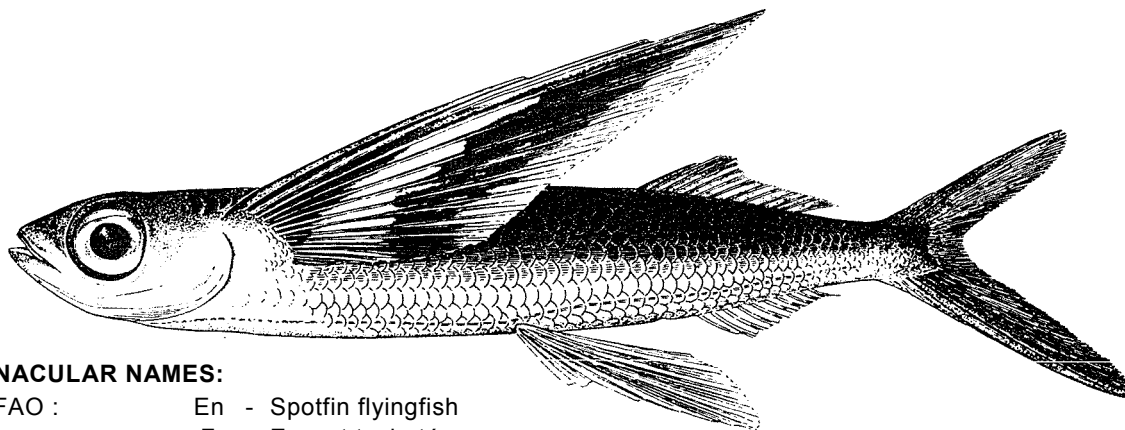


## FAO SPECIES IDENTIFICATION SHEETS

FAMILY: EXOCOETIDAE

FISHING AREA 51  
(W. Indian Ocean)Cheilopogon furcatus (Mitchill, 1815)OTHER SCIENTIFIC NAMES STILL IN USE : Cheilopogon unicolor (Valenciennes, 1846) Placed in genus Cypselurus by some authors

## VERNACULAR NAMES:

FAO : En - Spotfin flyingfish  
Fr - Exocet tacheté  
Sp - Volador manchado



NATIONAL:

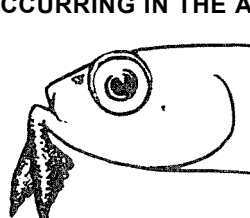
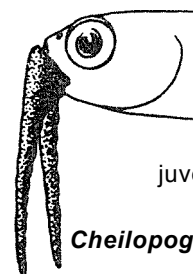
## DISTINCTIVE CHARACTERS:

Body elongate, thick, somewhat flattened ventrally. Head considerably shorter than distance between dorsal fin origin and origin of upper caudal fin lobe; lower jaw usually somewhat longer than the upper; upper jaw not protrusible; lower jaw not included beneath the upper; palatine teeth (on roof of mouth) absent. Dorsal fin with 12 to 14 rays, anal fin with 9 to 11 rays; anal fin origin 5 to 7 rays behind origin of dorsal fin; dorsal fin low, rays at anterior end the longest; pectoral fins strikingly long, 60 to 70% of standard length, only the first ray unbranched; pelvic fins abdominal, large, reaching well beyond anal fin origin, their insertion closer to anal fin origin than to pectoral fin insertion and much nearer to hind margin of head than to origin of lower caudal fin lobe. Pectoral branch of lateral line present. Scale rows across back in front of dorsal fin predorsal scales 26 to 33. Juveniles with a pair of short chin barbels (less than 35% of standard length), without lateral flaps.

Colour: dark above, pale below, the dark colour usually iridescent blue or greenish-blue in life; dorsal fin not pigmented, without a black spot; pectoral fins greyish with a pale margin, the central portion crossed by a pale transverse stripe becoming narrower toward fin margin; pelvic fins without spots.

## DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

Cheilopogon nigricans: dorsal fin with a prominent black spot; pelvic fins usually with a black spot; palatine teeth present; juveniles with a pair of chin barbels, their length to about 35% of standard length, each bearing a small lateral flap.

Cheilopogon nigricans

juvenile

Cheilopogon furcatus

Ch. intermedius. Palatine teeth present; juveniles with shorter chin barbels, their length less than 10% of standard length.

Ch. hexazona: palatine teeth present; predorsal scales 22 to 26 (26 to 32 in Ch. furcatus), juveniles without chin barbels.

Ch. cyanopterus: dorsal fin with a prominent black spot; pectoral fins not crossed by a pale curved stripe; predorsal scales 35 to 41; palatine teeth present; juveniles with longer chin barbels, their length about 100% of standard length.

Ch. pinnatibarbatus: predorsal scales 34 to 47; head less than 22% of standard length (longer in Ch. furcatus); juveniles with an unpaired chin barbel.

