

## FAO SPECIES IDENTIFICATION SHEETS

FISHING AREA 51  
(W. Indian Ocean)

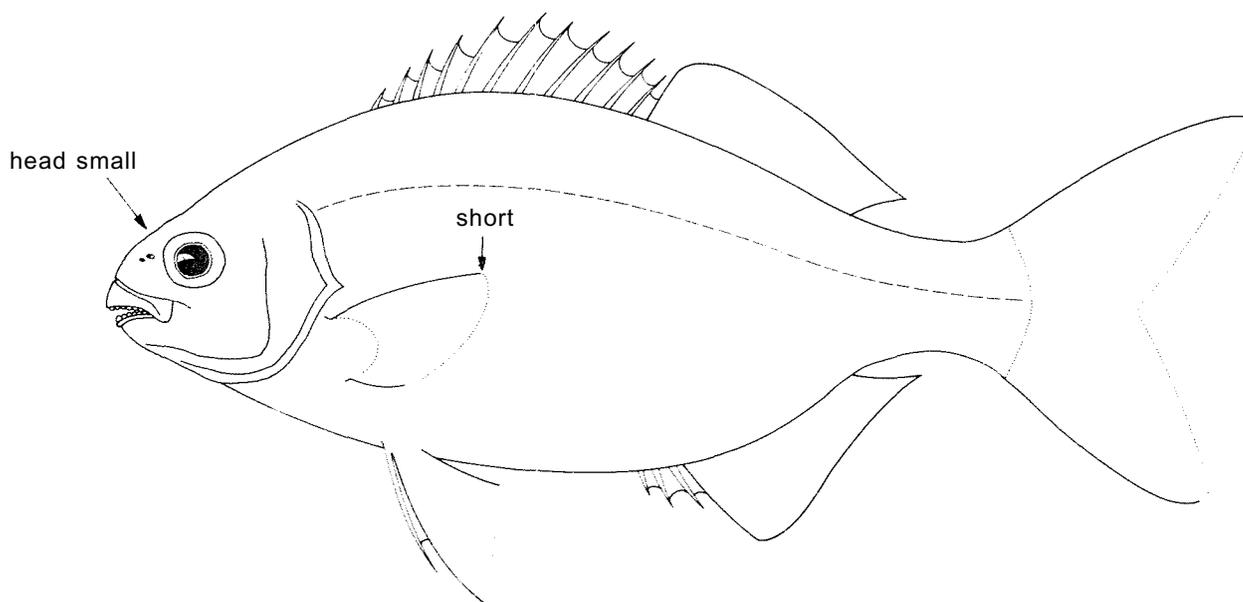
## KYPHOSIDAE

Sea chubs, rudderfishes, stonebreams

Body oblong-ovate, compressed. Head small; snout blunt with a low convexity above nostrils; mouth small, its cleft somewhat horizontal with a more or less exposed maxilla; upper jaw slightly protrusible; teeth either in several bands, with at least the outer series enlarged and lanceolate (Neoscorpis) or each jaw anteriorly with a single row of fixed, incisorlike teeth, somewhat lanceolate, with conspicuous compressed roots set horizontally, resembling a radially striated plate inside mouth, each single tooth shaped like a hockey-stick (Kyphosus); minute teeth present on roof of mouth and sometimes on tongue. Dorsal fin continuous, depressible in a sheath, with 6 to 12 spines and 11 to 22 soft rays; anal fin with 3 spines and 11 to 26 soft rays; pectoral fins short; pelvic fins inserted behind level of pectoral fin bases; caudal fin more or less forked. Scales ctenoid, small to very small, extending onto most of soft portions of dorsal and anal fins and onto caudal fin base.

Colour: dull olive or silvery black, lighter below; juveniles occasionally with dark vertical bands, adults often with longitudinal stripes along sides, from head backward, between rows of scales.

