore and neritic waters, carried out to open sea with currents. Feeds on crustacean plankton. Eaten by many predatory fishes and sea birds. Eggs demersal. Reach full size in 1 year. Very abundant but not known to be commercial species.

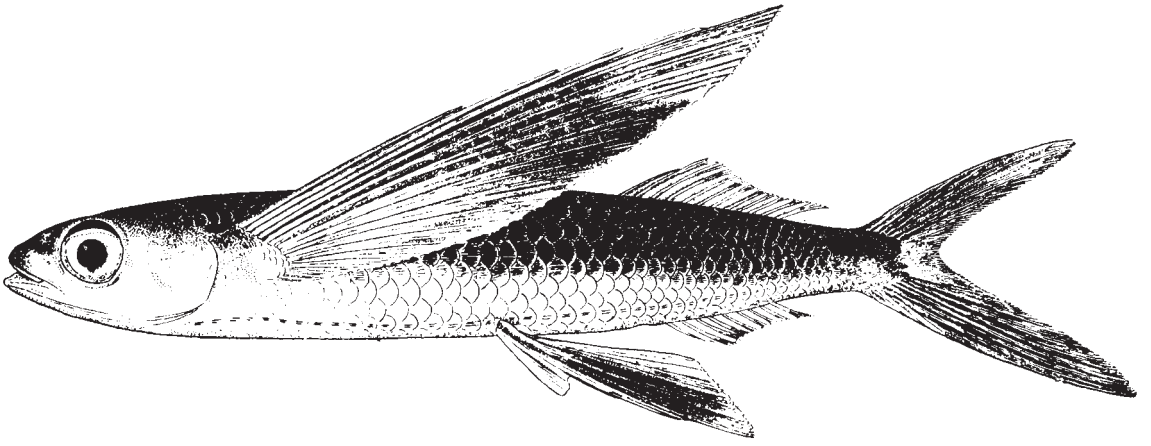
Distribution: From 40 N to northern Brazil. Very common in the Caribbean Sea and Lesser Antilles area, less common in the Gulf of Mexico, the Gulf Stream and the western Sargasso Sea. Also occurs in the tropical eastern Atlantic.

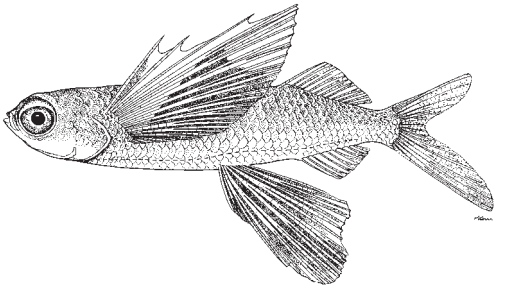


Prognichthys glaphyrae Parin, 1999

Frequent synonyms / misidentifications: None / *Prognichthys gibbifrons* (Valenciennes, 1846).

FAO names: En - Oceanic bluntnose flyingfish.





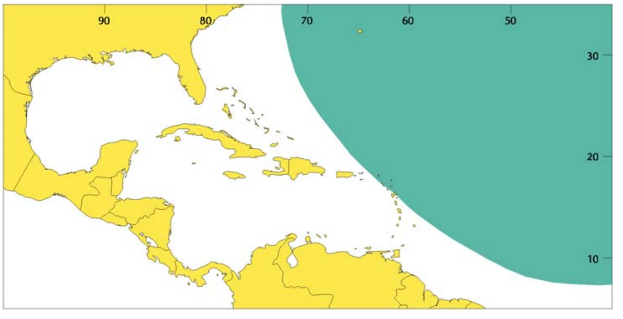
juvenile

Diagnostic characters: Body elongate, nearly rectangular in cross-section, almost flat ventrally. Depth 5.1 to 6.2 in standard length. Head length 3.6 to 4.0 in standard length. **Eye 2.8 to 3.2 in head length and 1.2 to 1.5 in postobital part of head**. Lower jaw a little shorter than the upper and included beneath upper jaw when mouth closed. Jaw teeth small, mostly conical. No palatine teeth. Gill rakers on first arch 21 to 28. **Dorsal fin low**, with 11 to 13 soft rays. **Anal fin with 8 to 11, usually 10 soft rays, originating under third to fifth dorsal fin ray. Pectoral fins 1.4 to 1.5 in standard length, with** 16 to 19 soft rays, **first 2 rays unbranched. Pelvic fins 2.8 to 3.3 in standard length**, inserted nearer to posterior margin of opercle than caudal-fin base. Juveniles not barbelled, characteristically robust and blunt-snouted at less than 60 mm standard length, with pectoral and pelvic fins of comparable length. Scales in transverse row 7 or 8. Predorsal scales 20 to 25. Vertebrae 42 to 44. **Colour:** body dark above, pale below (dark colour iridescent blue, pale colour silvery in life). Dorsal and caudal fins greyish; anal fin transparent; pectoral fins greyish in central part but their pointed tips for about 1/4 of fin length, posterior margin and lower portion transparent; pelvic fins mostly greyish, especially in the middle (probably both pectoral and pelvic fins greenish in life). Juveniles less than 30 mm standard length with body and paired fins heavily pigmented; in juveniles 30 to 130 mm standard length pectoral fins very contrastingly pigmented: mostly pale with a black areas at the base and posteriorly.

Size: Maximum to 20 cm standard length (about 25 cm total length).

Habitat, biology, and fisheries: Oceanic species. Feeds on zooplankton. Eggs pelagic. Of no importance in fisheries.