Ch. atrisignis and Ch. suttoni: pectoral fins with numerous scattered dark spots; predorsal scales 33 to 41; palatine teeth present; juveniles with a pair of flattened chin barbels.

Cypselurus species: lower jaw somewhat shorter than the upper and included beneath the upper; pectoral fins not crossed by a pale curved stripe. Furthermore, pectoral fins with numerous dark spots in C. poecilopterus.

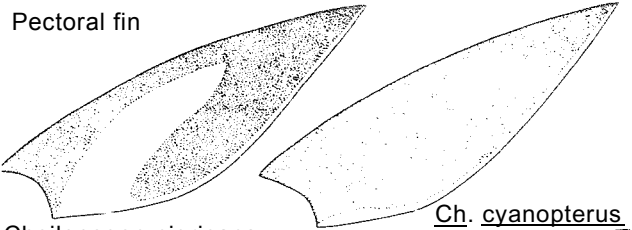
Prognichthys species: pectoral fins with 3 or 4 unbranched rays; lower jaw included beneath the upper.

Hirundichthys species: anal fin origin not more than 3 rays behind origin of dorsal fin.

Exocoetus species: pelvic fin insertion closer to pectoral-fin insertion than to anal fin origin; pelvic fins short, not reaching anal fin origin.

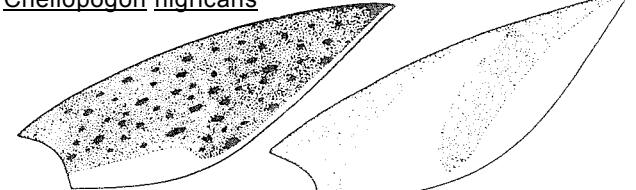
Parexocoetus species: pectoral fins shorter, 55 to 60% of standard length; dorsal fin high, with middle rays the longest; pectoral branch of lateral line present; upper jaw protrusible.

Pectoral fin



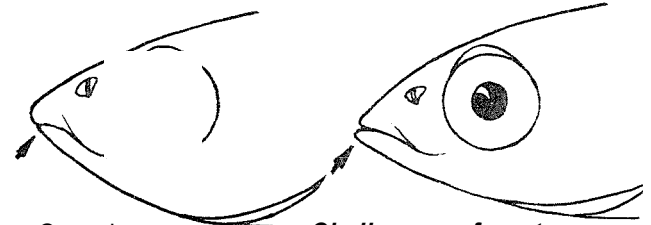
Cheilopogon nigricans

Ch. cyanopterus



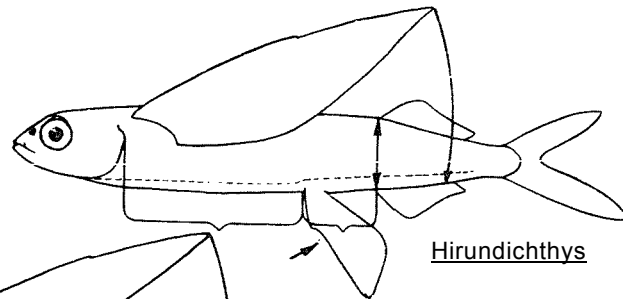
Ch. sutloni

Cheilopogon furcatus

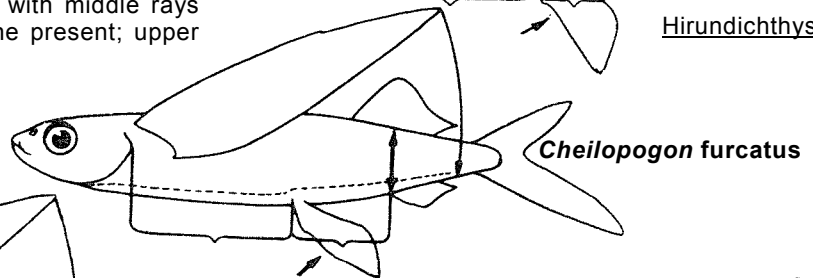


Cypselurus

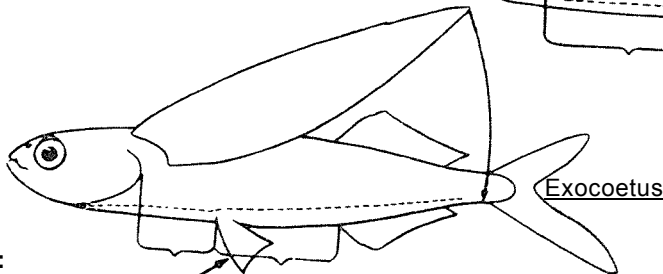
Cheilopogon furcatus



Hirundichthys



Cheilopogon furcatus



Exocoetus

**SIZE:**

Maximum: about 30 cm standard length.

