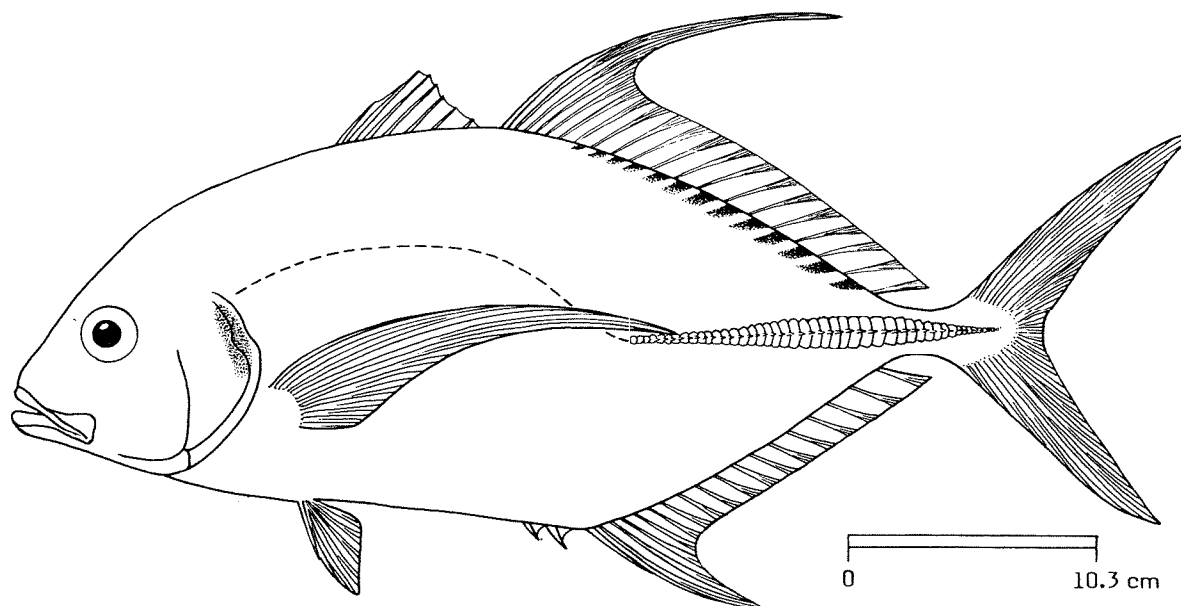


FAO SPECIES IDENTIFICATION SHEETS

FAMILY: CARANGIDAE

FISHING AREA 51
(W. Indian Ocean)Carangoides dinema Bleeker, 1851

OTHER SCIENTIFIC NAMES STILL IN USE:

Caranx dinema (Bleeker, 1851)Cananx deani Jordan & Snyder, 1907

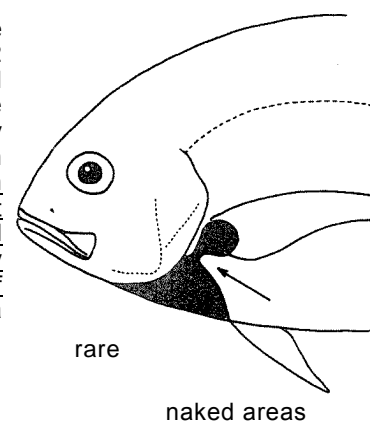
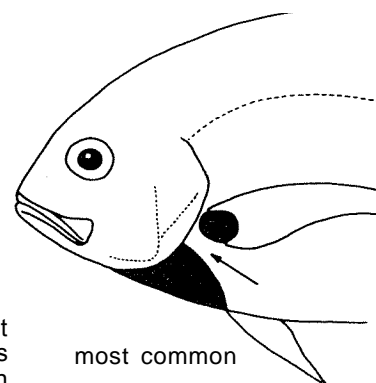
VERNACULAR NAMES:

FAO : En - Shadow trevally
 Fr - Carangue crépuscule
 Sp - Jurel crepúsculo

NATIONAL:

DISTINCTIVE CHARACTERS:

Body strongly compressed, almost ovate; nape slightly elevated, almost straight in profile. Eye diameter slightly smaller than snout length; both jaws with bands of small teeth, the bands widest anteriorly; upper jaw also with an irregular outer series of moderately large teeth; vomerine tooth patch ovate, without a posteromedian extension; gillrakers (including rudiments) 7 to 9 upper, 16 to 19 lower and 24 to 28 total on first gill arch. Two separate dorsal fins, the first with 8 spines, the second with 1 spine and 17 to 19 soft rays; anal fin with 2 detached spines followed by 1 spine and 15 to 17 soft rays; lobe of second dorsal fin elongate, longer than head length, in adults about equal or exceeding the length of second dorsal fin base. Lateral line anteriorly with a moderately regular arch, with junction of curved and straight parts below second dorsal fin between 10th to 12th soft rays; chord of curved part of lateral line longer than straight part of lateral line, contained 0.7 to 0.95 times in straight part; straight part of lateral line with 0 to 6 scales followed by 23 to 30 scutes. Breast naked ventrally to origin of pelvic fins; laterally, naked area of breast usually separated from naked base of pectoral fin by a moderate to narrow band of scales rarely, naked areas of breast and pectoral fin base united laterally by a narrow naked strip). Vertebrae 10 + 14.



Colour: in life, bluish-green above, silvery-white below; small brown blotches (becoming larger posteriorly) on back between bases of dorsal fin rays. Opercular blotch brownish and diffuse. Fins pale except in very large specimens; second dorsal fin with leading edge dusky and ray tips yellowish; anal fin with tips of rays whitish blue. Caudal fin with upper lobe yellowish, and with trailing edges and tip of lower lobe pale. Pectoral fins pale and pelvic fins whitish to dusky.

DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

Carangoides oblongus: straight part of lateral line with 37 to 45 scutes (23 to 30 in C. dinema); soft dorsal fins rays 20 to 22 (versus 17 to 19); and chord of curved part of lateral line slightly shorter than straight part of lateral line.

Other Carangoides species: lack small dark blotches on back between bases of second dorsal fin rays; and breast completely scaled or either naked area of breast extends posteriorly well beyond origin of pelvic fins or soft dorsal fin rays 22 to 34 (versus 17 to 19).

Caranx species: lack small dark blotches on back between bases of second dorsal fin rays; and lower jaw with a single series of strong conical teeth, widely spaced in adults (versus lower jaw with a band of small teeth, widest anteriorly).

SIZE:

Maximum: Largest specimen examined 53 cm fork length; 58.6 cm total length and 2.6 kg.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

In the Western Indian Ocean known only from South Africa to Tanzania, but probably has a wider distribution. Elsewhere, it is known from Okinawa, Japan, Indonesia, the Philippines, Papua New Guinea and Tonga Islands. In Australia this species appears to be replaced by the closely related Carangoides humerosus (McCulloch).

Inhabits coastal waters.

PRESENT FISHING GROUNDS:

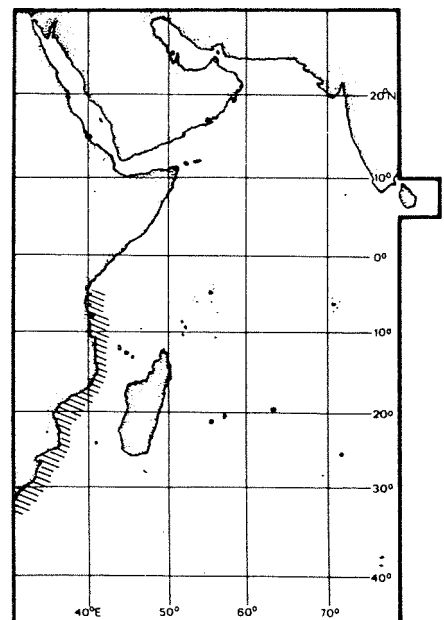
Taken incidental throughout its range, but apparently not abundant.

CATCHES, FISHING GEAR AND FORMS OF UTILIZATION:

Separate statistics are not reported for this species.

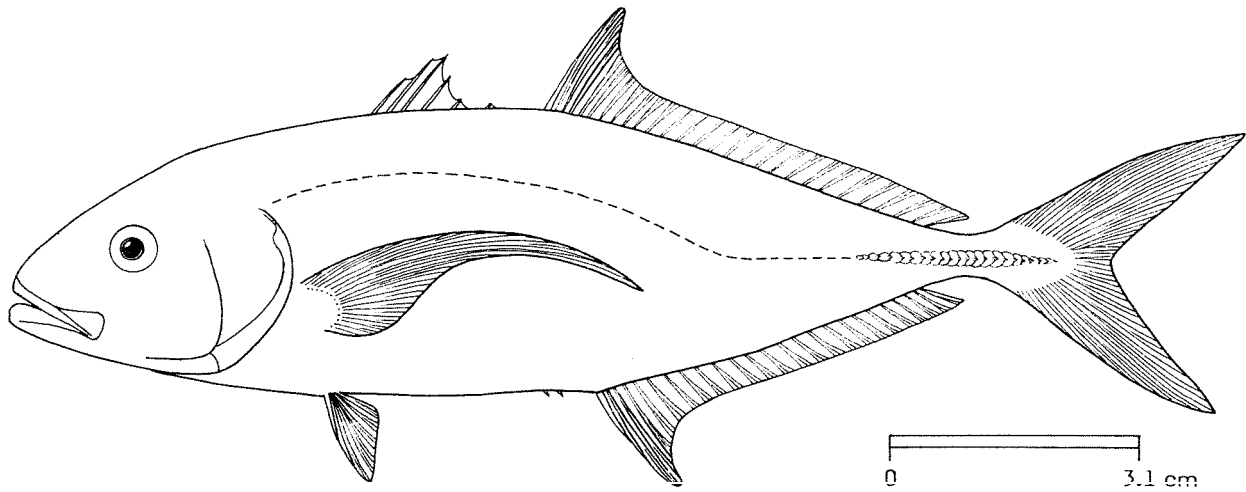
Caught on hook and line; also with gillnets and traps.