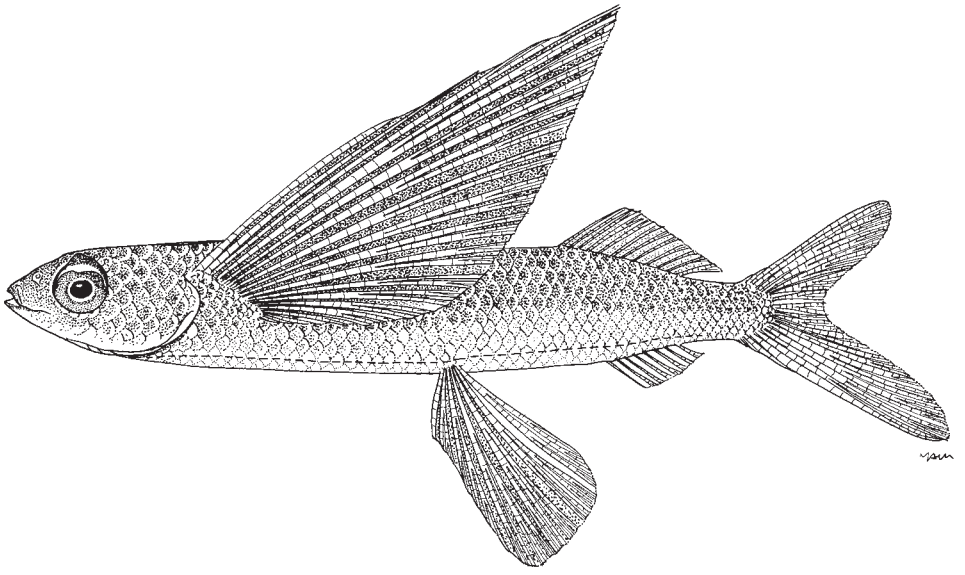
Distribution: Distributional range limited to the Atlantic Ocean. In the western Atlantic recorded between 30 to 32 N and 20 S but not known from coastal waters of America or from the Caribbean Sea, the Gulf of Mexico, or the Gulf Stream.

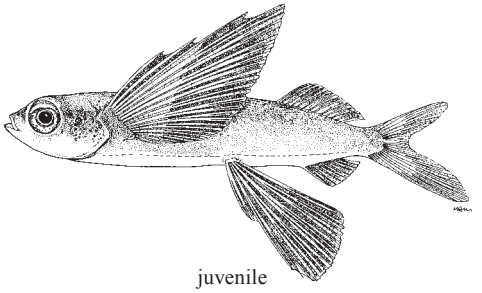


Prognichthys occidentalis Parin, 1999

Frequent synonyms / misidentifications: None / *Prognichthys gibbifrons* (Valenciennes, 1846).

FAO names: En - Western bluntnose flyingfish.





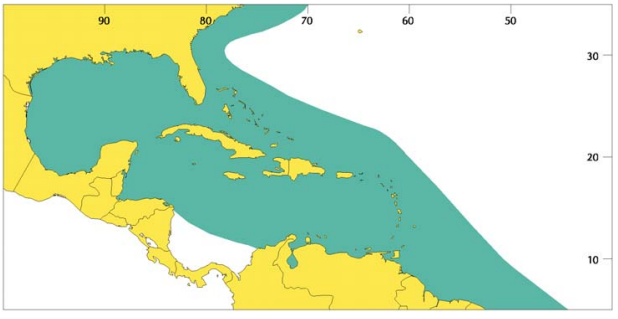
juvenile

Diagnostic characters: Body elongate, nearly rectangular in cross-section, almost flat ventrally. Depth 5.5 to 6.7 in standard length. Head length 3.7 to 7.1 in standard length. **Eye 3.0 to 3.6 in head length and 1.4 to 1.7 in postorbital part of head**. Lower jaw a little shorter than the upper and included beneath upper jaw when mouth closed. Jaw teeth small, mostly conical. No palatine teeth. Gill rakers on first arch 20 to 26. Dorsal fin low, with 10 to 13 soft rays. **Anal fin with 8 to 10, usually 9 soft rays, originating under fourth to fifth dorsal-fin ray. Pectoral fins 1.4 to 1.6 in standard length, with** 15 to 19 soft rays, **2 upper rays unbranched. Pelvic fins 2.8 to 3.4 in standard length**, inserted nearer to posterior margin of opercle than caudal-fin base. Juveniles not barbelled, characteristically robust and blunt-snouted, at less than 60 mm with pectoral and pelvic fins of comparable length. Vertebrae 42 to 44. Predorsal scales 20 to 25. Scales in transverse row 6.5 to 8. **Colour:** body dark above, pale below. Dorsal and caudal fins greyish; anal fin transparent; pectoral fins browish with pale distal tip and lowermost portion. Juveniles less than 30 mm standard length with body and paired fins heavily pigmented; in larger juveniles pectoral fins blackish, sometimes with lighter crossband in central part.

Size: Maximum to 18 cm standard length (about 23 cm total length).

Habitat, biology, and fisheries: Neritic species avoiding open sea. Feeds on zooplankton. Of no importance to fisheries.

Distribution: Distributed along the American coasts from 40 N to 40 S including the Caribbean Sea, the Gulf of Mexico, and near the Bahamas. Northernmost and southernmost records resulted from passive transport of juveniles with the Gulf Stream and the Brazil Current.