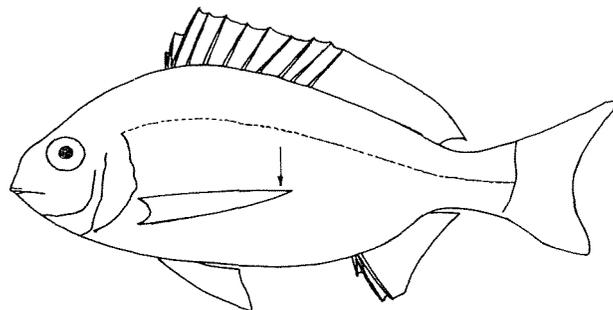
Medium-sized fishes (to at least 70 cm in total length) grazing on marine plants and associated faunas, in shallow waters about reefs and in rocky areas; occasionally occurring in shoals, often in caves. Although they are not of significant commercial importance, they are taken by artisanal fisheries on hook and line (using even seaweeds as bait), by gillnets and spears. The flesh is edible but not highly esteemed in some localities.



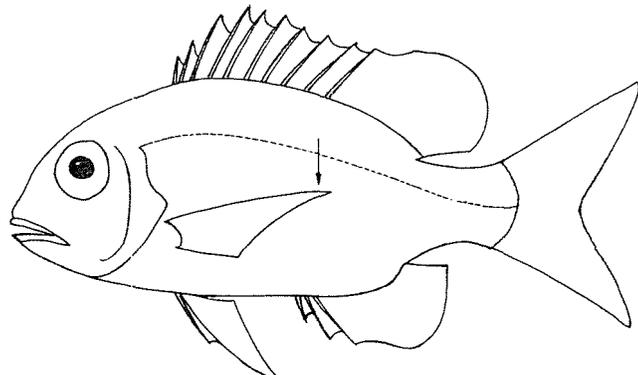
**SIMILAR FAMILIES OCCURRING IN THE AREA:**

Sparidae: molar teeth often present, teeth never with longitudinal posterior roots inside mouth; pectoral fins long (short in Kyphosidae).

Lethrinidae (particularly, Monotaxis, Gnathodentex, etc.): head much larger; lateral teeth conical or molar-like; teeth never with longitudinal posterior roots inside mouth; pectoral fins long.



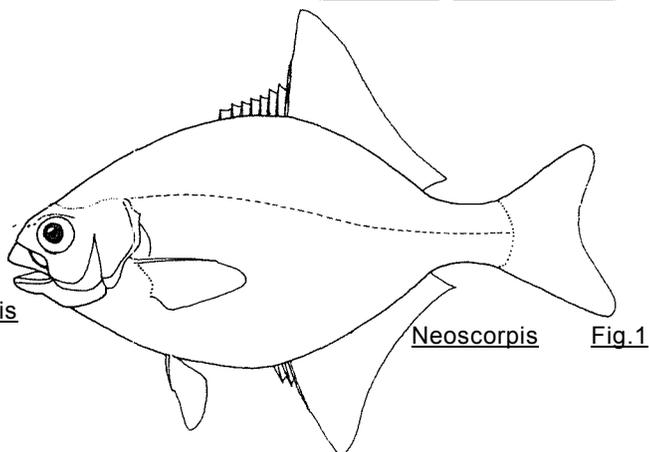
Sparidae (Crenidens)



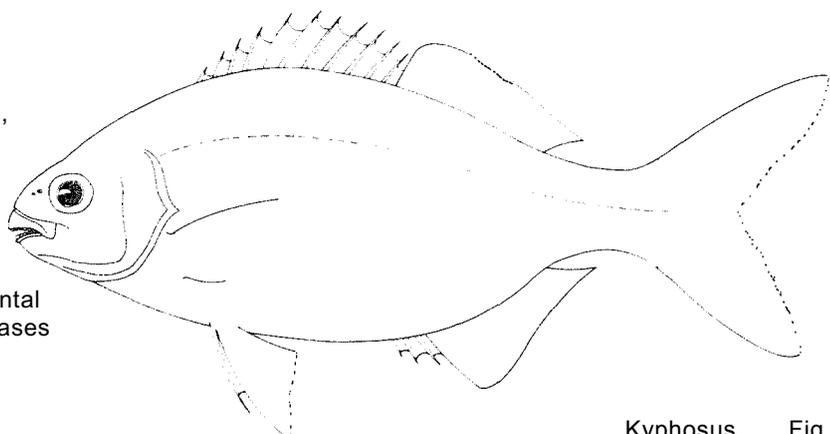
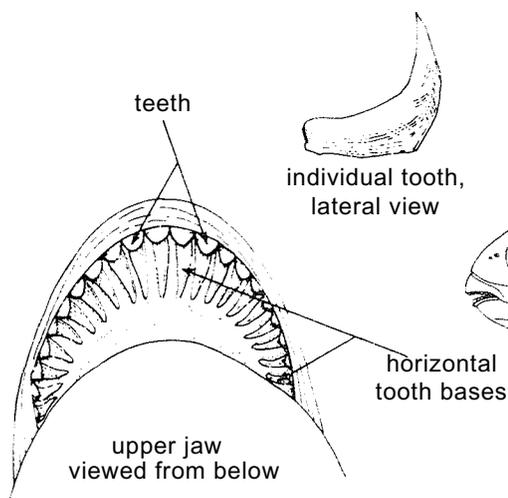
Lethrinidae (Monotaxis, Gnathodentex)