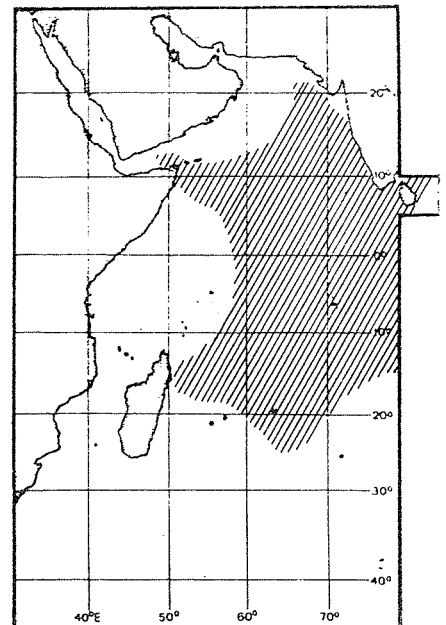
**GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:**

Widely distributed in the tropical Indian Ocean but absent from the Red Sea, northern Arabian Sea and the "Gulf". Also occurs in the Atlantic and Pacific Oceans.

Pelagic in surface waters of the open ocean, capable of leaping out of the water and gliding for long distances above the surface.

**PRESENT FISHING GROUNDS:**

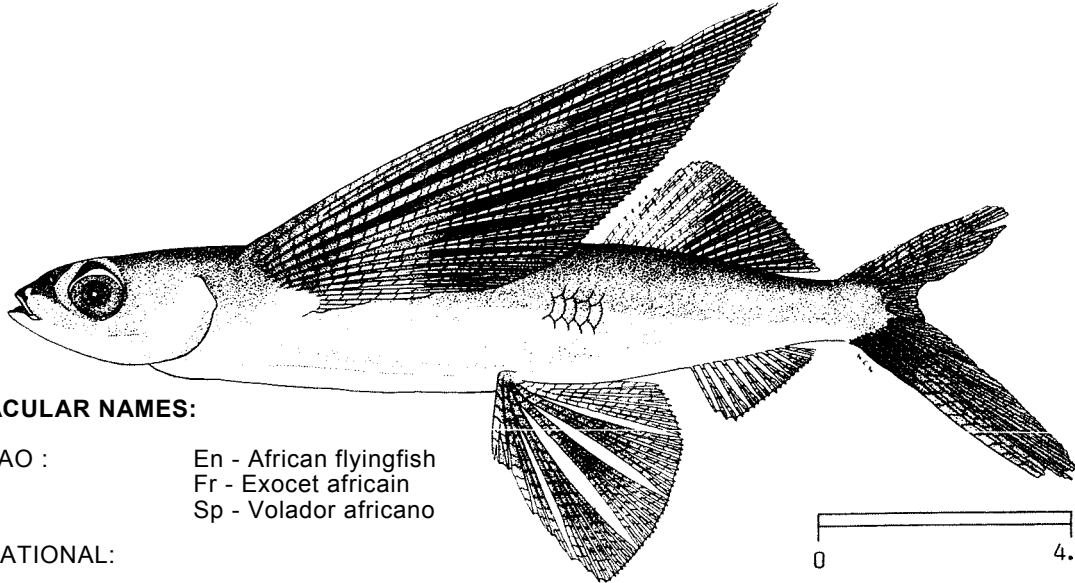
Not known to be a commercial species, but included in this publication to facilitate future field identification and data collection.



## FAO SPECIES IDENTIFICATION SHEETS

FAMILY: EXOCOETIDAE

FISHING AREA 51  
(W. Indian Ocean)
*Cheilopogon nigricans* (Bennett, 1840)

 OTHER SCIENTIFIC NAMES STILL IN USE: None. Placed in genus *Cypselurus* by some authors


## VERNACULAR NAMES:

 FAO :           En - African flyingfish  
                   Fr - Exocet africain  
                   Sp - Volador africano

NATIONAL:

## DISTINCTIVE CHARACTERS:

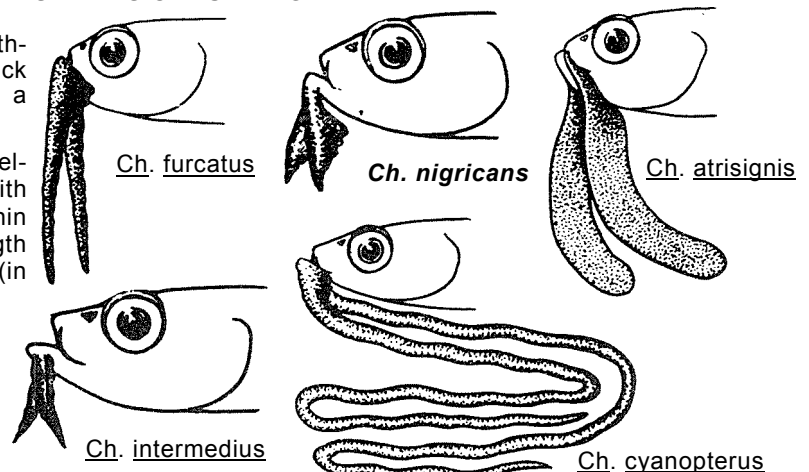
Body elongate, thick, somewhat flattened ventrally. Head shorter than distance between dorsal fin origin and origin of upper caudal fin lobe; jaws of equal length; upper jaw not protrusible; lower jaw not included beneath the upper; palatine teeth on roof of mouth present. Dorsal fin with 13 to 15 rays, anal fin with 8 to 11 rays; anal fin origin 5 to 7 rays behind origin of dorsal fin; dorsal fin low, rays at anterior end the longest; pectoral fins strikingly long, 67 to 73% of standard length, only the first ray unbranched; pelvic fins abdominal, large, reaching well beyond anal fin origin, their insertion closer to anal fin origin than to pectoral fin insertion and nearer to hind margin of head than to origin of lower caudal fin lobe. Pectoral branch of lateral line absent. Scale rows across back in front of dorsal fin (predorsal scales) 24 to 28. Juveniles with a pair of chin barbels, their length to about 35% of standard length, each bearing a small lateral flap.

Colour: dark above, pale below, the dark colour usually iridescent blue in life; dorsal fin with a prominent black spot; pectoral fins black with a pale margin, the central portion crossed by a yellow or greyish-yellow transverse stripe becoming narrower toward fin margin; pelvic fins usually with a prominent black spot.

## DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

*Cheilopogon furcatus*: dorsal fin without a black spot; pelvic fins without a black spot; palatine teeth absent; juveniles with a pair of chin barbels lacking a lateral flap.

*Ch. intermedius* and *Ch. hexazona*: pelvic fins without black spot; pectoral fins with a pale transverse stripe; juveniles with chin barbels not more than 10% of standard length (in *Ch. intermedius*) or without chin barbels (in *Ch. hexazona*).



Ch. cyanopterus: pectoral fins not crossed by a pale stripe; predorsal scales 34 to 41 (24 to 28 in Ch. nigricans); juveniles with longer chin barbels, their length about 100% of standard length.

Ch. pinnatibarbatus: predorsal scales 39 to 47; head less than 22% of standard length (longer in Ch. nigricans); juveniles with an unpaired fringed chin barbel.

Ch. atrisignis and Ch. suttoni: pectoral fins with numerous scattered dark spots; predorsal scales 33 to 41; juveniles with a pair of flattened chin barbels.

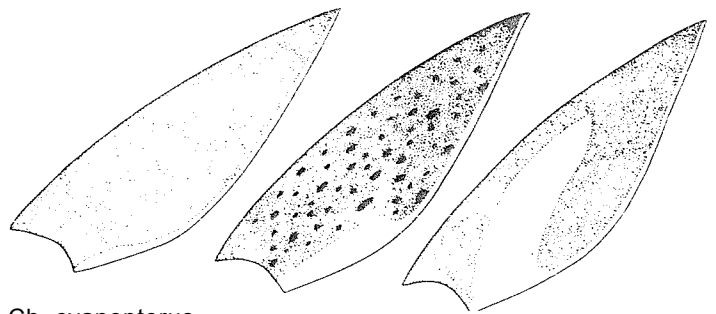
Cypselurus species: lower jaw somewhat shorter than the upper and included beneath the upper; pectoral fins not crossed by a pale stripe. Furthermore, pectoral fins with numerous dark spots in C. poecilopterus.

Prognichthys species: pectoral fins with 3 to 4 unbranched rays; lower jaw included beneath the upper.

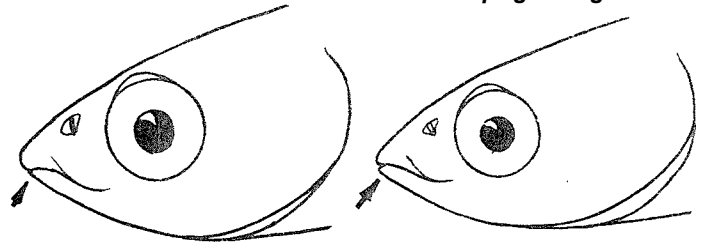
Hirundichthys species: anal fin origin not more than 3 rays behind origin of dorsal fin.

Exocoetus species: pelvic fin insertion closer to pectoral fin insertion than to anal fin origin; pelvic fins short, not reaching anal fin origin.

