ALBU

1983

FAO SPECIES IDENTIFICATION SHEETS

FISHING AREA 51
(W. Indian Ocean)

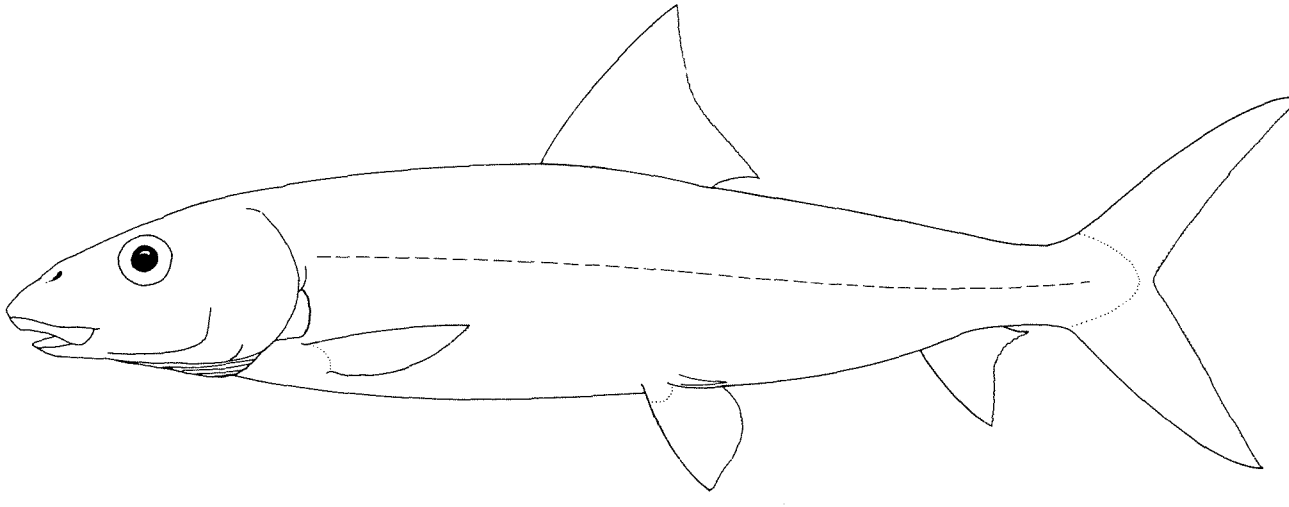
ALBULIDAE

Bonefishes

Elongate, fusiform fishes possessing a distinctive conical snout projecting beyond the tip of the lower jaw and having a small, subterminal mouth; a rudimentary gular plate present between arms of lower jaw but small and easily overlooked; gill rakers rudimentary, consisting of small patches of minute, villiform teeth; 10 to 15 branchiostegal rays; a well-developed lateral line present; belly rounded to flat, completely lacking scutes. Fins lacking spines; a single, relatively short dorsal fin with 16 or 17 rays, last dorsal ray normal (not filamentous); pelvic fins (with well developed axillary scale) originate below middle of dorsal fin; anal fin short-based, nearly always with 8 rays (range 7 to 9). Scales small, 62 to 78 along lateral line.

Colour: sides silvery; back blue/green or olive, often with about 8 to 10 darker, but indistinct bars dorsally; belly pale whitish.

Although thought for some time to consist of but one principal species (Albula vulpes) distributed in inshore, shallow-water habitats circumtropically, recent studies have revealed the existence of several morphologically similar species, two of which occur throughout the Indo-West Pacific. Bonefishes are of little commercial importance as food fishes because of the large number of small bones throughout their flesh but are highly prized sportfish to anglers. They have a leptocephalus larval stage (like that of eels but possessing a forked caudal fin); juveniles often school in shallow sandy or muddy habitats while adults are typically found in small groups or as solitary individuals in the same type of turbid environments. These fish feed by grubbing at the bottom, often in such shallow waters that their caudal and/or dorsal fins break the surface. The principle food seems to be crustaceans, but significant numbers of worms, molluscs, and small fishes are also consumed (together with a significant quantity of sand or mud). Food items are generally pulverized by the opposing pátches of robust molariform teeth on the parasphenoid (roof of mouth) and basibranchial (floor of mouth).