Marketed fresh and dried salted.



FAO SPECIES IDENTIFICATION SHEETS

FAMILY: CARANGIDAE

FISHING AREA 51
(W. Indian Ocean)Carangoides fulvoguttatus (Forsskål, 1775)OTHER SCIENTIFIC NAMES STILL IN USE : Caranx fulvoguttatus (Forsskål, 1775)
Turum emburyi Whitley, 1932

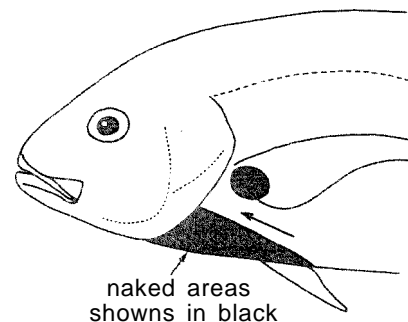
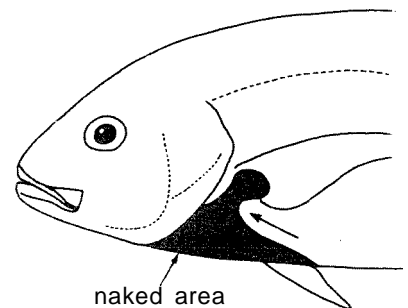
VERNACULAR NAMES:

FAO : En - Yellowspotted trevally
Fr - Carangue pailleteé
Sp - Jurel centellante

NATIONAL:

DISTINCTIVE CHARACTERS:

Body subovate and compressed, becoming elongate-ovate and slightly subcylindrical with age; profile of head and nape slightly angular becoming more steep with age. In adults mouth cleft distinctly below level of eye; eye diameter smaller than snout length; both jaws with bands of villiform teeth, the bands widest anteriorly; vomerine tooth patch ovate, without a posteromedian extension; gillrakers (including rudiments) 6 to 8 upper, 17 to 21 lower and 22 to 27 total on first gill arch. Two separate dorsal fins, the first with 8 spines, the second with 1 spine and 25 to 30 soft rays; anal fin with 2 detached spines followed by 1 spine and 21 to 26 (rarely 25 to 26) soft rays; lobe of second dorsal fin shorter than head length. Lateral line anteriorly with a low regular arch, with junction of curved and straight parts below second dorsal fin between 13th to 16th soft rays; chord of curved part of lateral line longer than straight part of lateral line, contained 0.7 to 0.95 times in straight part; straight part of lateral line with 18 to 27 scales followed by 15 to 21 small scutes. Breast naked ventrally to distinctly behind origin of pelvic fins; breast squamation variable laterally, either separated from naked base of pectoral fin by a moderate to very narrow band of scales or naked area of breast uninterrupted to naked base of pectoral fin. (Only 23 of 47 specimens examined for this character had the uninterrupted pattern of breast squamation.) Vertebrae 10+14.



Colour: adults iridescent blue-green dorsally, shading to silvery on sides, with many small golden or brassy spots mainly above midline; large individuals often with 3 irregular black blotches (sometimes very indistinct or absent) on flanks, the first below dorsal fin lobe, the second at inflection point of lateral line and the third slightly anterior to midpoint of straight part of lateral line. Opercular spot dusky and inconspicuous. Dorsal and anal fins dusky-yellow, the latter with leading edge and distal margin whitish blue; caudal fin olive-yellow with upper leading edge and trailing edges dusky; pelvic fins whitish blue.

DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

Cararioides gymnostethus; profile of snout moderately rounded and, in specimens larger than about 30 cm fork length, horizontal line from tip of snout passes at or through level of eye; soft anal fin rays 24 to 26, usually 25 or 26 (22 to 26, rarely 25 or 26 in C. fulvoguttatus); total gillrakers on first arch 27 to 31: (versus 22 to 27); and vertebrae 10 + 15.

C. bajad: superficially similar but differs in having breast completely scaled or with a narrow naked area anteroventrally, scarcely if at all visible in lateral view.

Other Carangoides species: either naked area of breast does not extend posteriorly beyond origin of pelvic fins or soft dorsal fin rays 18 to 23 (versus 25 to 32).

SIZE:

Maximum: Largest specimen examined 80 cm fork length; 87.5 cm total length and 6.4 kg. South African spearfishing record 18.0 kg. Reliably reported to attain 100 cm fork length.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

Broadly distributed through the Indian and Western Pacific Oceans, including Okinawa, Palau and Australia.

Prefers rocky and coral reefs, but is occasionally found over offshore banks to depths of 100 m. It does not enter estuaries.

Feeds mainly on small invertebrates and fishes.

PRESENT FISHING GROUNDS:

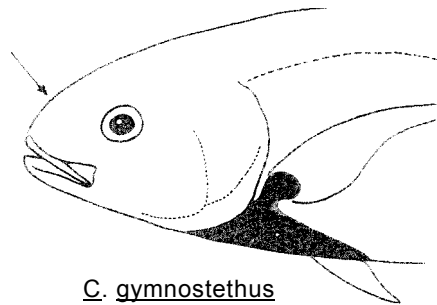
Coastal waters throughout its range.

CATCHES, FISHING GEAR AND FORMS OF UTILIZATION:

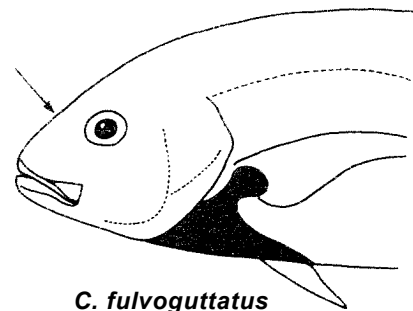
Separate statistics are not reported for this species.

Caught mainly on hook and line and by spearing. A good sportsfish. Also with general types of artisanal gear, including gillnets and traps.

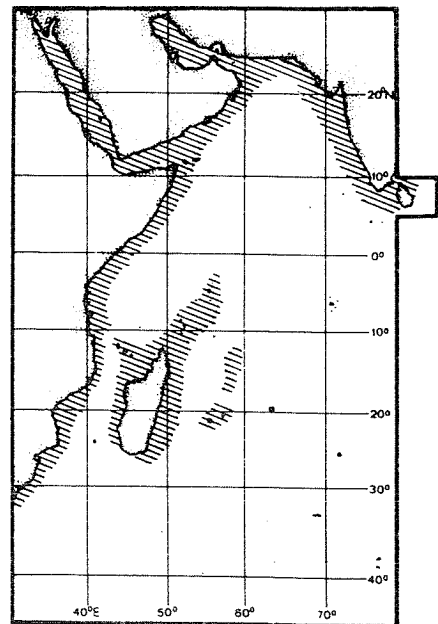
Marketed fresh and dried salted.



