

**Trisopterus**

**GADI Triso**

**Genus with Reference** : *Trisopterus* Rafinesque, 1814, Prec.decouv.somiolog.: 16.

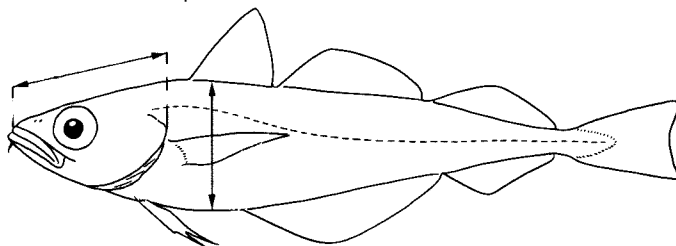
**Diagnostic Features** : Chin barbel well developed. Dorsal fins three; anal fins two, first anal fin with a long base, two times or more the length of the first dorsal fin base; dorsal fins in contact at their bases or with only a very small interspace; anal fin similar; pectoral fin extending beyond origin of anal fin; pelvic fin with a slightly elongated ray. Lateral line continuous for its entire length; lateral line on head with pores.

**Habitat, Distribution and Biology** : Benthopelagic to pelagic. Found in the eastern Atlantic to Iceland and adjacent areas of the Arctic; also, in the Mediterranean.

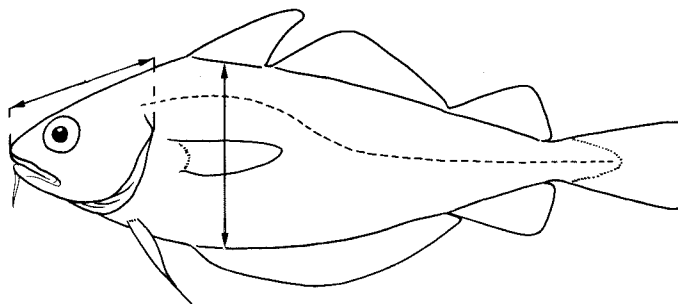
**Interest to Fisheries** : All three species are taken in small to moderate quantities.

**Key to species:**

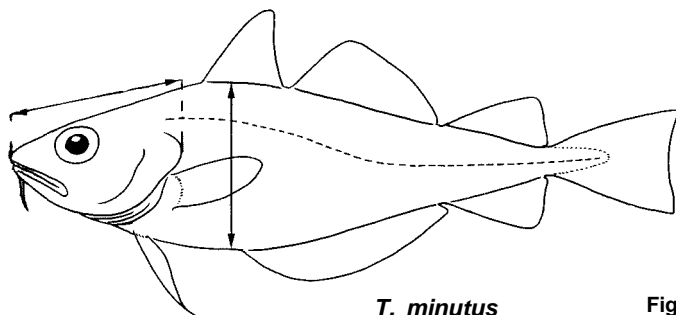
- 1a. Lower jaw slightly longer than upper. Greatest body depth less than head length (Fig. 143)..... *T. esmarkii*
- 1b. Lower jaw shorter than upper
  - 2a. Greatest body depth greater than head length (Fig. 144)..... *T. luscus*
  - 2b. Greatest body depth equal to or less than head length (Fig.145) ... *T. minutus*



*T. esmarkii* Fig. 143



*T. luscus* Fig. 144



*T. minutus* Fig. 145

**Trisopteros esmarkii** (Nilsson, 1855)

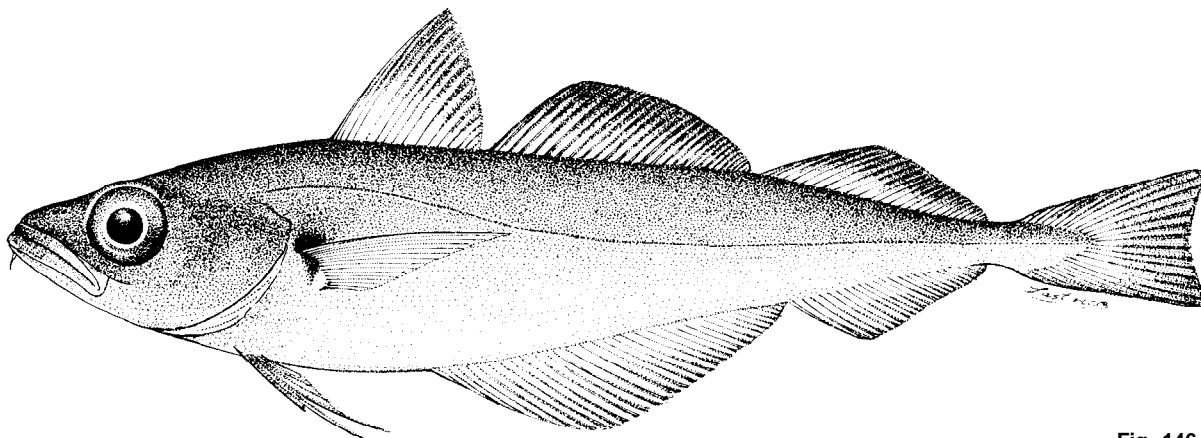
Fig. 146

**GADI Triso 3**

**Scientific Name with Reference** : *Gadus esmarkii* Nilsson, 1855, Scand.Fauna, 4:565

**Synonyms** : None

**FAO Names** : **En** - Norway pout; **Fr** - Tcaud norvegien; **Sp** - Faneca noruega.



(adapted from Svetovidov, 1948)

Fig. 146

**Diagnostic Features** : Lower jaw slightly longer than upper. Greatest body depth less than head length. **Colour** : grey-brown dorsally, sides silvery, belly white; a dark blotch at upper edge of pectoral base.

**Geographical Distribution** : Southwest Barents Sea, sometimes at Bear Island, south to the English Channel, around Iceland, and at the Faeroe Islands (Fig. 147).

**Habitat and Biology** : Benthopelagic to pelagic over muddy bottoms at depths of 50-300 m, but mostly found between 100 and 200 m. First maturity is reached at 2 years (14 to 15 cm) and sex ratio of adults in the North Sea is 43% males: 57% females. A 15 to 19 cm fish lays 27 000 to 51 200 eggs; the spawning period extends from January to July (mostly from March to May). Migrates for spawning between the Shetland Islands and Norway and out of the Skagerrak, the major spawning grounds being located between NW Scotland, Norway, Faeroe Islands and Iceland. Growth is rapid: at 1 year, 13 cm; 2 years, 19 cm; 3 years, 21 cm; maximum age is 4 to 5 years. It is a pelagic feeder, mostly on planktonic crustaceans (copepods euphausiids, shrimps, amphipods) but also on small fish and various eggs and larvae.