SIMILAR FAMILIES OCCURRING IN THE AREA

Elopidae: a well developed gular plate clearly present between the arms of lower jaw; mouth large and terminal (no projecting snout); 27 to 34 branchiostegal rays; dorsal fin typically with 22 or 23 rays; pelvic fin origin slightly anterior to dorsal fin origin; anal fin with 14 or 15 rays. Over 90 scales in lateral line (62 to 78 in Albula).

Megalopidae: gular plate clearly present between arms of lower jaw; mouth large and supra-terminal, with lower jaw projecting (no overhanging snout); 23 to 27 branchiostegal rays; dorsal fin typically with 17 to 20 rays, the last of which is produced into a long trailing filament; pelvic fin origin anterior to dorsal fin origin; anal fin with 24 to 31 rays. Scales large, 36 to 40 in lateral line.

Clupeidae: no lateral line; sharp scutes usually present along belly; gill rakers elongate and slender; gular plate totally lacking; anal fin rays nearly always 10 or more; size smaller, to 25 cm (to 50 cm in Albulidae).

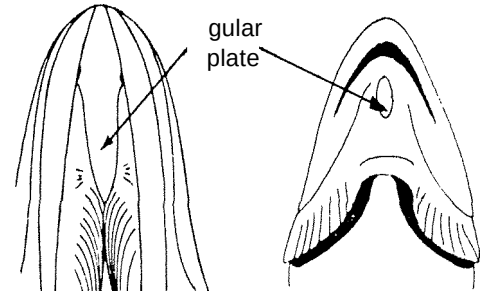
Engraulidae: no lateral line; belly often sharp, with scutes; numerous long, slender gill rakers; gular plate totally absent; pelvic fin origin anterior to dorsal fin origin; anal fin rays always more than 15; size smaller, to 20 cm.

Chanidae: mouth small and terminal; 4 branchiostegal rays; gill rakers very numerous (well over 100), elongate and slender; gular plate totally lacking; anal rays 9 to 11; lateral line with 75 to 91 scales.

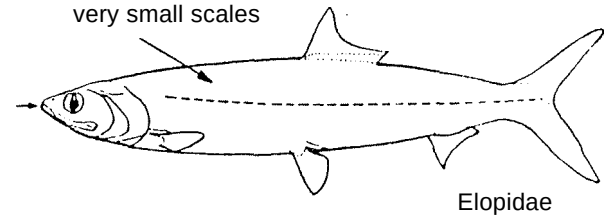
Sillaginidae: two dorsal fins, first with 9 to 12 spines; gill rakers short, robust and lanceolate; anal fin with a long base, consisting of 2 spines and 15 to 27 soft rays.

GENERA OCCURRING IN THE AREA

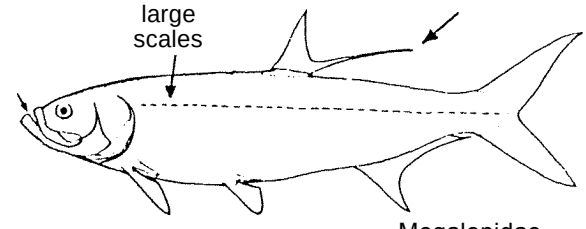
Albula only.



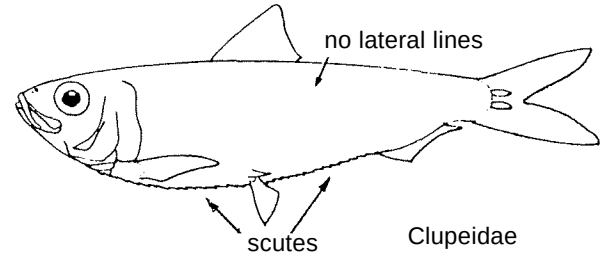
Elopidae, Megalopidae ***Albulidae***
underside of head