**KEY TO GENERA OCCURRING IN THE AREA:**

- 1a. Six or 7 (rarely 8) dorsal spines graduated in length from first to last; spinous part of dorsal fin clearly shorter than soft part; more than 20 soft rays in dorsal and anal fins, Outer series of tenth in each jaw somewhat enlarged and lanceolate, but not hockey-stick shaped, without prominent horizontal basal process inside mouth. South Africa only (Fig.1) ..... Neoscorpis
- 1b. Eleven or 12 low dorsal spines, not graduated in size backward; spinous part of dorsal fin not conspicuously shorter than soft part; normally not more than 15 soft rays in dorsal and anal fins; each jaw with prominent incisor-like, hockey-stick shaped teeth with conspicuous horizontal roots inside mouth. Indo-Pacific (Fig.2).....Kyphosus



Neoscorpis Fig.1



Kyphosus Fig.2

**LIST OF SPECIES OCCURRING IN THE AREA:**

Code numbers are given for those species for which identification Sheets are included

<u>Kyphosus bigibbus</u> Lacepède, 1802	
<u>Kyphosus cinerascens</u> (Forsskål, 1775)	KYPH Kyph 3
<u>Kyphosus vaiqiensis</u> (Quoy & Gaimard, 1824)	
<u>Neoscorpis lithophilus</u> (Gilchrist & Thompson, 1909)	KYPH Neo 1

Prepared by A. Maugé, Muséum National d'Histoire Naturelle, Ichthyologie Générale et Appliquée, Paris, France;  
draft material revised by P.C. Heemstra, J.L.B. Smith Institute of Ichthyology, Grahamstown, South Africa