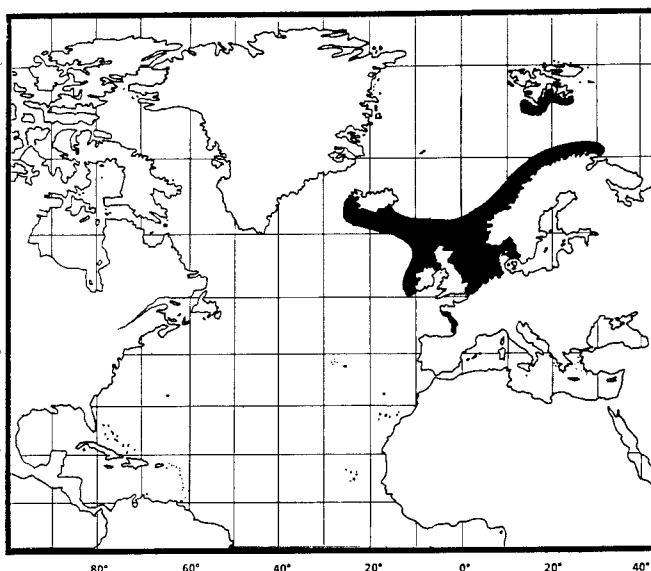


Fig. 147

**Size** : An exceptional specimen reached 35 cm; however, less than 20 cm is the more ordinary size.

**Interest to Fisheries** : The catch reported for 1987 in the FAO Yearbook of Fishery Statistics was 321 082 metric tons, down from 878 000 t in 1974. Major exploiting countries are Denmark (ca. 219 000 t), Norway (ca. 81 000 t) and the Faeroe Islands (ca. 20 000 t), using bottom trawls and Danish seines. The major fishing grounds are the northern North Sea and Skagerrak and to a lesser extent, the Norwegian More coast, between 100 and 250 m depth. Used mainly for fish meal and oil.

**Local Names** : DENMARK: Spaering; FRANCE : Mostelle de fond, Tacaud norvegien; GERMANY: Stintdorsch; NORWAY: Ogerpal, Skellbrosme; UK: Norway pout.

**Literature** : Svetovidov (1948); Andriashev (1954); Raitt (1968a)

***Trisopterus luscus*** (Linnaeus, 1758)

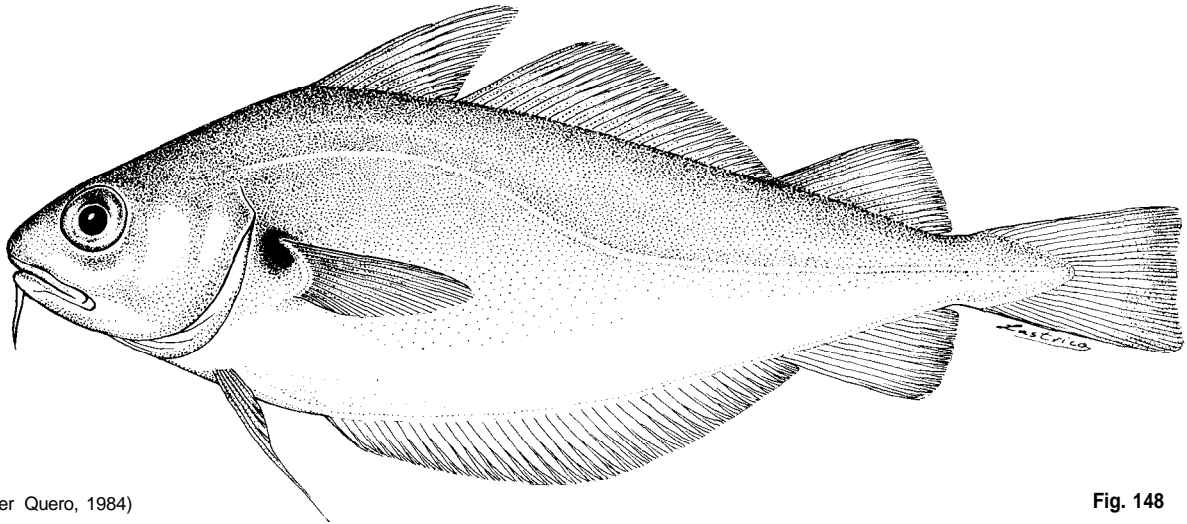
Fig. 148

GADI Triso 2

**Scientific Name with Reference** : *Gadus luscus* Linnaeus, 1758, *Syst.Nat.*, ed.10:252.

**Synonyms** : *Gadus barbatus* Linnaeus, 1758; *Gadus bibus* Lacépède, 1800; *Morhua lusca*, Fleming, 1828; *Morhua barbata*, Fleming, 1828; *Gadus colias* Gronow, 1854; *Gadulus luscus*, Malm, 1877.

**FAO Names** : En- Pouting; Fr - Tacaud commun; Sp - Faneca.



(after Quero, 1984)

Fig. 148

**Diagnostic Features** : Lower jaw shorter than upper. Greatest body depth greater than head length. **Colour**: light brown dorsally, sides greyish becoming silvery ventrally; four or five broad indistinct transverse bars on the side; a dark blotch at the upper edge of the pectoral base.

**Geographical Distribution** : From the British Isles and Skagerrak to about 25°N along the West African coast, also at the offshore islands and in the western Mediterranean (Fig. 149).

**Habitat and Biology** : A benthopelagic species living mostly on the outer shelf up to 100 m depth, but moving inshore to depths of 50 m or less for spawning. Found also in estuaries. Immatures form schools above sandy bottoms. First maturity is reached at the end of first year. Spawning occurs from December to April (mostly March-April) in the Atlantic and from January to July in the Mediterranean. Growth is rapid: at 1 year, 21-25 cm; 2 years, 23-27 cm; 3 years, 28-33 cm. Maximum age is 4 years. Feeds on benthic crustaceans but also on small fish, molluscs and polychaetes.

**Size** : Reaches at most 45 cm total length, generally 30 cm or less.

**Interest to Fisheries** : The catch reported for 1987 in the FAO Yearbook of Fishery Statistics was 22 664 metric tons of which 18 591 t were taken in the northeastern Atlantic (France: ca. 6 400 t; Spain: ca. 6 100 t; Portugal: ca. 4 300 t; and others), 2 006 t in the eastern central Atlantic (mostly Morocco) and 2 067 t in the Mediterranean (mostly Spain).

**Local Names** : BELGIUM: Steenbolk; DENMARK: Skaegtorsk; FRANCE: Barraud, Gade, Guitan moulek, Guidon, Kiankiarquia, Officier, Plouse, Poule de mer, Tacaud; GERMANY: Franzosendorsch; GREECE: Bakallarakı; ITALY: Merluzzetto bruno; MOROCCO: Capela, Faneca; NETHERLANDS: Steenbolk; NORWAY: Skjeggorsk; PORTUGAL: Faneca; SPAIN: Faneca; SWEDEN: Bredtorsk, Skaggtorsk; UK: Bib, Pout, Pouting; USSR: Lyusca.