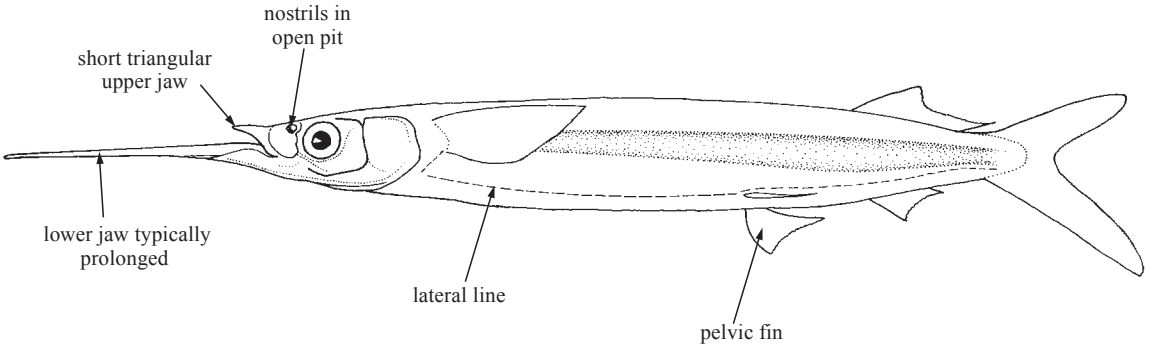


HEMIRAMPHIDAE

Halfbeaks

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

Diagnostic characters: Elongate fishes with a **prolonged lower jaw** (except in *Chriodorus atherinoides* and *Oxyporhamphus micropterus*) and a short triangular upper jaw. Nostrils in a pit anterior to eyes. No spines in fins; dorsal and anal fins posterior in position; pectoral fins usually short; pelvic fins in abdominal position, with 6 soft rays. Scales moderately large, cycloid (smooth), easily detached. Lateral line running down from pectoral-fin origin and then backward along ventral margin of body. **Colour:** these fishes live at the surface and are protectively coloured for this mode of life being green or blue on the back and silvery white on the sides and ventrally; tip of the lower jaw bright red or orange in life in most species.

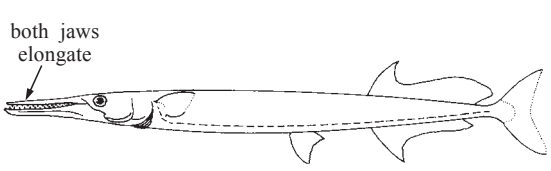


Habitat, biology, and fisheries: Most species are marine, but some inhabit fresh water; omnivorous, feeding on floating sea grasses, crustaceans, and small fishes. They are prone to leap and skitter at the surface and 1 offshore species, *Euleptorhamphus velox* can leap out of the water and glide like a flyingfish. The flesh is excellent and halfbeaks are utilized as food in many parts of the world. In the Gulf of Mexico and Caribbean Sea, they are more important as baitfish for billfishes, dolphins, kingfish, wahoo, and king mackerel than as food fish. They are caught with seines or dipnetted under lights at night.

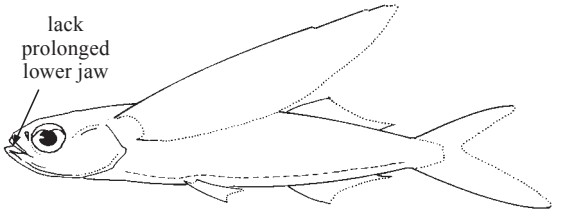
Similar families occurring in the area

Belonidae (needlefishes): both upper and lower jaws elongate and armed with needle-sharp teeth.

Exocoetidae (flyingfishes): lack the prolonged lower jaw characteristic of most halfbeaks; pectoral fins or both pectoral and pelvic fins enlarged and used for aerial gliding.



Belonidae



Exocoetidae

Key to the species of Hemiramphidae occurring in the area

1a. Lower jaw not noticeably elongate (Fig. 1) . . . . . → *2*

1b. Lower jaw distinctly elongate (Fig. 2); total gill rakers on first arch 25 to 46; pectoral-fin soft rays usually 7 to 12 . . . . . → *3*

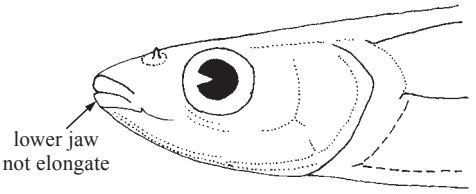


Fig. 1 lateral view of head

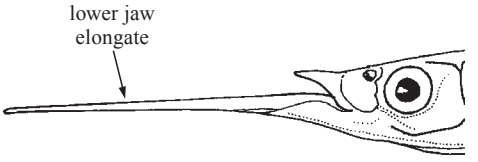


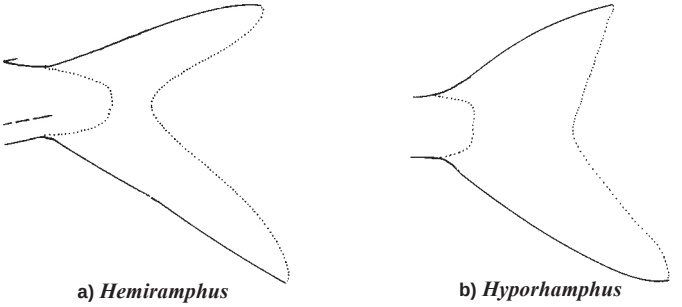
Fig. 2 lateral view of head

2a. Total gill rakers on first arch 19 to 23; pectoral fins short; pectoral-fin soft rays usually 13 or 14 . . . . . ***Chriodorus atherinoides***