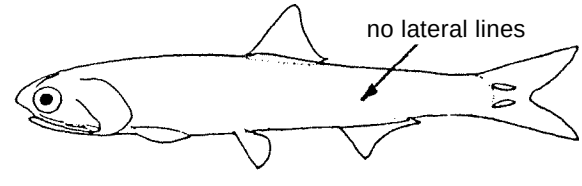
Elopidae



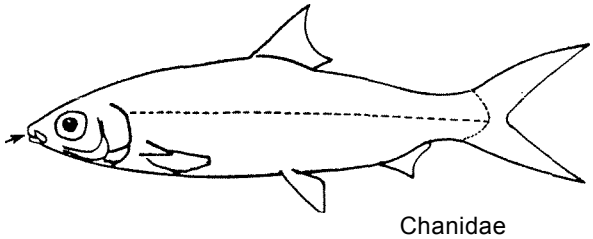
Megalopidae



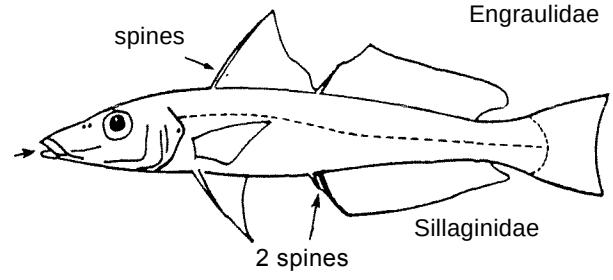
Clupeidae



Engraulidae



Chanidae



Sillaginidae

LIST OF SPECIES OCCURRING IN THEA AREA:

Code numbers are given for those species for which Indetification Sheets are included:

Albula glossodonta (Forsskål, 1775)	ALBU Albu 2
Albula neoguinaica Cuvier & Valenciennes, 1846	ALBU Albu 3

Prepared by J.B. Shaklee, Division of Fisheries Research, CSIRO Marine Laboratories, P.O. Box 120, Cleveland, Queensland 4163, Australia

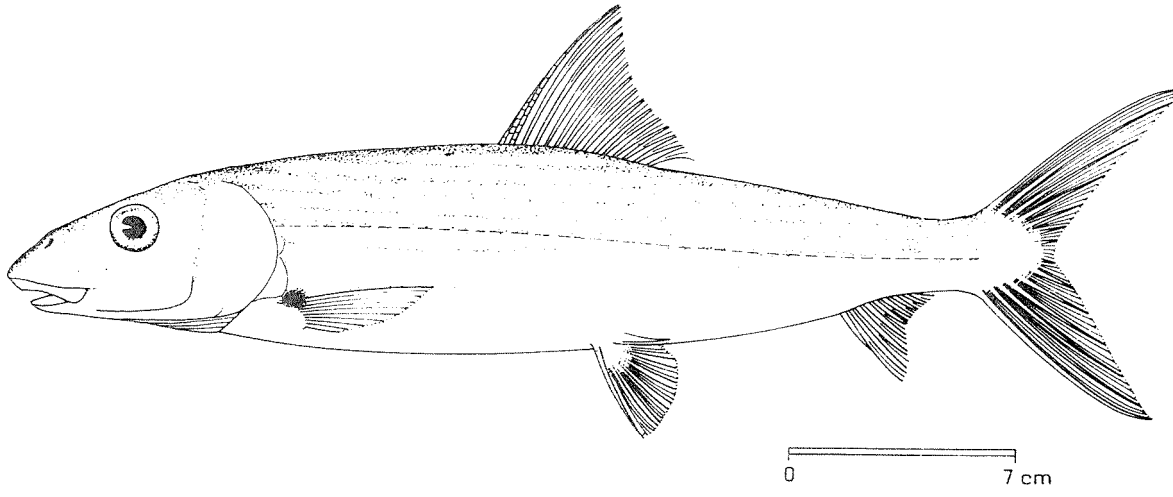
FAO SPECIES IDENTIFICATION SHEETS

FAMILY: ALBULIDAE

FISHING AREA 51
(W. Indian Ocean)

Albula glossodonta (Forsskål, 1775)

OTHER SCIENTIFIC NAMES STILL IN USE : Albula vulpes (Linnaeus, 1758)



VERNACULAR NAMES:

FAO: En - Roundjaw bonefish
Fr - Banane lèvre ronde
Sp – mocabl boca redonda

NATIONAL :

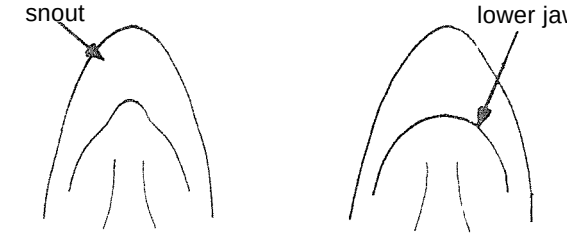
DISTINCTIVE CHARACTERS:

An elongate, fusiform fish with a small, subterminal mouth below a projecting, conical snout; upper jaw not reaching to eye; lower jaw broadly rounded in outline; anterior ventral portion of snout often with a small patch of black pigment medially (usually prominent in juveniles but disappearing in large adults); molariform tooth patches on parasphenoid (roof of mouth) and basibranchials (floor of mouth) broadly oval in shape (average width/length = 0.38 and 0.45, respectively) number of teeth in the second pharyngobranchial tooth patch usually 5 to 15; gill rakers (major tooth patches) on lower limb of first gill arch usually 12 (range 11 to 13); branchiostegal rays usually 12 to 14. Scales in lateral line usually 71 to 75.

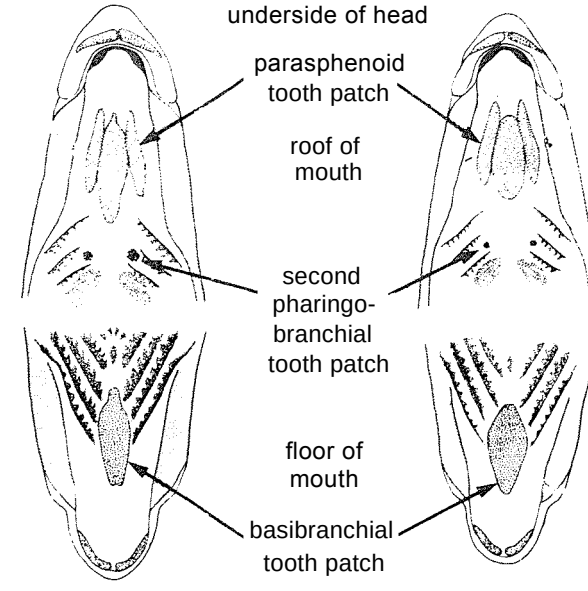
Colour: sides bright silvery; back blue/green to olive, often with about 8 to 10 darker but indistinct bars dorsally; belly pale whitish.

DISTINGUISHING CHARACTERS OF SIMILAR SPECKS OCCURRING IN THE AREA:

Albula neoguinaica (difficult to distinguish from A. glossodonta in the field): lower jaw angular, with a pointed symphysis; anterior ventral portion of snout without any black pigment medially; molariform tooth patches on parasphenoid and basibranchial bones generally elongate and nearly rectangular in shape (average width/ length = 0.28 and 0.34, respectively, against 0.38 and 0.45 in A. glossodonta); number of teeth in the second pharyngobranchial tooth patch usually 15 to 30 (usually 5 to 15 in A. glossodonta); gill rakers on lower limb of first arch 10 to 12 (usually 12 in A. glossodonta); branchiostegal rays usually 13 or 14 (12 to 14 in A. glossodonta). Scales in lateral line 63 to 69 (71 to 75 in A. glossodonta) but individuals of A. neoquinaica from the East Indies, Japan and the Philippines have 72 to 78 scales in the lateral line.



Albula neoguinaica ***Albula glossodonta***



Albula neoguinaica **Albula glossodonta**

SIZE:

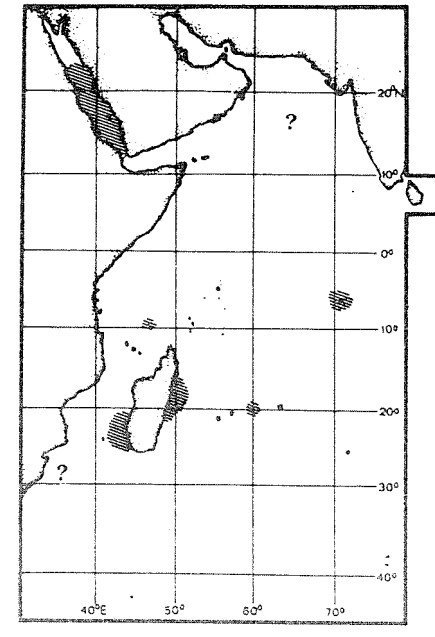
Maximum: at least 50 cm.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

Known from the Red Sea, Aldabra Islands, Mauritius, Madagascar, and Diego Garcia in the Chagas Archipelago. Probably occurs throughout the area but confirmed specimens from other localities are lacking.* This species ranges throughout the Indo-West Pacific and is abundant as far east as Hawaii and the Tuamotu and Marquesas Islands.