Main species illustrations provided by author

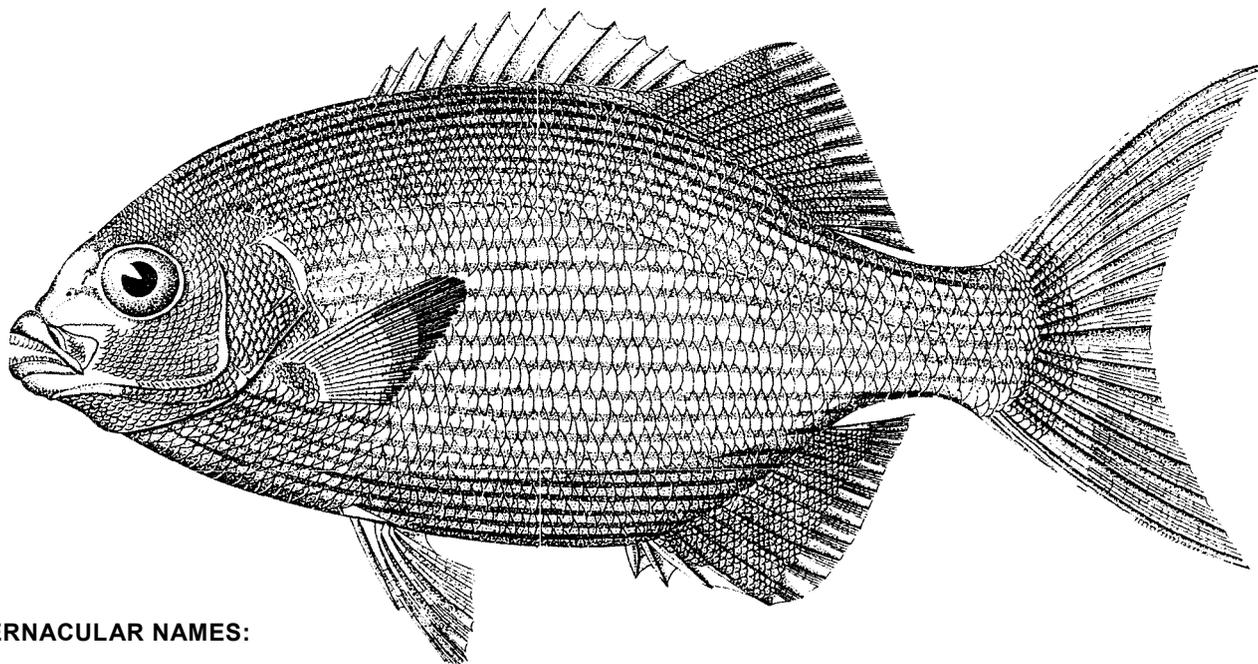
FAO SPECIES IDENTIFICATION SHEETS

FAMILY: KYPHOSIDAE

FISHING AREA 51  
(W. Indian Ocean)

*Kyphosus cinerascens* (Forsskål, 1775)

OTHER SCIENTIFIC NAMES STILL IN USE: None



VERNACULAR NAMES:

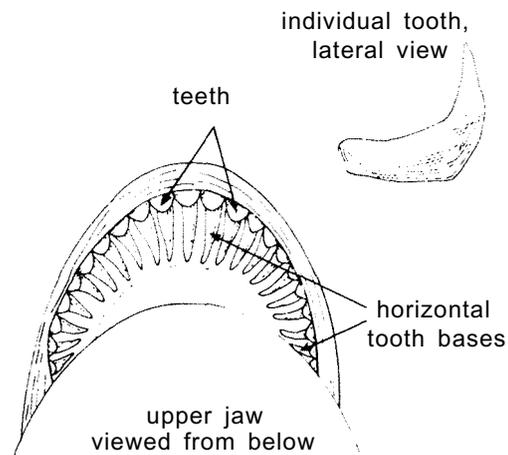
FAO: En - Blue sea chub  
 Fr - Calicagère bleue  
 Sp - Chopa azul

NATIONAL:

DISTINCTIVE CHARACTERS:

Body ovate, compressed; snout blunt, upper profile with a low hump above nostrils; maxilla barely reaching to eye level; teeth incisorlike, fixed, in a single row on both jaws, hockey-stick shaped with posterior compressed roots set horizontally, resembling a radially striated plate inside mouth; fine teeth inside mouth on palate and tongue; preopercular edge finely serrated. Dorsal fin with 11 spines and 12 soft rays, the soft part clearly higher than the longest spine, and its base clearly shorter than that of spinous part; pectoral fins short; pelvic fins present; anal fin with 3 spines and 11 or 12 soft rays. Scales small, finely ciliated.

Colour: silvery grey, olivaceous to dusky dark above, a dark stripe between each row of scales; a grey or silvery stripe under the eye. Vertical fins blackish, paired fins lighter.

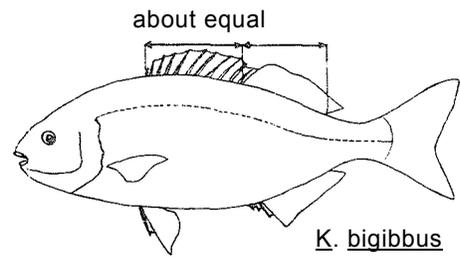


## DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

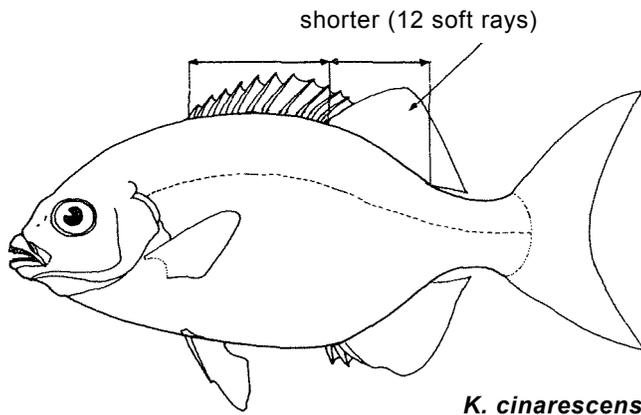
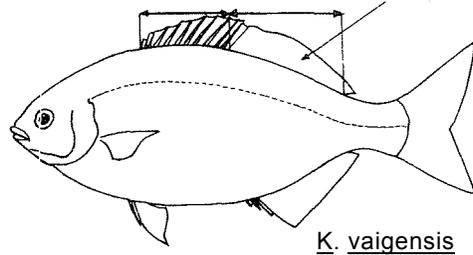
Kyphosus bigibbus: base of soft part of dorsal fin nearly equal to that of spinous part. Soft dorsal with 11 or 12 rays (always 12 rays in K. cinarescens).