2b. Total gill rakers on first arch 30 to 35; pectoral fins long; pectoral-fin soft rays 11 to 13 . . . . . ***Oxyporhamphus micropterus similis***

3a. Dorsal-fin soft rays 21 to 25; anal-fin soft rays 19 to 24; pectoral fins very long; pectoral-fin soft rays usually 7 to 9 . . . . . ***Euleptorhamphus velox***

3b. Dorsal-fin soft rays 12 to 17; anal-fin soft rays 10 to 18; pectoral fins short to moderate; pectoral-fin soft rays 9 to 12 . . . . . → *4*

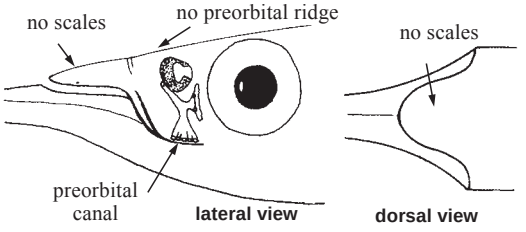


a) ***Hemiramphus*** b) ***Hyporhamphus***

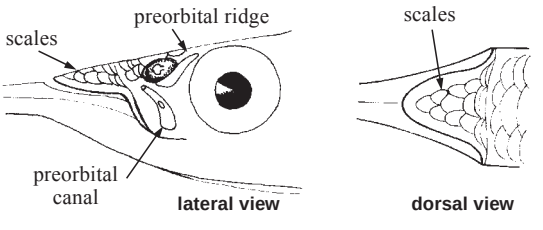
Fig. 3 caudal fin

4a. Caudal fin deeply forked (Fig. 3a); scales absent on snout; preorbital ridge absent (Fig. 4a); anal-fin soft rays usually 10 to 13 . . . . . ***(Hemiramphus)*** → *5*

4b. Caudal fin emarginate or only slightly forked (Fig. 3b); scales present on snout; preorbital ridge well developed (Fig. 4b); anal-fin soft rays usually 14 to 17 . . . . . ***(Hyporhamphus)*** → *7*



a) ***Hemiramphus***



b) ***Hyporhamphus***

Fig. 4 detail of head

5a. Pectoral fins moderate, reaching beyond anterior margin of nasal pit when folded forward; anal-fin soft rays 10 to 13, usually 11 or 12; upper caudal-fin lobe blue in life . . ***Hemiramphus balao***

5b. Pectoral fins short, not reaching nasal pit when folded forward; anal-fin soft rays 12 to 14, usually 13; upper caudal-fin lobe reddish orange in life . . . . . ***→ 6***

6a. Gill rakers on first arch 37 to 45. . . . . ***Hemiramphus bermudensis***

6b. Gill rakers on first arch 28 to 36 . . . . . ***Hemiramphus brasiliensis***

7a. Scales absent from dorsal and anal fins or only a few present on anterior parts of the fins . . . . . ***Hyporhamphus roberti***

7b. Scales cover dorsal and anal fins of adults . . . . . ***→ 8***

8a. Total gill rakers on first arch 26 to 35, usually 28 to 32; on second arch 19 to 28, usually 25 or fewer; ratio of preorbital length to orbit diameter usually less than 0.70 . . . . . ***Hyporhamphus unifasciatus***

8b. Total gill rakers on first arch 31 to 40, usually 33 to 39; on second arch 20 to 30, usually 25 or more; ratio of preorbital length to orbit diameter usually greater than 0.70 . . ***Hyporhamphus meeki***

List of species occurring in the area

The symbol is given when species accounts are included.

Chriodorus atherinoides Goode and Bean, 1882.

Euleptorhamphus velox Poey, 1868.

Hemiramphus balao Lesueur, 1821.
Hemiramphus bermudensis Collette, 1962.
Hemiramphus brasiliensis (Linnaeus, 1758).

Hyporhamphus meeki Banford and Collette, 1993.
Hyporhamphus roberti (Valenciennes, 1847).
Hyporhamphus unifasciatus (Ranzani, 1841).

Oxyporhamphus micropterus similis Bruun, 1935.

References

Banford, H.M. and B.B. Collette. 1993. *Hyporhamphus meeki*, a new species of halfbeak (Teleostei: Hemiramphidae) from the Atlantic and Gulf coasts of the United States. *Proc. Biol. Soc. Washington,* 106:369-384.

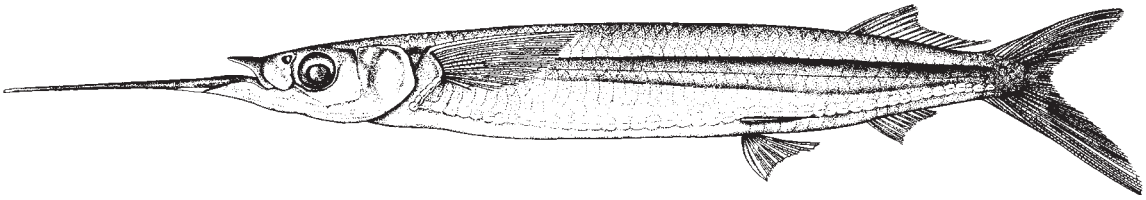
Berkeley, S.A. and E.D. Houde. 1978. Biology of two exploited species of halfbeaks, *Hemiramphus brasiliensis* and *H. balao* from southeast Florida. *Bull. Mar. Sci. Gulf. Carib.,* 28:624-644.