**Literature** : Svetovidov (1948); Bini (1969); Quero (1984); Fischer, Bauchot & Schneider, eds (1987).

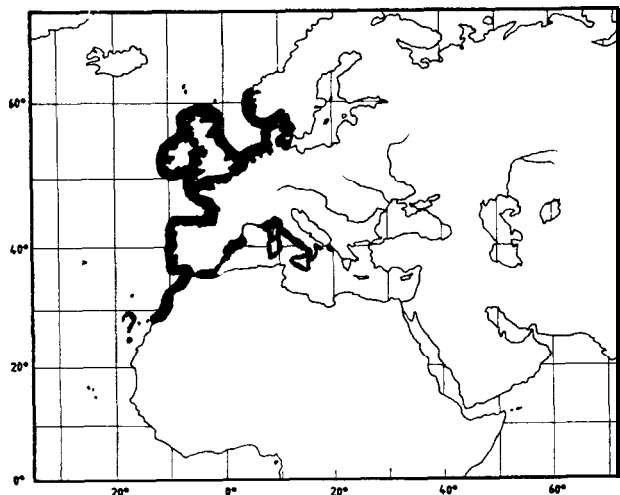


Fig. 149

***Trisopterus minutus*** (Linnaeus, 1758)

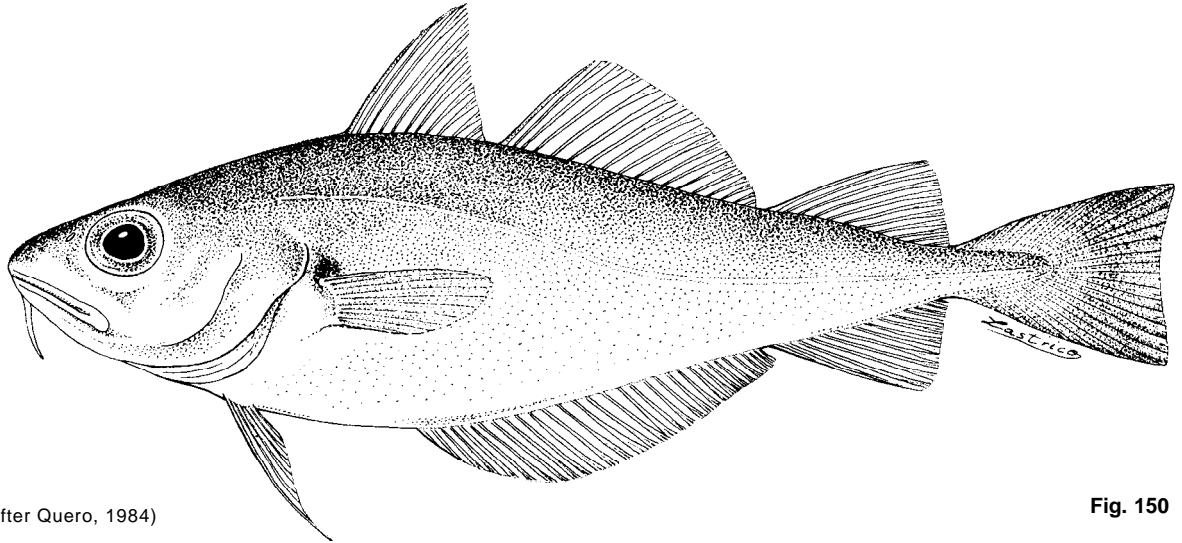
Fig. 150

GADI Triso 1

**Scientific Name with Reference** : *Gadus minutus* Linnaeus, 1758, *Syst.Nat.*, ed. 10:253.

**Synonyms** : *Gadus capelanus* Lacépède, 1800; *Gadus tacaud* Lacépède, 1800; *Morva capelanus*, Risso, 1826; *Brachygadus minutus*, Gill, 1863; *Gadulus minutus*, Malm, 1877; *Trisopterus minutus minutus*, Svetovidov, 1948; *Trisopterus minutus capelanus*, Svetovidov, 1948; *Gadus (Trisopterus) capelanus*, Dieuzeide *et al.* 1959.

**FAO Names** : En - Poor cod; Fr - Capelan de Méditerranée; Sp - Capellán.



(after Quero, 1984)

Fig. 150

**Diagnostic Features** : Lower jaw shorter than upper. Greatest body depth equal to or less than head length. **Colour**: brownish yellow dorsally, paler ventrally; a dark blotch at upper base of pectoral fin.

**Geographical Distribution** : From the Trondheim Fjord and the Faeroe Islands to Portugal and along the Atlantic coast of Morocco and in the Mediterranean. (Fig. 151).

**Habitat and Biology** : Benthopelagic to depths of 400 m, mostly from 15 to 200 m in the Atlantic and to 120 m in the Mediterranean on muddy or sandy bottoms. A gregarious species, living in small schools. First maturity is reached at 1 year. Spawns from December to March off Spain, February to March in the English Channel and December to March in the Mediterranean, at 50-100 m depth. Growth is rapid, more so in females than in males: at 1 year, 12-14 cm; 2 years, 17-19 cm; at 4 years, 40 cm for males and 6 years for females. Feeds on crustaceans, small fish, and polychaetes.

**Size** : Reaches 40 cm total length.

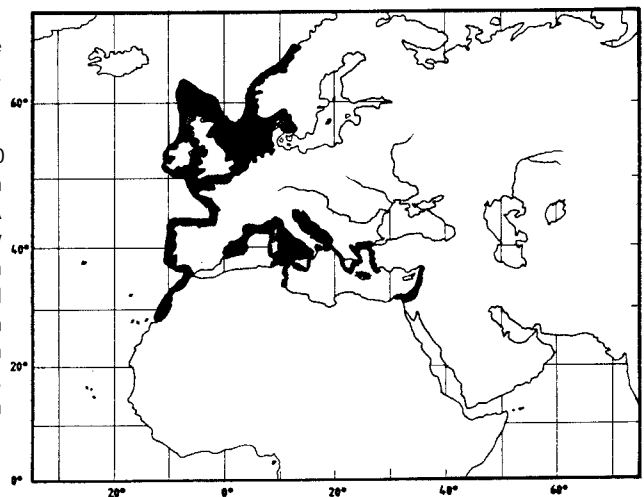


Fig. 151

**Interest to Fisheries** : Locally abundant and reputedly a good food fish but not extensively fished. The catch reported for 1987 in the FAO Yearbook of Fishery Statistics was 935 metric tons, all by France in the Mediterranean. Gear used includes trawls, gill nets, longlines and handlines. Found regularly in northern Mediterranean markets, fresh and chilled; also used for fish meal in Sicily.

**Local Names** : ALBANIA: Peshk lakuriq; ALGERIA: Bakalá; CYPRUS: Bacaliaraki; EGYPT: Nazelli; FRANCE: Capailla, Capelin; GREECE: Fighi; ISRAEL: Shibbut guz; ITALY: Asinello, Busbano, Cappellano, Figarotto, Merluzzetto, Mormoro, Pesce mudo; LEBANON: Armout; LIBYA: Merlutso; MALTA: Mankana; MONACO: Capelan; MOROCCO: Capelan; SPAIN: Capella, Mollera; TUNISIA: Nazalli; UK: Poor-cod; USSR: Kapelan; YUGOSLAVIA: Ugotica mala.

**Literature** : Svetovidov (1948); Bini (1969); Quero (1984) Bauchot, Fischer & Schneider, eds (1987).

**Remarks** : The population living in the Mediterranean and to the south along the African coast is considered to be a separate species or subspecies, *T. minutus capelanus*.

## Urophycis

## GADI Uroph

**Genus with Reference** : *Urophycis* Gill, 1864, *Proc.Acad.Nat.Sci.Philad.*, 1863 (1864), 15:240.

**Diagnostic Features** : Two dorsal fins; one anal fin, neither connected with caudal fin; first dorsal fin with 9 to 13 rays; anal fin not indented; pelvic fin with two elongated rays. Head with lateral-line pores. Opisthotic bone at rear of skull lacking large processes for attachment of pectoral girdle; post-temporal and supracleithrum poorly developed.