An inshore, shallow-water species associated with sand and mud bottoms.

Feeds by grubbing in the substratum with the snout.



PRESENT FISHING GROUNDS:

Caught throughout its range, but no special fishery.

CATCHES, FISHING GEAR AND FORMS OF UTILIZATION :

Separate statistics are not reported for this species.

Taken mainly in gillnets or by angling, occasionally by cast nets.

Marketed fresh. Although the flesh is of good quality, this fish is seldom used for human consumption (except in areas such as Hawaii) and is often used for bait.

* Frozen and/or preserved specimens of this species from this area would be welcomed by Dr. J.B. Shaklee (Division of Fisheries Research CSIRO marine Laboratories, P.O. Box 120, Cleveland, Qld 4163, Australia) in his ongoing research on albulid fishes.

ALBU Albu 3

1983

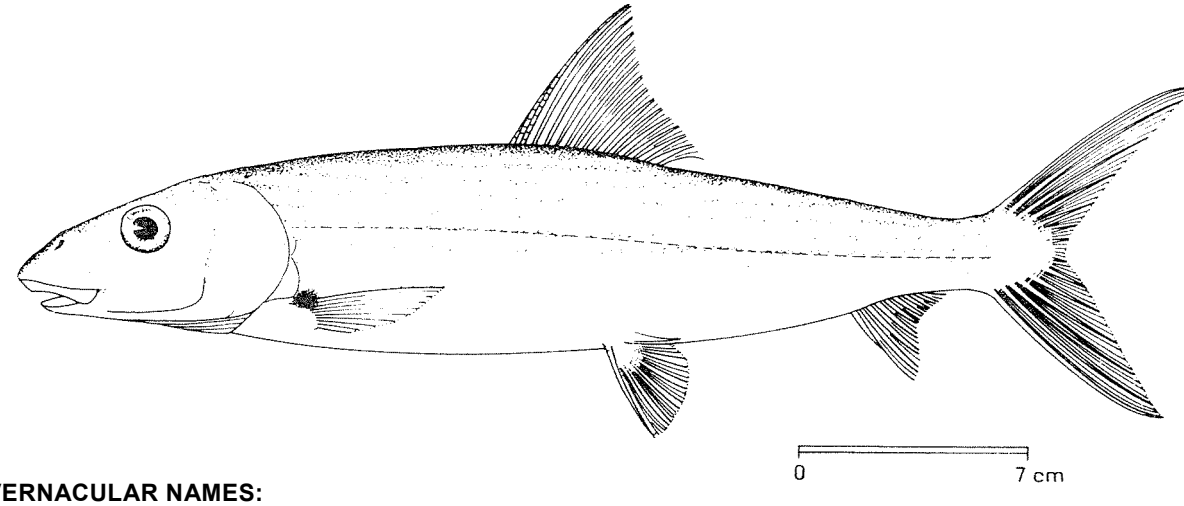
FAO SPECIES IDENTIFICATION SHEETS

FAMILY: ALBULIDAE

FISHING AREA 51
(W. Indian Ocean)

Albula neoguinaica Cuvier & Valenciennes, 1846

OTHER SCIENTIFIC NAMES STILL IN USE : Albula vulpes (Linnaeus, 1758)



VERNACULAR NAMES:

FAO : En - Sharpjaw bonefish
Fr - Banane lèvre aigue
Sp - Macabí boquiagudo

NATIONAL:

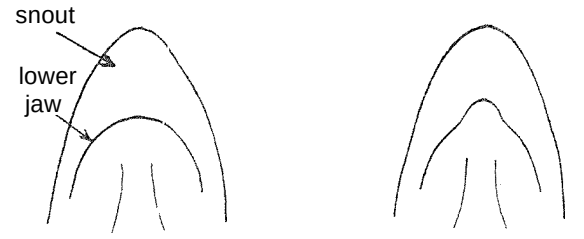
DISTINCTIVE CHARACTERS:

An elongate, fusiform fish with a small, subterminal mouth below a projecting, conical snout; upper jaw not reaching to eye; lower jaw angular, with a pointed symphysis; anterior ventral portion of snout without an black pigment medially; molariform tooth patches on parasphenoid (roof of mouth) and basibranchials (floor of mouth generally elongate and nearly rectangular in shape (average width/length = 0.28 and 0.34 respectively); number of teeth in the second pharyngobranchial tooth patch usually 15 to 30; gill rakers major tooth patches) on lower limb of first gill arch 10 to 12; branchiostegal rays usually 13 or 14. Scales in lateral line 63 to 69 (but individuals from the East Indies, Japan and the Philippines have 72 to 78 scales in the lateral tine).