Collette, B.B. 1962. *Hemiramphus bermudensis*, a new halfbeak from Bermuda, with a survey of endemism in Bermudian shore fishes. *Bull. Mar. Sci. Gulf. Carib.*, 12:432-449.

McBride, R., L. Foushee, and B. Mahmoudi. 1996. Florida's halfbeak, *Hemiramphus* spp., bait fishery. *Mar. Fish. Rev.*, 58(1-2):29-38.

Hemiramphus balao Lesueur, 1821 BHA

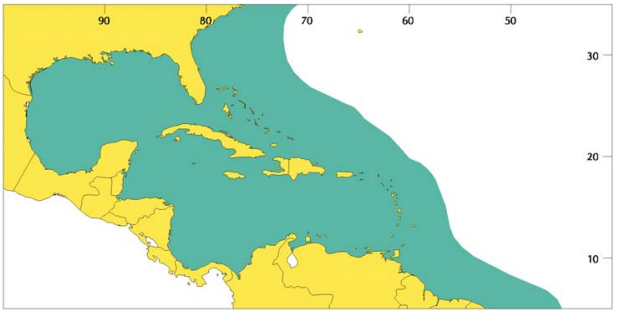
Frequent synonyms / misidentifications: None / *Hemiramphus brasiliensis* (Linnaeus, 1758).
FAO names: En - Balao halfbeak (AFS: Balao); **Fr** - Démi-bec balaou; **Sp** - Agujeta balajú.



Diagnostic characters: An elongate fish with a greatly prolonged beak-like lower jaw. Upper jaw short, triangular; snout scaleless; preorbital ridge (bony ridge under nostril) absent. Total number of gill rakers on first arch 31 to 39 (average 34.5 to 37.2), 7 to 10 on upper and 22 to 29 on lower limb of arch. Dorsal-fin rays 11 to 15, usually 13 or 14; **anal-fin soft rays 10 to 13, usually 11 or 12**; caudal fin deeply forked, lower lobe much longer than upper; **pectoral fins long, reaching beyond anterior margin of nasal pit when folded forward**, and with 10 to 12, usually 11, soft rays. **Colour:** dark bluish above, silvery white below; beak dark with fleshy red tip; **upper and lower lobes of caudal fin bluish violet.**

Size: Maximum to at least 40 cm total length; about 28 cm standard length (from jaw to base of caudal fin); commonly to 35 cm total length.

Habitat, biology, and fisheries: An inshore, surface-dwelling fish forming sizeable schools. Feeds on planktonic organisms, such as copepods, decapods, siponophores, and polychaetes. Matures in the first year. Although a good foodfish (used as such especially in the West Indies), this species is most important as bait for offshore gamefishes such as sailfishes and marlins. An important bait fishery exists in Dade and Munroe counties, southern Florida; local food and bait fisheries in Venezuela and Colombia. Separate statistics are not reported for this species. Usually taken along with *Hemiramphus brasiliensis*, the estimated combined catch of the 2 species in the Florida fishery 300 t/year (worth about US$800 000 retail). The Florida fishery is conducted mostly from small boats powered by a single gasoline engine with modified lampara nets. In Venezuela it is taken mainly with 'mandinga' nets, often using lights.

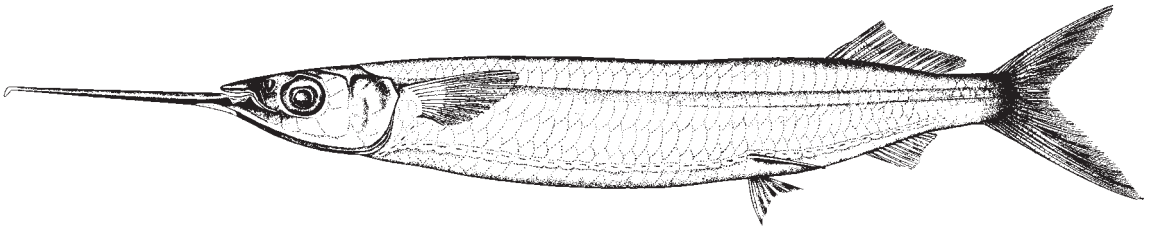


Distribution: East coast of Florida and throughout the Gulf of Mexico and the Caribbean Sea; extending north to New York and south to Santos (Brazil); also found in the eastern tropical Atlantic from the Canary Islands south to Luanda, Angola.

Hemiramphus bermudensis Collette, 1962

Frequent synonyms / misidentifications: None / None.

FAO Names: En - Bermuda halfbeak; **Fr** - Démi-bec bermudien; **Sp** - Agujeta bermuda.