**Habitat, Distribution and Biology** : Benthic, mostly on soft bottom, chiefly in the western Atlantic from Canada to Argentina, rarely caught in the eastern North Atlantic.

**Interest to Fisheries** : Several of the species are fished commercially and are of varying importance.

**Remarks** : The taxonomy of *Urophycis* species requires additional study, especially in the tropics and off temperate South America. Species accounts are not presented for indeterminate names, which are also excluded from keys and synonymies.

### Key to species:

1a. First dorsal fin with an elongated ray

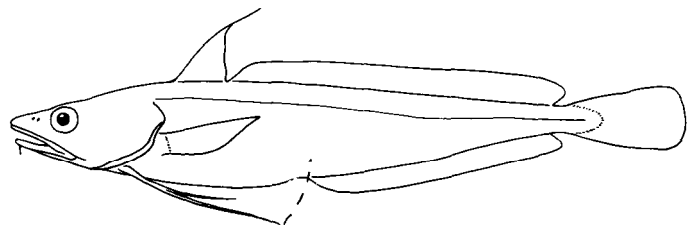
2a. Upper limb of first gill arch with two rakers (rarely 3); scale rows between first dorsal fin and lateral line 11 or more

3a. Pelvic fin rarely reaching beyond origin of anal fin (Fig 152)..... *U. tenuis*

3b. Pelvic fin extending beyond origin of anal fin (Fig. 153).... *U. brasiliensis*

2b. Upper limb of first gill arch with 3 rakers (rarely 2); scale rows between first dorsal fin and lateral line about 7 (Fig. 154)..... *U. chuss*

1b. First dorsal without an elongated ray



*U. tenuis*

Fig. 152



*U. brasiliensis*

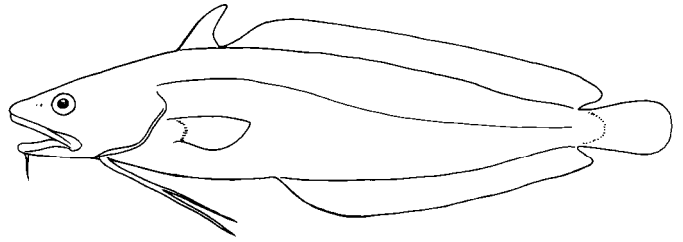
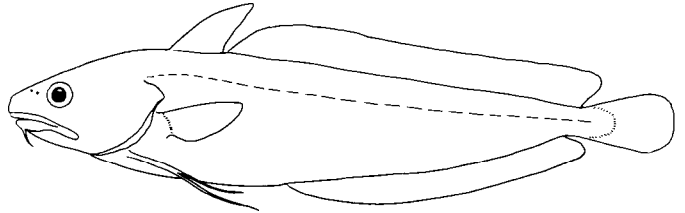
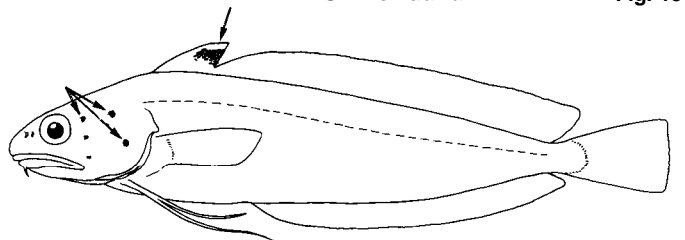
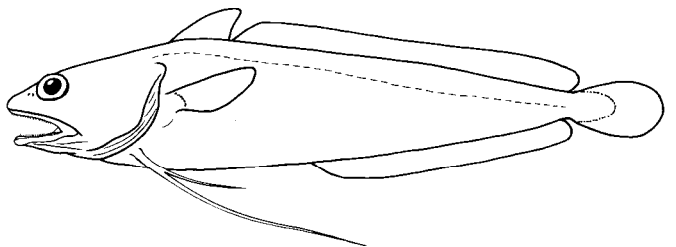
Fig. 153



*U. chuss*

Fig. 154

- 4a. Scale rows between first dorsal fin and lateral line 18 to 21 (Fig. 155) ..... ***U. earllii***
- 4b. Scale rows between first dorsal fin and lateral line 12 or fewer
- 5a. Upper limb of first gill arch with 2 rakers (Fig. 156)..... ***U. floridana***
- 5b. Upper limb of first gill arch with 3 rakers (rarely 2)
- 6a. A series of dark spots on head; first dorsal fin with a dark blotch and distinct white margin (Fig. 157)..... ***U. regia***
- 6b. No series of dark spots on head; first dorsal fin with neither a dark blotch nor white margin (Fig. 158)..... ***U. cirrata***

***U. earllii*****Fig. 155*****U. floridana*****Fig. 156*****U. regia*****Fig. 157*****U. cirrata*****Fig. 158**

***Urophycis brasiliensis*** (Kaup, 1858)

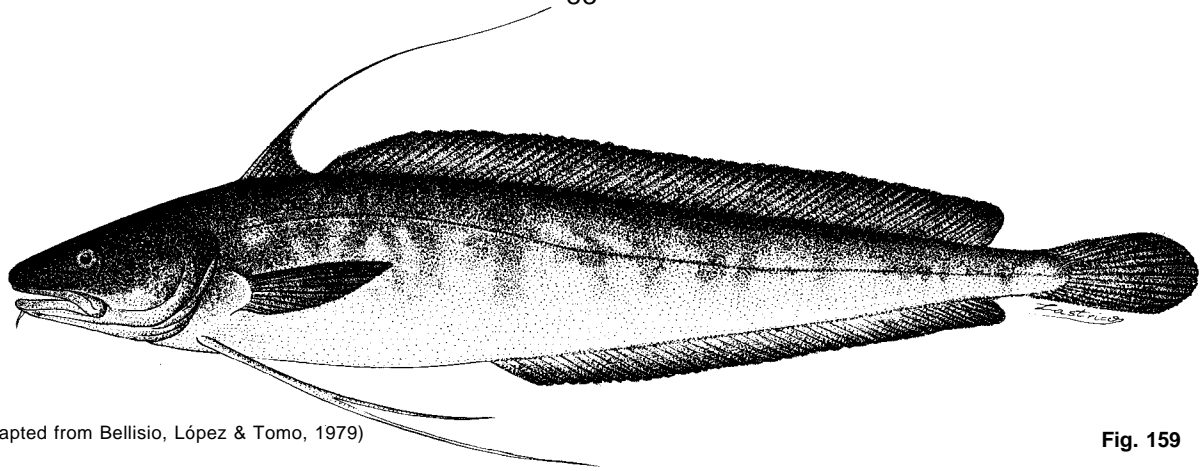
**Fig. 159**

**GADI Uroph 3**

**Scientific Name with Reference** : *Phycis brasiliensis* Kaup, 1858, *Wiegman Arch.*, 88.

**Synonyms** : *Laemonema longifilis* Günther, 1880

**FAO Names** : **En** - Brazilian codling; **Fr** - Phycis brésilien; **Sp** - Brótola brasileña



(adapted from Bellisio, López & Tomo, 1979)

Fig. 159

**Diagnostic Features** : Upper limb of first gill arch with two rakers. First dorsal fin with an elongated ray; pelvic fin extending beyond origin of anal fin. Scale rows between first dorsal fin and lateral line about 13. **Colour**: a dusky blotch present on opercle.