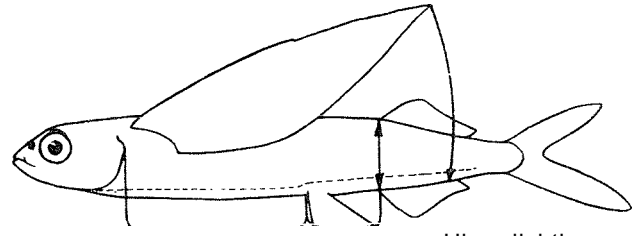
Parexocoetus species: pectoral fins shorter, 55 to 60% of standard length; dorsal fin high, with middle rays the longest; pectoral branch of lateral line present; upper jaw protursible.



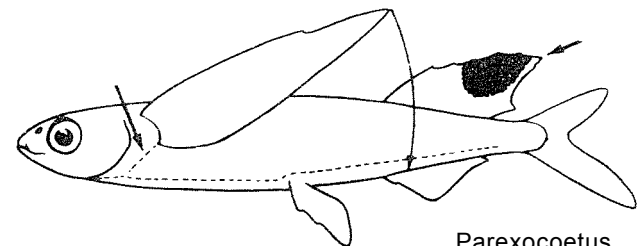
Ch. cyanopterus      Ch. suttoni      *Cheilopogon nigricans*



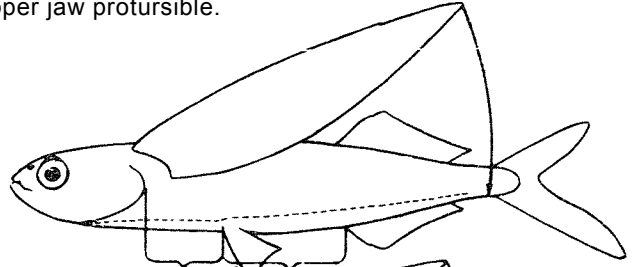
Cypselurus      *Cheilopogon nigricans*



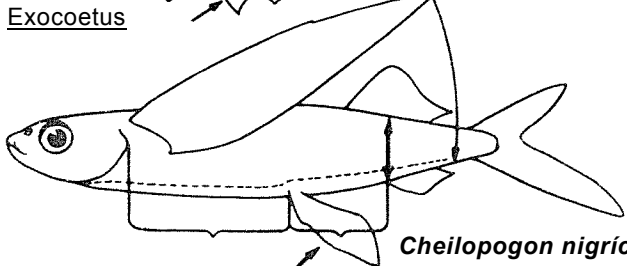
Hirundichthys



Parexocoetus



Exocoetus



*Cheilopogon nigricans*

Maximum: about 24 cm standard length.

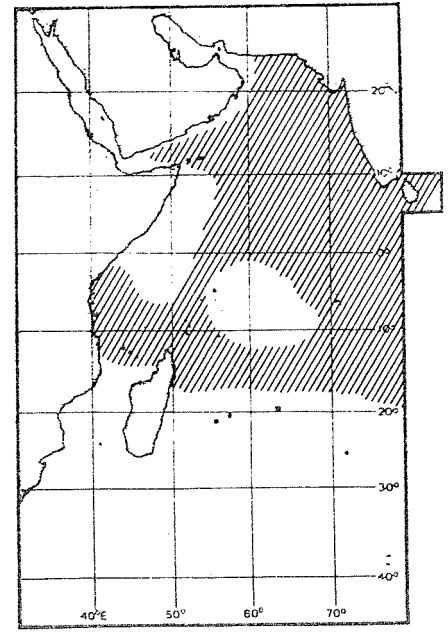
**GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:**

Widely distributed in the tropical Indian Ocean but absent from the Red Sea and the "Gulf". Also occurs in the Atlantic and Pacific Oceans.

Pelagic in surface waters of the open ocean, capable of leaping out of the water and gliding for long distances above the surface.

**PRESENT FISHING GROUNDS:**

Not known to be a commercial species, but included in this publication to facilitate future field identification and data collection.