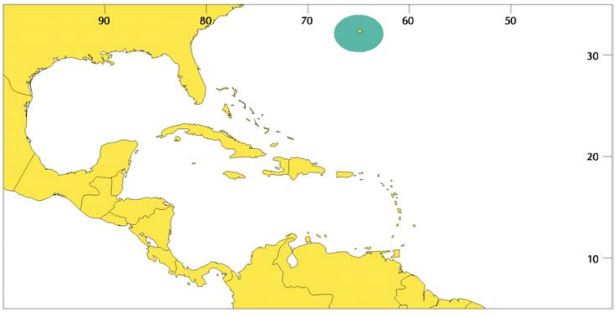


Diagnostic characters: An elongate fish with a greatly prolonged beak-like lower jaw. Upper jaw short, triangular; snout scaleless; preorbital ridge (bony ridge under nostril) absent. **Total number of gill rakers on first arch 37 to 45 (average 40)**, 9 to 13 on upper and 26 to 33 on lower limb of arch. Dorsal-fin soft rays 13 to 15, usually 14; **anal-fin soft rays 12 to 14, usually 13**; caudal fin deeply forked, lower lobe much longer than upper; **pectoral fins short, not reaching to nasal pit when folded forward** and with 10 to 12 (usually 11) soft rays. **Colour:** dark bluish above, silvery white below; beak black with bright red fleshy tip; **upper caudal-fin lobe reddish orange in adults.**

Size: Maximum to about 44 cm total length, about 31 cm standard length (from tip of upper jaw to base of caudal fin); commonly to 35 cm total length.

Habitat, biology, and fisheries: An inshore pelagic species, forming sizeable schools. Taken in coastal waters around Bermuda, but apparently no special fishery. Separate statistics are not reported for this species. Caught mainly with seines and dipnets. Although a foodfish, it is mainly used as bait.

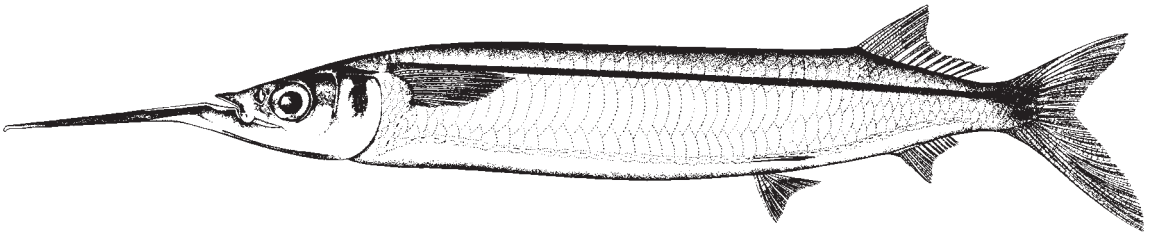
Distribution: Restricted to the waters around Bermuda where it replaces the wide-ranging *Hemiramphus brasiliensis*.



Hemiramphus brasiliensis (Linnaeus, 1758) BAL

Frequent synonyms / misidentifications: None / None.

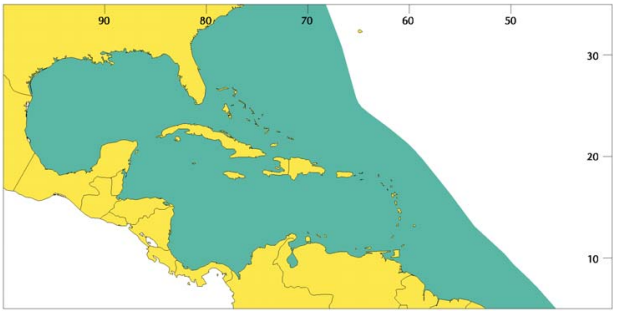
FAO Names: En - Ballyhoo halfbeak (AFS: Ballyhoo); **Fr** - Démi-bec brésilien; **Sp** - Agujeta brasileña.



Diagnostic characters: An elongate fish with a greatly prolonged beak-like lower jaw. Upper jaw short, scaleless; preorbital ridge (bony ridge under nostril) absent. **Total number of gill rakers on first arch 28 to 36** (average 31.2), 7 to 10 on upper and 20 to 26 on lower limb of arch. Dorsal-fin soft rays 12 to 15, usually 13 or 14; **anal-fin soft rays 12 to 14, usually 13**; caudal fin deeply forked, lower lobe much longer than upper; **pectoral fins short, not reaching to nasal pit when folded forward**, with 10 to 12 (usually 11) soft rays. **Colour**: dark bluish green above, silvery white below; beak black with fleshy red tip; **entire upper lobe of caudal fin yellowish orange**, lower lobe dusky.

Size: Maximum to at least 40.5 cm total length, 35 cm standard length (from tip of upper jaw to base of caudal fin); commonly to 35 cm total length.

Habitat, biology, and fisheries: An inshore, surface-dwelling fish forming sizeable schools. Feeds largely on sea grasses and also on planktonic crustaceans and siphonophores. Mature in their first year and few exceed 2 years of age. Although a good foodfish (used as such especially in the West Indies), is most important as bait for offshore gamefishes such as sailfish and marlins. An important bait fishery exists in Dade and Munroe counties, southern Florida; local food and bait fisheries in Venezuela and Colombia. Separate statistics are not reported for this species. Usually taken along with *Hemiramphus balao*, the estimated combined catch of the 2 species in the Florida fishery 300 t/year (worth about US$800 000 retail). The Florida fishery is conducted mostly from small boats powered by a single gasoline engine with modified lampara nets. In Venezuela it is taken mainly with 'mandinga' nets, often using lights.