**Geographical Distribution** : Coasts of southern Brazil, Uruguay, and Argentina (Fig. 160).

**Habitat and Biology** : Demersal, taken at depths of 70 to 80 m off Argentina.

**Size** : Reaches to at least 40 cm total length.

**Interest to Fisheries** : A prized species taken incidentally by corvina fishermen. The catch reported for 1987 in the FAO Yearbook of Fishery Statistics totalled 1 266 metric tons, of which 1 202 t were taken by Argentina.

**Local Names** : ARGENTINA: Brótola; BRAZIL: Abrotea; URUGUAY: Brotóla.

**Literature** : Svetovidov (1948); Bellisio, López & Tomo (1979).

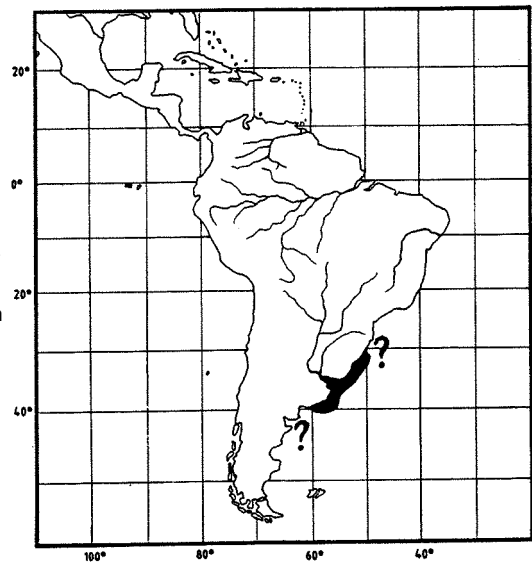


Fig. 160

***Urophycis chuss* (Walbaum, 1792)**

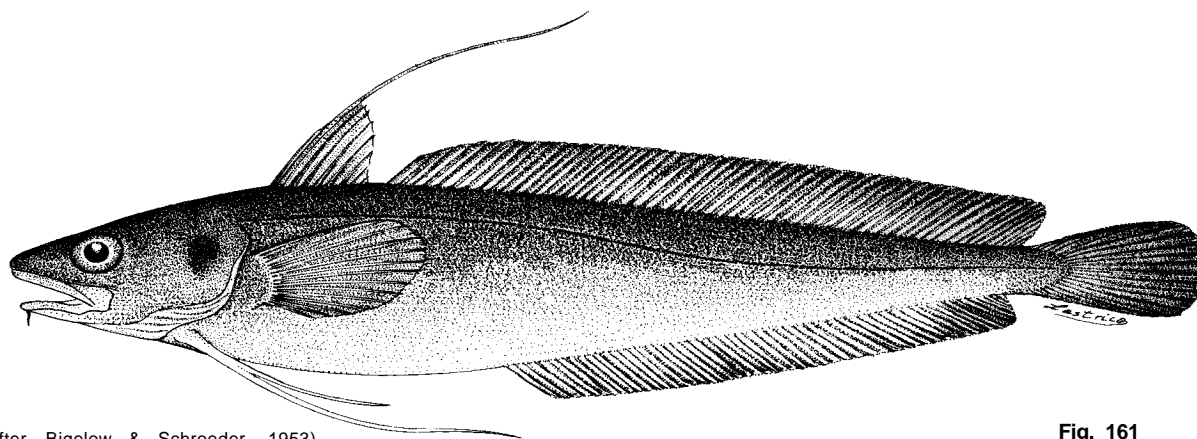
Fig. 161

**GADI Uroph 4**

**Scientific Name with Reference** : *Blennius chuss* Walbaum, in Artedi, 1792, Gen.Pisc.: 186.

**Synonyms** : *Enchelyopus americanus* Bloch & Schneider, 1801; *Gadus longipes* Mitchill, 1814; *Phycis marginatus* Rafinesque, 1818; *Phycis filamentosus* Storer, 1858; *Phycis americanus*, Günther, 1862; *Phycis chuss*, Gill, 1864.

**FAO Names** : En - Red hake; Fr - Merluche écureuil; Sp - Locha roja.



(after Bigelow & Schroeder, 1953)

Fig. 161

**Diagnostic Features** : Upper limb of first gill arch with 3 rakers (rarely 2). First dorsal fin with an elongated ray. Scale rows between first dorsal fin and lateral line about 7. **Colour**: variable, reddish to olive brown dorsally, sometimes very dark or mottled; lower side paler, sometimes with dusky dots; belly and underside of head pale; fins generally dark, except for pelvics, which are pale; a dusky blotch present on opercle.

**Geographical Distribution** : Western North Atlantic, from North Carolina to southern Nova Scotia, straying to the Gulf of St. Lawrence. Rare European records are probably *U. tenuis* (Fig. 162).

**Habitat and Biology** : Normally found on soft muddy and sandy bottoms, but never on rocks gravel or shells. Juveniles live along the coasts at shallow depths (4 to 6 m); adults migrate to deeper waters, beyond 35 m, generally to between 110 and 130 m, and in some instances, to over 550 m. The highest concentrations of mature fish are found deeper than 180 m. There are apparently no long-distance migrations, but only seasonal inshore-offshore movements. Juveniles live in scallops (*Placopecten magellanicus*), then in the vicinity of scallop beds until their second year of life. Maturity is reached at 3 years. At the beginning of summer (commencing in spring and continuing into the autumn) the fish move from deep to shallow waters for spawning, then again offshore until the following spring. The main spawning grounds are located off southern New England and all around inshore areas of the Gulf of Maine in depths of less than 100 m. Growth is very rapid and females are larger than males: at 1 year, 20 cm; 2 years, 32 cm; 3 years, 40 cm. Feeds on shrimps, amphipods and other crustaceans, but also on squid and fish (herring, flatfish, mackerel and others).

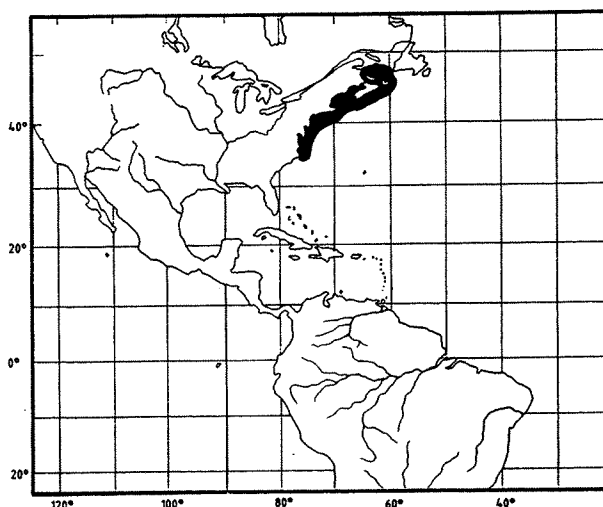


Fig. 162

**Size** : Reaches 50 cm total length (records of larger fish are probably *U. tenuis*).

**Interest to Fisheries** : A variable constituent of the trawl fishery. Catches have decreased from 75 500 metric tons in 1972 to 2 626 t in 1987, mostly by USA (2 009 t) in Gulf of Maine. Marketed fresh or frozen; smaller fish are used for animal feeds.