K. vaigiensis: base of soft part of dorsal fin longer than that of spinous dorsal. Soft dorsal fin rays 13 or 15.

Neoscorpis lithophilus: base of soft dorsal longer than that of spinous dorsal, only 6 to 8 dorsal fin spines (11 in K. cinarescens); more than 20 dorsal and anal soft rays; teeth without the characteristic roots of Kyphosus.



longer (13 or 15 soft rays)



***K. cinarescens***

## SIZE:

Maximum: 40 cm.

## GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

Throughout most of the area, the southern limit on the African coast being Durban. Also found in the Eastern Indian Ocean and the Western Central Pacific to Japan, Australia and Easter Island.

Occurs in shallow coastal waters mainly about reef and rocks, often in caves, occasionally forming schools.

Mainly herbivorous, feeding chiefly on seaweeds and associated invertebrates.

## PRESENT FISHING GROUNDS:

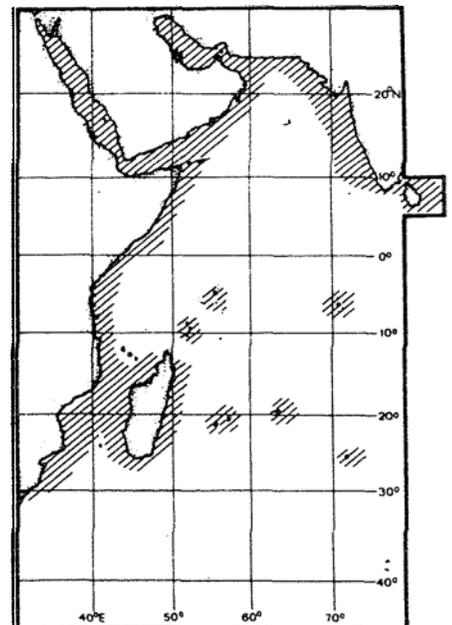
Shallow reef and rocky areas throughout its range. Common but apparently not very abundant.

## CATCHES, FISHING GEAR AND FORMS OF UTILIZATION:

Separate statistics are not reported for this species.

Caught mainly on hook and line (baited with shrimp or even seaweed); also with several types of artisanal gear.

The flesh is edible, but in some areas not esteemed due to the odour emanating from the gut.