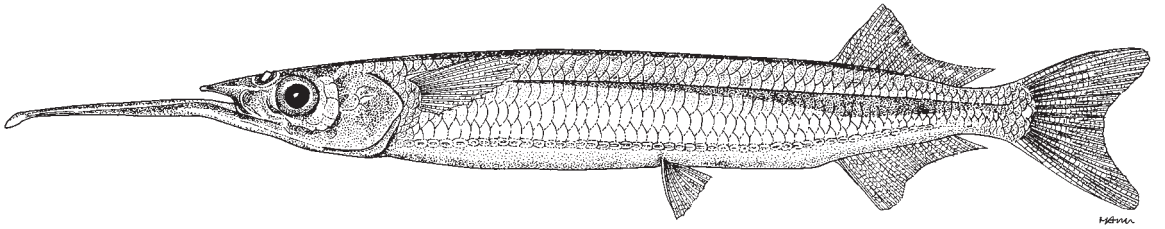


Distribution: East coast of Florida and throughout the Gulf of Mexico and the Caribbean Sea; northward extending to Woods Hole, Massachusetts and southward to Rio de Janeiro, Brazil. Also found in the eastern Atlantic from the Canary Islands and Dakar south to Luanda, Angola. Replaced at Bermuda by *Hemiramphus bermudensis*.

Hyporhamphus meeki Banford and Collette, 1993

Frequent synonyms / misidentifications: None / *Hyporhamphus unifasciatus* (Ranzani, 1842).

FAO names: En - Meek's halfbeak (AFS: False silverstripe halfbeak); **Fr** - Démi-bec Meek; **Sp** - Agujeta Meek.

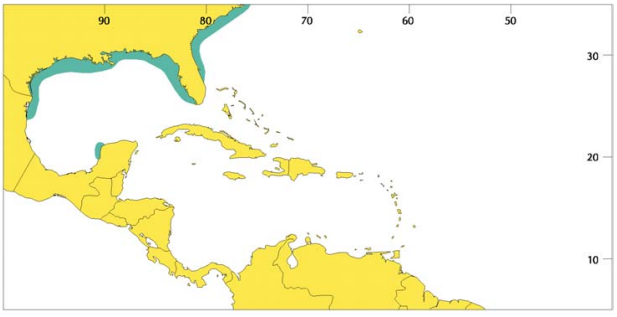


Diagnostic characters: An elongate fish with a greatly prolonged beak-like lower jaw. Upper jaw short, scaly; **preorbital ridge (bony ridge under nostril) present; ratio of preorbital length to orbit diameter usually greater than 0.70**. Total number of gill rakers on first arch 31 to 40 (average 34.6), 8 to 12 on upper and 20 to 29 on lower limb of first arch. Dorsal-fin soft rays 12 to 17, usually 14 or 15; **anal-fin soft rays 14 to 18, usually 15 to 17; caudal fin emarginate to slightly forked. Bases of dorsal and anal fins covered with scales**. Pectoral fins short, not reaching to nasal pit when folded forward and with 10 to 13 (usually 11 or 12) soft rays. **Colour:** greenish above, silvery white below; 3 distinct narrow black lines along back from head to dorsal fin; fleshy tip of beak red; caudal fin pale, dark-edged.

Size: Maximum to about 18 cm standard length (from tip of snout to base of caudal fin), 22 cm total length; commonly to 15 cm standard length, 18 cm total length.

Habitat, biology, and fisheries: An inshore surface schooling species, frequently entering estuaries. Omnivorous, feeding mostly on floating sea grasses and also on algae and small animal organisms.

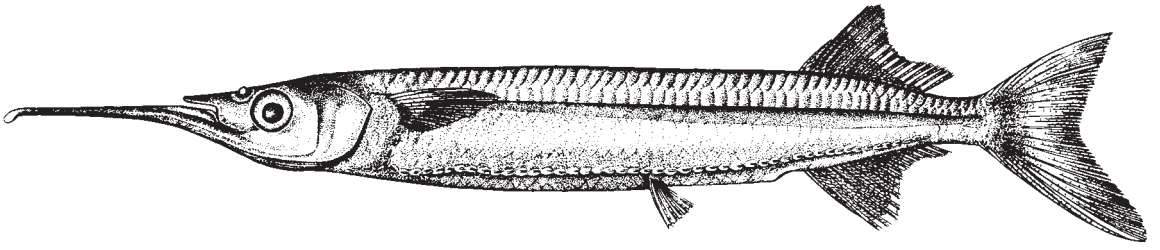
Distribution: From Cape Cod, Massachusetts to peninsular Florida, throughout the northern Gulf of Mexico to Yucatán. Replaced by *Hyporhamphus unifasciatus* in Bermuda, the southern tip of Florida, the West Indies, and Central and South America from Yucatán to Uruguay.



Hyporhamphus unifasciatus (Ranzani, 1841)

Frequent synonyms / misidentifications: None / None.

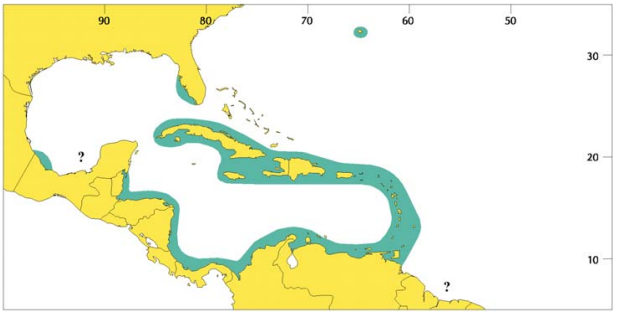
FAO names: En - Common halfbeak (AFS: Atlantic silverstripe halfbeak); **Fr** - Démi-bec blanc; **Sp** - Agujeta blanca.