**Local Names** : CANADA: Red hake, Squirrel hake; UK: Squirrel hake; USA: Red hake, Squirrel hake.

**Literature** : Svetovidov (1948); Bigelow & Schroeder (1953); Leim & Scott (1966); Musick (1973, 1974).

**Remarks** : Musick (1973) has shown that *U. chuss* and *U. tenuis* have been confused for many years. Hence many of the earlier synonymies, literature accounts and catch statistics are incorrect.



***Urophycis cirrata*** (Goode & Bean, 1896)

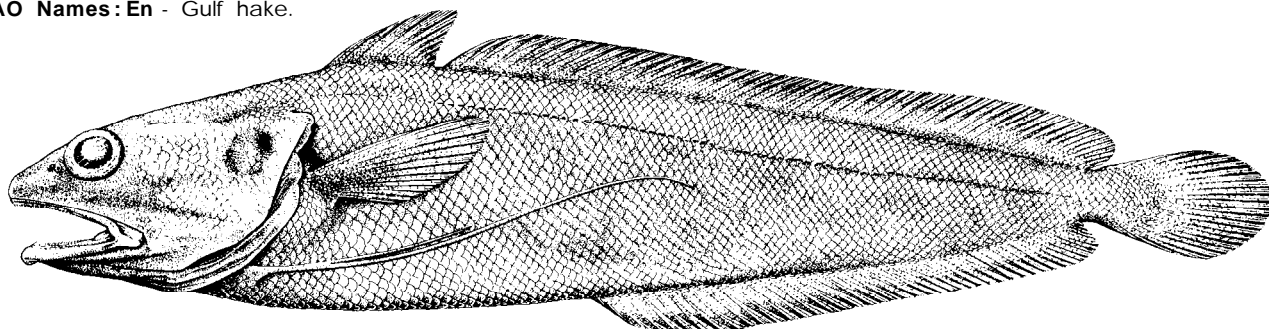
Fig. 163

GADI Uroph 5

**Scientific Name with Reference** : *Phycis cirratus* Goode & Bean, 1896, Oceanic Ichthyol., 1896:358.

**Synonyms** : None

**FAO Names** : En - Gulf hake.



(drawn by K. Moore, Washington)

Fig. 163

**Diagnostic Features** : Gill rakers on upper arm of first arch 3 (rarely 2); barbel very short, lacking in many specimens. First dorsal fin lacking an elongated ray. Scale rows between lateral line and first dorsal fin 6 to 9. **Colour**: a diffuse dusky blotch present on opercle; no series of dark spots on head.

**Geographical Distribution** : Florida, Gulf of Mexico, northern coasts of South America to the Orinoco, perhaps to Rio de Janeiro (Fig. 164).

**Habitat and Biology** : Demersal on mud bottoms from 27 to 684 m, most common between 360 and 470 m.

**Size** : Reaches at least 57 cm total length.

**Interest to Fisheries** : No commercial fishery, perhaps due to a relatively deep centre of abundance.

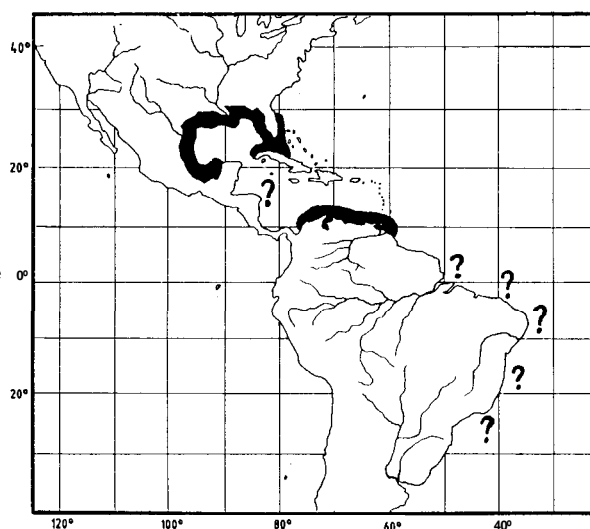


Fig. 164

***Urophycis earllii*** (Bean, 1880)

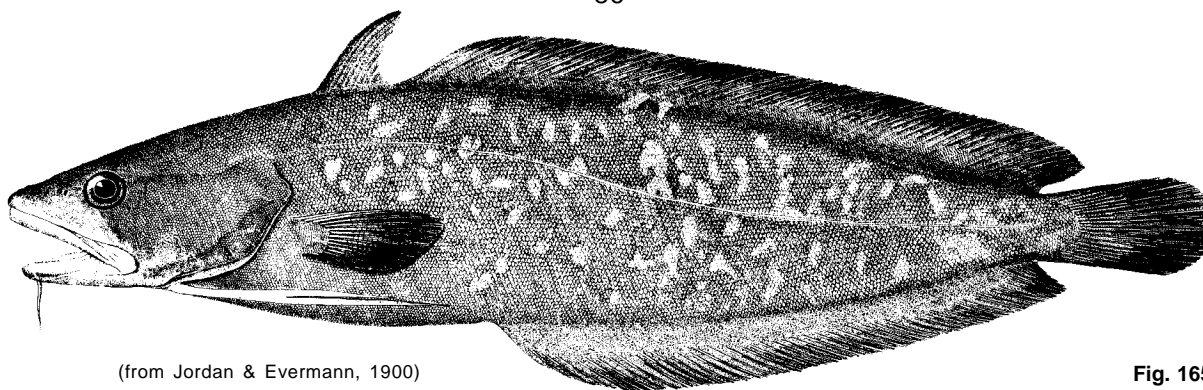
Fig. 165

GADI Uroph 6

**Scientific Name with Reference** : *Phycis earllii* Bean, 1880, Proc. US Natl. Mus., 3:69

**Synonyms** : None.

**FAO Names** : En - Carolina hake.



(from Jordan & Evermann, 1900)

Fig. 165

**Diagnostic Features** : Gill rakers on upper arm of first arch two. First dorsal fin lacking an elongated filament; pelvic fin rarely extending beyond origin of anal fin. Scale rows between lateral line and first dorsal fin 18 to 21. **Colour** : generally dark; sides mottled.

**Geographical Distribution** : Southeast coast of the USA, from Cape Hatteras to the northeast coast of Florida (Fig. 166).