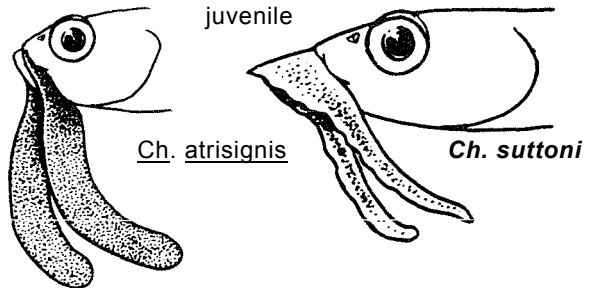
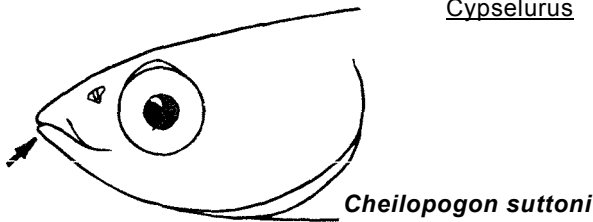
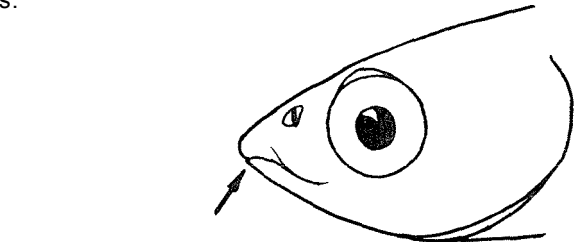
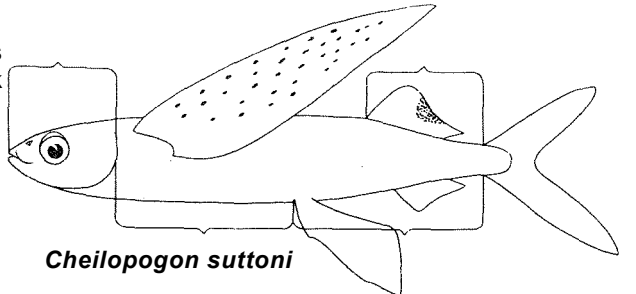
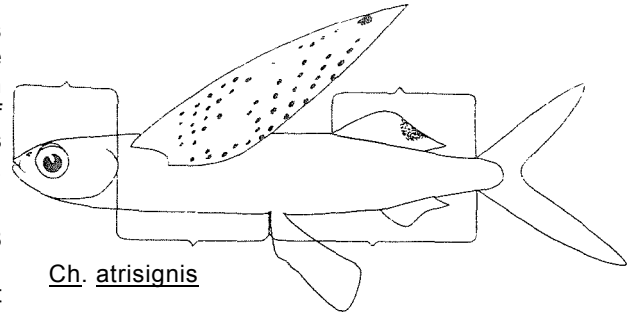


**DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:**

Cheilopogon atrisignis: dorsal fin with 14 to 16 rays (12 to 14 in Ch. suttoni); head shorter than distance between dorsal fin origin and origin of upper caudal fin lobe; pelvic fin insertion much nearer to hind margin of head than to origin of lower caudal fin lobe; juveniles with two flattened chin barbels connected at their bases. their length more than 30% of standard length.

Cypselurus poecilopterus: predorsal scales 24 to 28 (34 to 40 in Ch. suttoni); dorsal fin without black spot; lower jaw included beneath the upper; juveniles without chin barbel.

Other flyingfishes occurring in the area: none has the pectoral fins covered with numerous scattered dark spots.



**SIZE:**

Maximum: about 28 cm standard length.

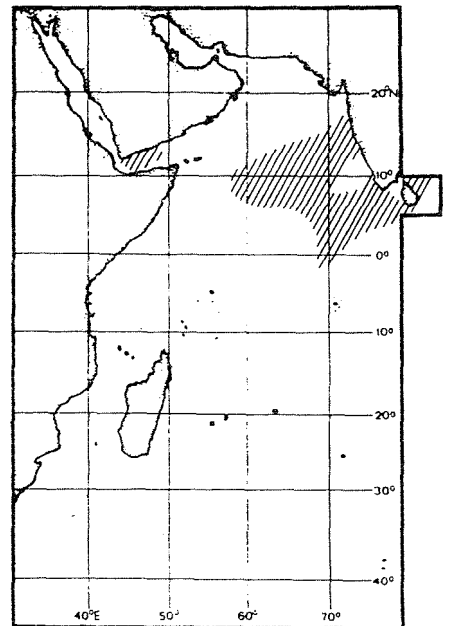
**GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:**

Widely distributed in the tropical Indian Ocean but absent from the Red Sea, northern Arabian Sea and the "Gulf". Also occurs in the tropical Pacific Ocean.

Pelagic in surface waters of both neritic and oceanic areas; capable of leaping out of the water and gliding for long distances above the surface.

**PRESENT FISHING GROUNDS:**

Not known to be a commercial species, but included in this publication to facilitate future field identification and data collection.