Diagnostic characters: An elongate fish with a greatly prolonged beak-like lower jaw. Upper jaw short, scaly; **preorbital ridge (bony ridge under nostril) present; ratio of preorbital length to orbit diameter usually less than 0.70**. Total number of gill rakers on first arch 26 to 35 (average 30.6), 7 to 11 on upper and 11 to 25 on lower limb of first arch. Dorsal-fin soft rays 13 to 16, usually 15; **anal-fin soft rays 15 to 18, usually 16 or 17**; pectoral fins short, not reaching to nasal pit when folded forward and with 10 to 12 (usually 11) soft rays; **caudal fin emarginate to slightly forked. Bases of dorsal and anal fins covered with scales. Colour:** greenish above, silvery white below; 3 distinct narrow black lines from along head to dorsal fin; fleshy tip of beak red; caudal fin pale, dark-edged.

Size: Maximum to about 27 cm total length, about 24 cm standard length (from tip of snout to base of caudal fin); commonly to 20 cm standard length.

Habitat, biology, and fisheries: An inshore surface schooling species, frequently entering estuaries. Omnivorous, feeding mostly on floating sea grasses and also on algae and small animal organisms. Caught in inshore waters throughout its range; a special bait fishery is reported from Venezuela. Separate statistics are not reported for this species. Caught with 'mandinga' nets in Venezuela, often using lights. Considered edible but little appreciated (Colombia).

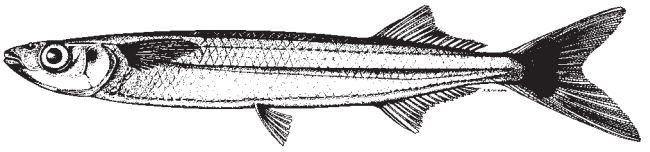


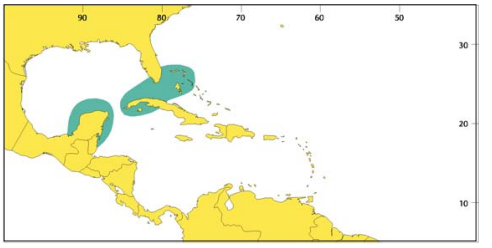
Distribution: From Bermuda and southern peninsular Florida, southward through the Caribbean and the West Indies to Uruguay. Confined to the western Atlantic Ocean, all literature records outside this range refer to other superficially similar species of *Hyporhamphus*, including *Hyporhamphus naos*, from the eastern Pacific, California to Panama and the Galapagos Islands.

Chriodorus atherinoides Goode and Bean, 1882 HCE

En - Hardhead halfbeak.

Maximum size 164 mm standard length. Abundant in clear waters around Key West and in brackish lakes in the Bahamas. Feeds on green algae and adherent organisms such as diatoms. Of no present fisheries importance but was considered an excellent panfish in the 1880s. Southern Florida, Florida Keys, Cuba, Campeche and Yucatán, Mexico, and Belize.

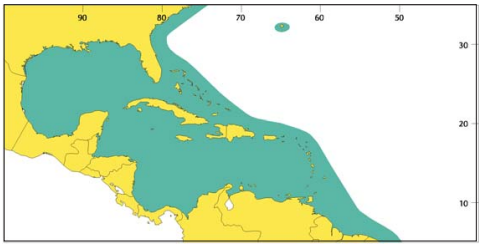




Euleptorhamphus velox Poey, 1868

En - Flying halfbeak; **Fr** - Démi-bec volant; **Sp** - Agujeta voludora.

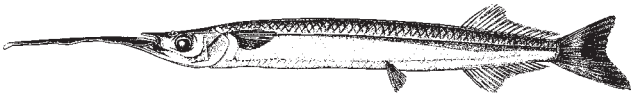
Maximum size 281 mm standard length. An offshore species. Eaten by oceanic fishes and birds. Of no fisheries interest. Western Atlantic from Massachusetts throughout the Gulf of Mexico and Caribbean Sea south to Recife, Brazil. Also found in the Gulf of Guinea in the eastern Atlantic.

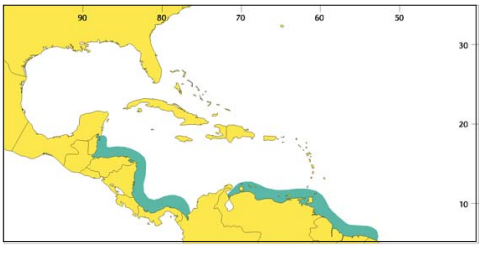


Hyporhamphus roberti (Valenciennes, 1847)

En - Slender halfbeak; **Fr** - Démi-bec allongé; **Sp** - Agujeta larga.

Maximum size 186 mm standard length. Found in estuaries and river mouths of coastal Central and South America. Of no fisheries importance. Two subspecies are recognized: *Hyporhamphus roberti roberti* (Valenciennes, 1847) from south of Rio de Janeiro, Brazil north to Lake Maracaibo, Venezuela and *Hyporhamphus roberti hildebrandi* Jordan and Evermann, 1927 from the Gulf of Uraba, Colombia north to Guatemala.





Oxyporhamphus micropterus similis Bruun, 1935

En - Atlantic smallwing flyingfish (AFS: Smallwing flyingfish).

Maximum size 185 mm standard length. A small offshore species of no fisheries interest. Widespread in tropical and subtropical waters of the Atlantic, in the western Atlantic north to 40°N, in the Gulf of Mexico and Caribbean Sea south at least to the equator. In the eastern Atlantic from 20°N south to 20°S. Considered to be Exocoetidae by some authors.