**Habitat and Biology** : Demersal from nearshore to about 81 m, apparently prefers hard bottoms.

**Size** : Reaching about 45 cm total length.

**Interest to Fisheries** : Taken as bycatch in trawls. No commercial fishery.

**Local Names** : USA: Carolina hake.

**Literature** : Hildebrand & Cable (1938).

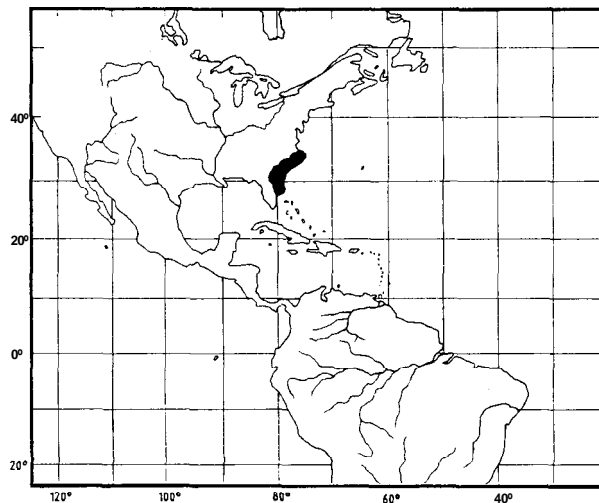


Fig. 166

***Urophycis floridana*** (Bean & Dressel, 1884)

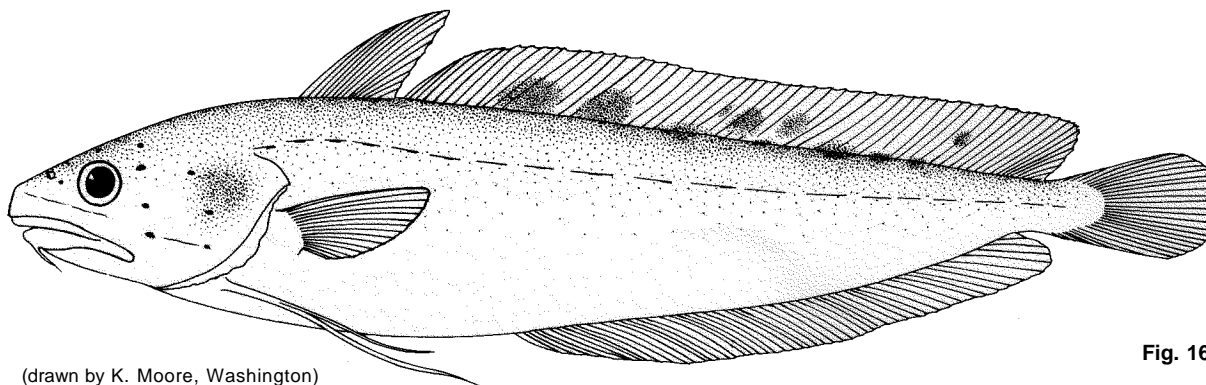
Fig. 167

GADI Uroph 1

**Scientific Name with Reference** : *Phycis floridanus* Bean & Dressel, 1884, Proc.Biol.Soc.Wash.: 100

**Synonyms** : None

**FAO Names** : **En** - Southern codling; **Fr** - Phycis de Floride; **Sp** - Locha de Florida.



(drawn by K. Moore, Washington)

Fig. 167

**Diagnostic Features** : Gill rakers on upper arm of first arch two. First dorsal fin lacking an elongated ray. Scale rows between first dorsal fin and lateral line 9 to 12. **Colour**: a dusky blotch present on opercle; a series of dark spots on head.

**Geographical Distribution** : From Beaufort, North Carolina south along the coast and into the Gulf of Mexico, where it occurs south to about 23° lat. off Mexico (Fig. 168).

**Habitat and Biology** : Onshore to 400 m depth but most common in less than 300 m. Juveniles of this demersal species spend part of their life in estuaries. Shallow-water specimens feed on crustaceans, worms and fish.

**Size** : Maximum 35 cm; common to 25 cm.

**Interest to Fisheries** : Fished in coastal waters with bottom trawls; marketed mostly fresh.

**Local Names** : USA: Southern hake

**Literature** : Hildebrand & Cable (1938); Cohen (1978).

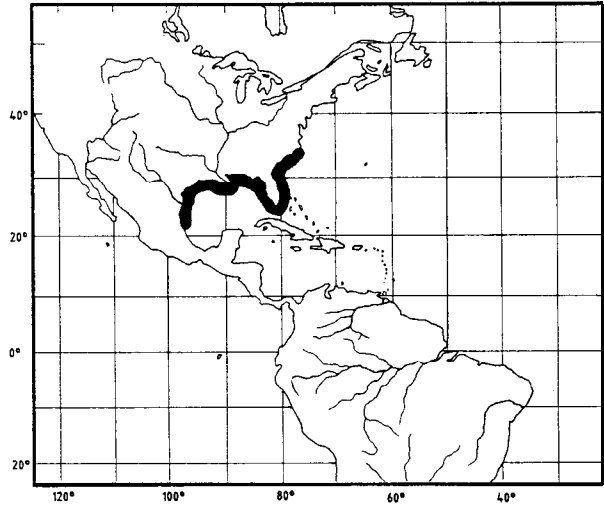


Fig. 168

***Urophycis regia*** (Walbaum, 1792)

Fig. 169

GADI Uroph 2

**Scientific Name with Reference** : *Blennius regius* Walbaum, 1792, in Artedi, *Gen.Pisc.*, 186.

**Synonyms** : *Enchelyopus regalis* not Bloch & Schneider, 1801; *Gadus punctatus* Mitchill, 1815; *Phycis punctatus*, Dekay, 1842; *Phycis regalis*, Güther, 1862.

**FAO Names** : En - Spotted codling; Fr - Phycis tacheté; Sp - Locha regia

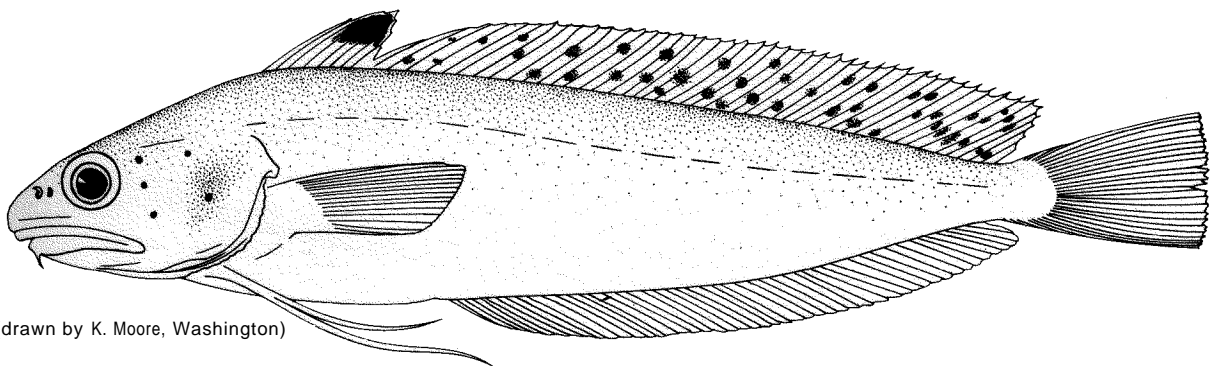


Fig. 169

**Diagnostic Features** : Gill rakers on upper arm of first arch 3 (rarely 2). First dorsal fin lacking an elongated ray. Scale rows between first dorsal fin and lateral line 9 to 12. **Colour**: a dusky blotch on opercle; a series of dark spots on head; first dorsal fin with a dark blotch and distinct white margins.

**Geographical Distribution** : Common from southern New England to the northeast coast of Florida; also found in the northeastern Gulf of Mexico (Fig. 170).