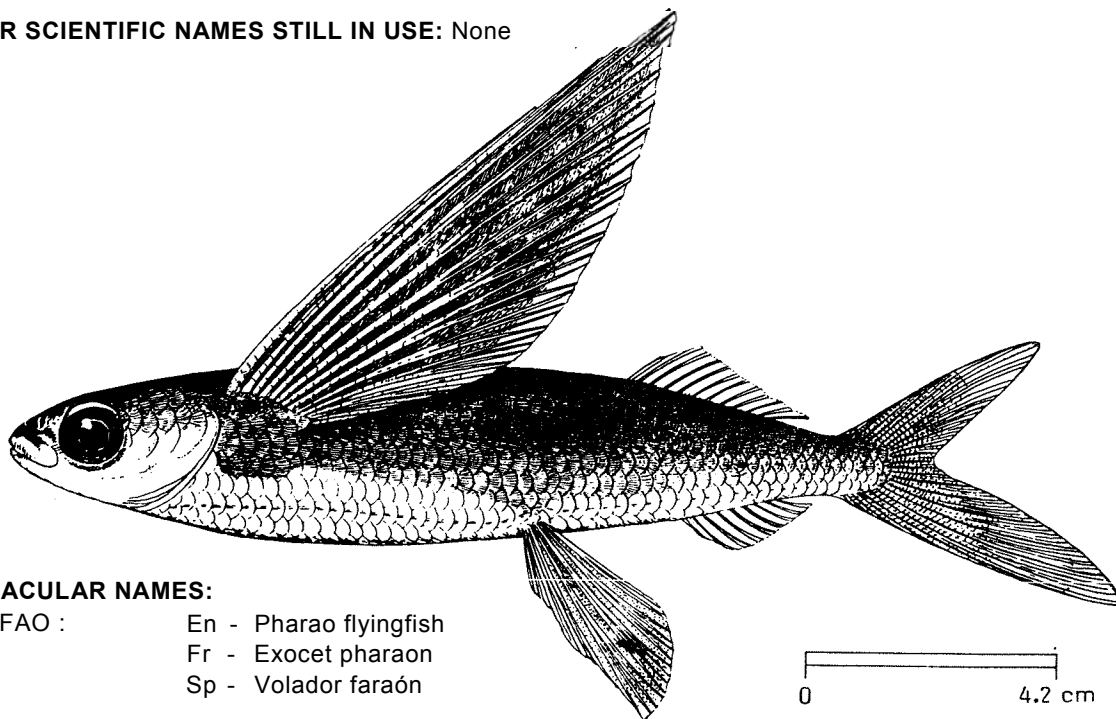


## FAO SPECIES IDENTIFICATION SHEETS

FAMILY : EXOCOETIDAE

FISHING AREA 51  
(W. Indian Ocean)*Cypselurus naresii* (Günther, 1889)

OTHER SCIENTIFIC NAMES STILL IN USE: None



## VERNACULAR NAMES:

FAO : En - Pharaon flyingfish  
Fr - Exocet pharaon  
Sp - Volador faraón

NATIONAL:

## DISTINCTIVE CHARACTERS:

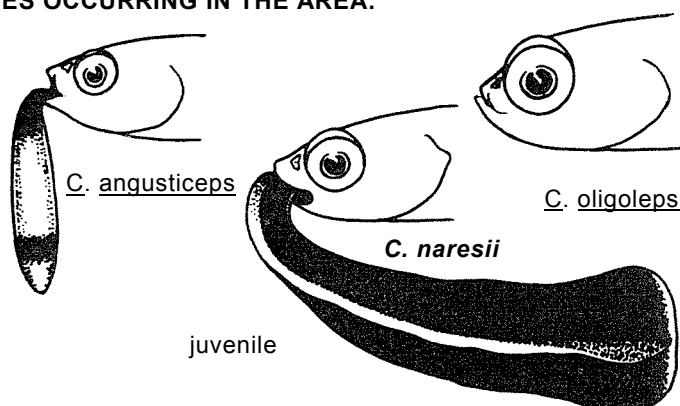
Body elongate, thick, somewhat flattened ventrally. Head approximately equal distance to between dorsal fin origin and origin of upper caudal fin lobe; lower jaw a little shorter than the upper; upper jaw not protrusible; lower jaw included beneath the upper; palatine teeth (on root of mouth) present. Dorsal fin with 10 to 12 rays, anal fin with 7 to 9 rays; anal fin origin 4 to 7 rays behind origin of dorsal fin; dorsal fin low, rays at anterior end the longest; pectoral fins strikingly long, 65 to 70% of standard length, only the first ray unbranched; pelvic fins abdominal, large, reaching well beyond anal fin origin, their insertion closer to anal fin origin than to pectoral fin insertion and approximately at midpoint of distance between hind margin of head and on in of lower caudal fin lobe. Pectoral branch of lateral line absent. Scale rows across back in front of dorsal fin predorsal scales 27 to 32. Juveniles with a single barbel, its basal portion 3-edged in cross-section.

Colour: dark above, pale below, the dark colour usually iridescent blue or greenish-blue in life; dorsal fin greyish; pectoral fins brownish, unpigmented below the 9th ray; pelvic fins usually without spots (dark in juveniles).

## DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

*Cypselurus angusticeps*: dorsal fin with 12 to 14 rays (10 to 12 in *C. naresii*); head a little shorter than distance between dorsal fin origin and origin of upper caudal fin lobe; predorsal scales 24 to 28 (27 to 32 in *C. naresii*); juveniles with a single flattened, broad chin barbel.