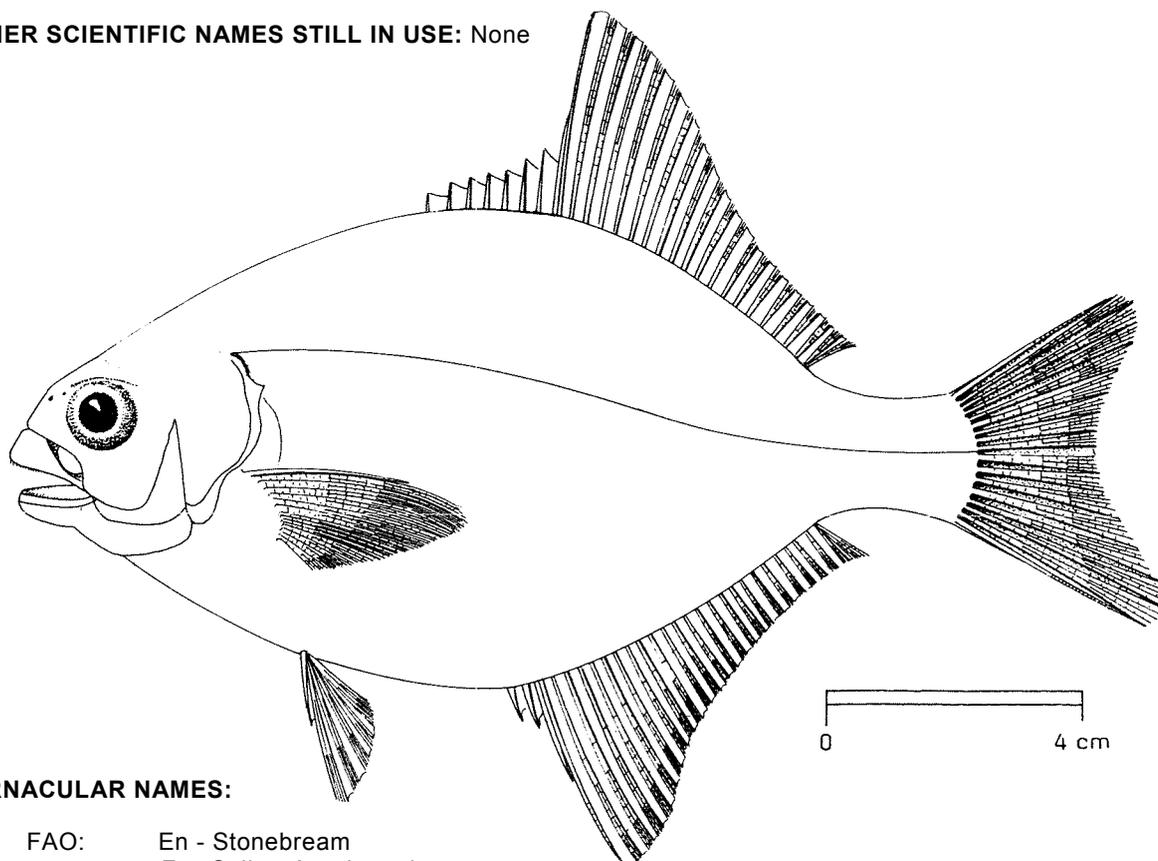


## FAO SPECIES IDENTIFICATION SHEETS

FAMILY: KYPHOSIDAE

FISHING AREA 51  
(W. Indian Ocean)Neoscorpis lithophilus (Gilchrist & Thompson, 1909)

OTHER SCIENTIFIC NAMES STILL IN USE: None



## VERNACULAR NAMES:

FAO: En - Stonebream  
Fr - Calicagère de roche  
Sp - Parguete pedrero

NATIONAL:

## DISTINCTIVE CHARACTERS:

Body strongly compressed, moderately deep, oblong-ovate. Snout moderate, obtuse; mouth small, terminal; maxilla extending backward to level of anterior third of eye; jaws with bands of minute teeth, the outer series enlarged and somewhat lanceolate; minute teeth on roof of mouth, none on tongue; preopercle entire. Dorsal fin with 6 to 8 (usually 6) low spines increasing in size posteriorly and depressible in a sheath, and 20 to 22 soft rays, the soft part distinctly longer than spinous part; anterior soft rays longer, forming a prominent subfalcate lobe; anal fin similar in shape to dorsal fin, with 3 spines and 23 to 26 soft rays.

Colour: silvery grey, rather drab, juveniles with 6 to 8 faint obscure crossbars; a prominent semicircular black spot on edge of gill cover.

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

Kyphosus species: teeth in jaws hockey-stick shaped, with horizontal roots inside mouth; dorsal fin spines 10 to 12 (6 to 8 in Neoscorpis), and much longer; soft dorsal and anal fins not falcate, number of soft rays normally not more than 15 (more than 20 in Neoscorpis).

**SIZE:**

Maximum: 50 cm standard length; common to 18 cm.

**GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:**

Found only off South Africa, from Agulhas Bank along the southeast coast of Africa to Zululand and even further north, but not recorded from Mozambican waters.

Inhabits shallow nearshore waters, especially in rocky areas.

Mainly herbivorous, feeds chiefly on seaweeds and associated invertebrates.

**PRESENT FISHING GROUNDS:**

Shallow waters, over rock areas.

**CATCHES, FISHING GEAR AND FORMS OF UTILIZATION:**

Separate statistics are not reported for this species.

Caught on hook and line (baited with shrimp and even seaweed), with nets and spears, especially at night with the aid of light.

Marketed fresh; flesh esteemed when properly gutted (the guts emanating a noticeably bad odour).