**Habitat and Biology** : Onshore to 420 m depth, most common between 110 and 185 m. Juveniles of this demersal species spend part of their life in estuaries. Feeds mainly on crustaceans, but fish and squid have also been found in stomachs.

**Size** : Maximum 41 cm; common to 17 cm.

**Interest to Fisheries** : Fished in coastal waters with bottom trawls. Marketed fresh in small quantities.

**Local Names** : USA: Spotted hake.

**Literature** : Hildebrand & Schroeder (1928); Hildebrand & Cable (1938); Bigelow & Schroeder (1953); Cohen (1978).

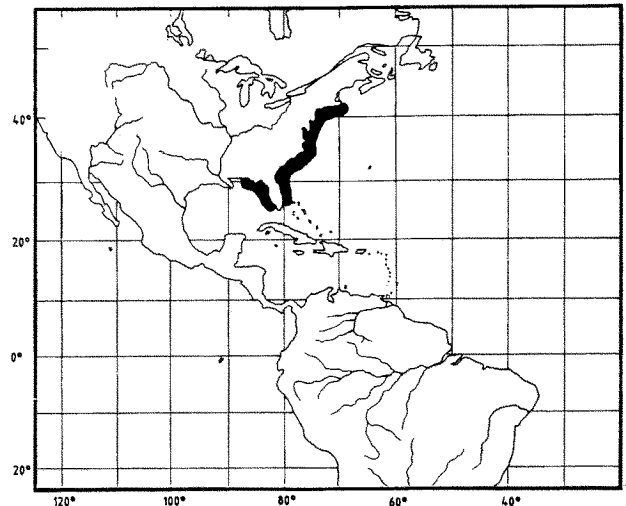


Fig. 170

*Urophycis tenuis* (Mitchill, 1814)

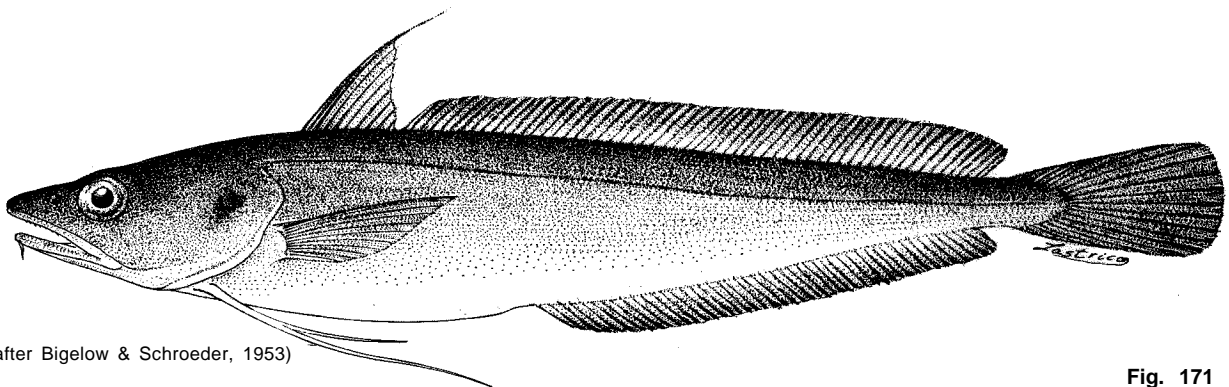
Fig. 171

GADI Uroph 7

**Scientific Name with Reference** : *Gadus tenuis* Mitchill, 1814, *Rept. in Part Fishes N.Y.*:4.

**Synonyms** : *Phycis furcatus* Fleming, 1828; *Phycis americanus* Storer, 1858; *Phycis dekayi* Kaup, 1858; *Phycis tenuis*, Gill, 1864; *Urophycis (Emphycis) tenuis*, Jordan & Evermann, 1898; *Phycis borealis* Saemundsson, 1913.

**FAO Names** : **En** - White hake; **Fr** - Merluche blanche; **Sp** - Locha blanca.



(after Bigelow & Schroeder, 1953)

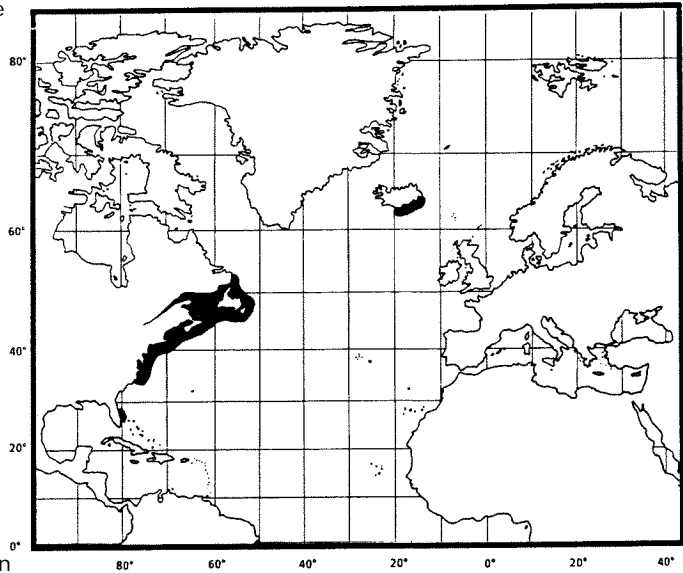
Fig. 171

**Diagnostic Features** : Upper limb of first gill arch with two rakers (rarely 3). First dorsal fin with an elongated ray. Scale rows between first dorsal fin and lateral line about 12. **Colour** : variable, dorsally various dark shades, paler laterally, sometimes bronze, belly pale dirty to yellow white; pelvic fins pale; a dusky blotch present on opercle.

**Geographical Distribution :** Labrador and the Grand Banks of Newfoundland to the coast of North Carolina. Straying to Iceland in the east and Florida in the south (Fig. 172).

**Habitat and Biology :** Demersal on soft, muddy bottoms of the continental shelf and upper slope. Although it reaches down to 980 m depth, it is mostly found at 180 m. Mature fish migrate inshore in the northern Gulf of Maine in summer, disperse in autumn, and move into deepest areas in winter. Spawns from July to September in shallow waters. Males are mature at 40 cm length, females at 48 cm. Fecundity ranges from 1 to 15 million eggs per female (mostly 2 to 6 million). Growth is rapid: at 1 year, 20 cm, 3 years, 42 cm; 4 years, 46 cm; 5 years, 49 cm; 6 years, 55 cm; 7 years, 60 cm. Maximum age is 10 years. Feeds on small crustaceans, squids and small fish.

**Size :** Reaches about 120 cm total length; common to 70 cm.



**Fig. 172**

**Interest to Fisheries :** Reported landings in 1987 were 30 429 metric tons, mostly taken by Canada (19 570 t), USA (5 830 t), and Spain (4 788 t). Caught with gill nets, otter trawls, Danish and Scottish seines, longlines and other gear. The major fishing grounds are located at 100 to 247 m depth in Newfoundland and the Gulf of Maine. Larger fish are marketed fresh or frozen as fillets; smaller ones are used for animal feed.

**Local Names :** CANADA, USA: Mud hake, White hake.

**Literature :** Bigelow & Schroeder (1953); Musick (1973, 1974); Beacham (1983).

**Remarks :** Landings of this species have been confused with those of *U. chuss*.