*C. oligolepis*: predorsal scales 23 to 27; head much shorter than distance between dorsal fin origin and origin of upper caudal fin lobe; pelvic fin insertion much nearer to hind margin of head than to origin of lower caudal fin lobe; juveniles without barbel.



C. poecilopterus: pectoral fins with numerous dark spots; predorsal scales 24 to 28; pelvic fin insertion much nearer to hind margin of head than to origin of lower caudal fin lobe; juveniles without barbel.

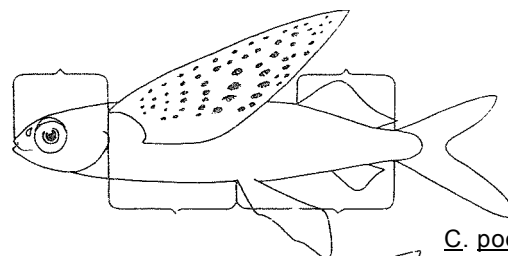
Prognichthys species: pectoral fins with 3 or 4 unbranched rays; pelvic fin insertion nearer to hind margin of head than to origin of lower caudal fin lobe; juveniles without barbel.

Cheilopogon species: both jaws of equal length, or lower jaw a little longer than the upper; lower jaw not included beneath the upper; juveniles with a pair of chin barbels in all except Ch. Pinnatibarbatus which has an unpair fringed barbel, and Ch. Hexazona which lacks barbels.

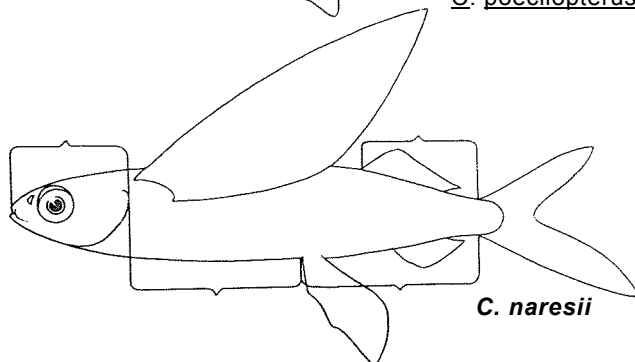
Hirundichthys species: anal fin origin not more than 3 rays behind origin of dorsal fin; lower jaw not included beneath the upper; usually 10 to 13 rays in anal fin (7 to 9 in C. naresii).

Exocoetus species: pelvic fin insertion closer to pectoral fin insertion than to anal fin origin; pelvic fins short, not reaching anal fin origin.

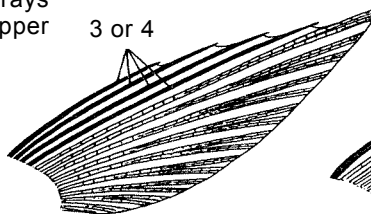
Parexocoetus species: pectoral fins shorter, 55 to 60% of standard length; dorsal fin high, with middle rays the longest; pectoral branch of lateral line present; upper jaw protrusible.



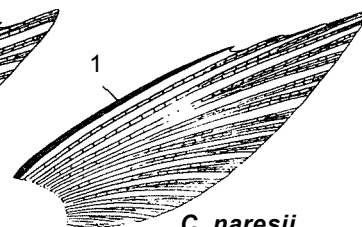
C. poecilopterus



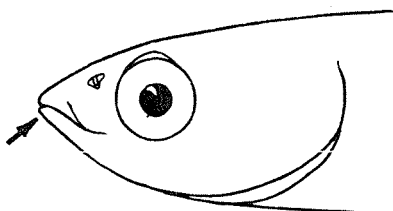
C. naresii



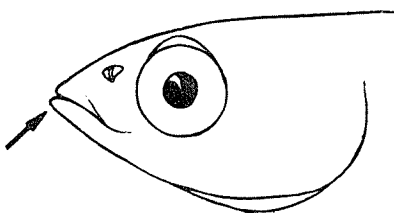
Prognichthys



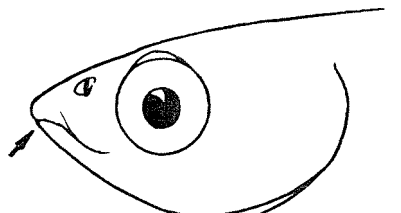
C. naresii



Cheilopogon



Cheilopogon



Cypselurus

**SIZE:**

Maximum: about 21 cm standard length.

**GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:**

Widely distributed in the tropical Indian Ocean but apparently absent from the Red Sea, and the "Gulf". Also occurs in the Pacific Ocean.

Pelagic in surface waters of both neritic and oceanic areas; capable of leaping out of the water and gliding for long distances above the surface.

**PRESENT FISHING GROUNDS:**

Not known to be a commercial species, but included in this publication to facilitate future field identification and data collection.