Colour: sides bright silvery; back blue/green to alive, often with about 8 to 10 darker but indistinct bars dorsally; belly pale whitish.

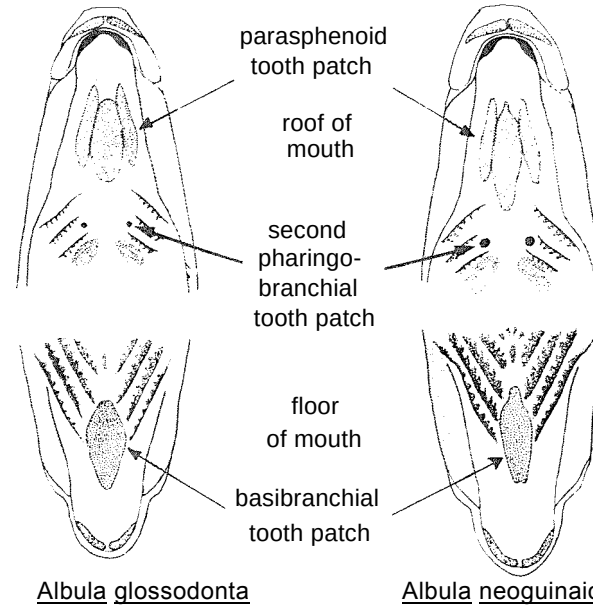
DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

Albula glossodonta (difficult to distinguish from A. neoguinaica in the field): lower jaw broadly rounded in outline; anterior ventral portion of snout often with a small patch of black pigment medially (usually prominent in juveniles but disappearing in large adults); molariform tooth patches on parásphenoid and basibranchiai broadly oval in shape (average width/length = 0.38 and 0.45, respectively against 0.28 and 0.34 in A. neoguinaica); number of teeth in the second pharyngobranchial tooth patch usually 5 to 15 (15 to 30 in A. neoguinaica); gill rakers on lower limb of first gill arch usually 12 (10 to 12 in A. neoguinaica); branchiostegal rays usually 12 to 14 (13 or 14 in A. neoguinaica). Scales in lateral line usually 71 to 75 (63 to 69 in Western Indian Ocean specimens of A. neoguinaica).



Albula glossodonta Albula neoguinaica

underside of head



Albula glossodonta Albula neoguinaica

SIZE:

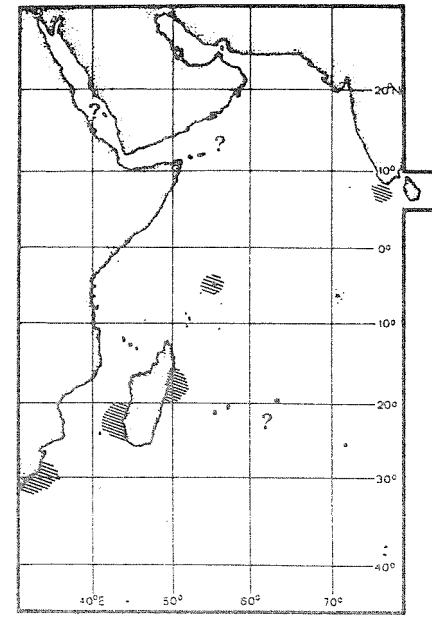
Maximum: at least 50 cm.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

Known from South Africa, Madagascar, the Seychelles and the Gulf of Mannar. Probably occurs throughout the area, but confirmed specimens from other localities are lacking.* This species ranges throughout the Indo-West Pacific and is abundant as far east as Hawaii and the Marquesas Islands.

An inshore, shallow-water species associated with sand and mud bottoms.

Feeds by grubbing in the substratum with the snout.



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CATCHES, FISHING GEAR AND FORMS OF UTILIZATION :

Separate statistics are not reported for this species.

Taken mainly in gillnets or by angling, occasional by cast nets.

Marketed fresh. Although the flesh is of good quality, this fish is seldom used for human consumption (except in areas such as Hawaii) and is often used for bait.

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