C. gymnostethus



C. fulvoguttatus

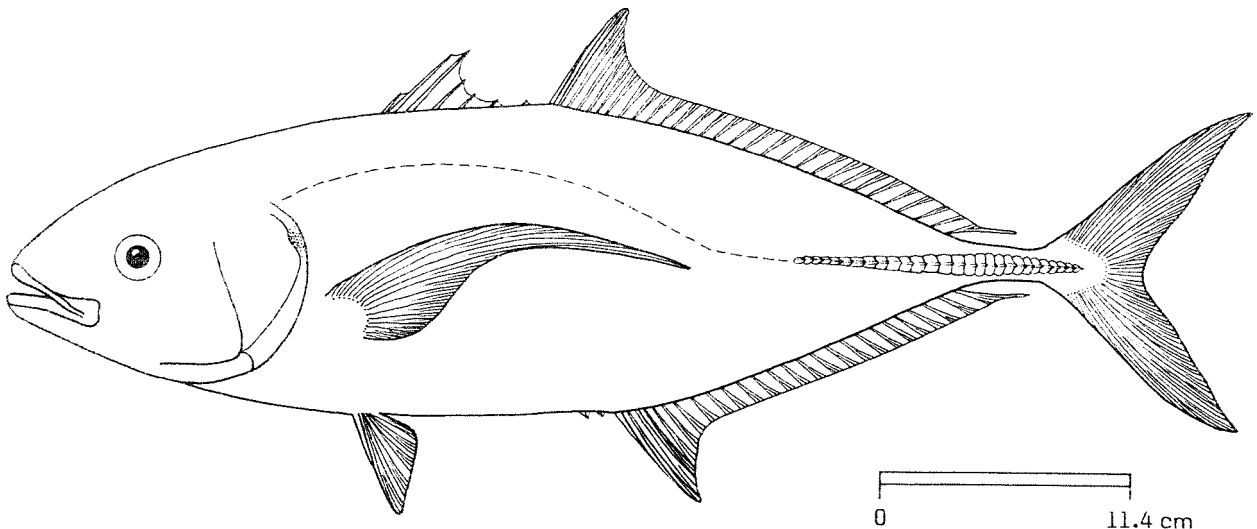


FAO SPECIES IDENTIFICATION SHEETS

FAMILY: CARANGIDAE

FISHING AREA 51
(W. Indian Ocean)Carangoides gymnostethus (Cuvier, 1833)

OTHER SCIENTIFIC NAMES STILL IN USE:

Caranx gymnostethus (Cuvier, 1833);
Carangoides gymnostethoides Bleeker, 1851

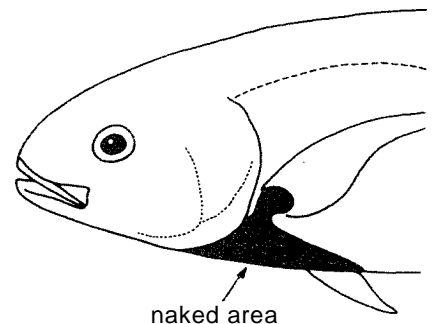
VERNACULAR NAMES:

FAO: En - Bludger
Fr - Carangue balo
Sp - Jurel balo

NATIONAL:

DISTINCTIVE CHARACTERS:

Body ovate and compressed, becoming elongate-ovate and slightly subcylindrical with age; profile of head and nape gently convex becoming less steep with age. In adults mouth cleft at level with lower margin of eye; diameter of eye smaller than snout length; both jaws with bands of villiform teeth, the bands widest anteriorly; vomerine tooth patch ovate, without a posteromedian extension; gillrakers (including rudiments) 7 to 9 upper, 19 to 22 lower and 27 to 31 total on first gill arch. Two separate dorsal fins, the first with 6 spines, the second with 1 spine and 28 to 32 soft rays; anal fin with 2 detached spines followed by 1 spine and 24 to 26 (usually 25) soft rays; lobe of second dorsal fin shorter than head length. Lateral line anteriorly with a low regular arch, with junction of curved and straight parts below second dorsal fin between 16th to 20th soft rays; chord of curved part of lateral line longer than straight part of lateral line, contained 0.65 to 0.9 tunes in straight part; straight part of lateral line with 14 to 25 scales followed by 20 to 31 small scutes. Breast naked ventrally to distinctly behind origin of pelvic fins; laterally, naked area of breast extends diagonally to naked base of pectoral fin, the naked area somewhat constricted below the pectoral fin base. Vertebrae 10+15.



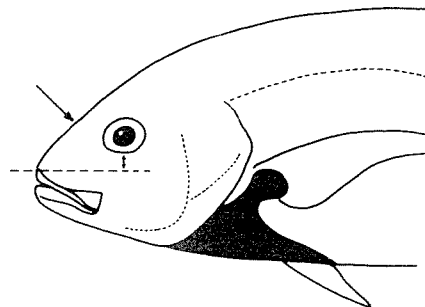
Colour: in life, adults olive-green above, silvery white below with a few brown or golden spots sometimes present midlaterally; opercular spot dusky and inconspicuous. Dorsal, anal and caudal fins pale olive-green to greenish-grey, leading edge and distal margin of anal fin white. Pelvic and pectoral fins pale green to hyaline.

DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

Carangoides fulvoguttatus: profile of snout angular and, in specimens larger than about 30 cm fork length, horizontal line from snout tip distinctly below level of eye; soft anal fin rays 22 to 26, rarely 25 or 26 (24 to 26, usually 25 or 26 in C. gymnostethus); total gillrakers on first arch 22 to 27 (versus 27 to 31); and vertebrae 10 + 14.

C. bajad: superficially similar but differs in having breast completely scaled or with a narrow naked area anteroventrally, scarcely if at all visible in lateral view.

Other Carangoides species: either naked area of breast does not extend posteriorly beyond origin of pelvic fins or soft dorsal fin rays 18 to 23 (versus 25 to 32).



C. fulvoguttatus

SIZE:

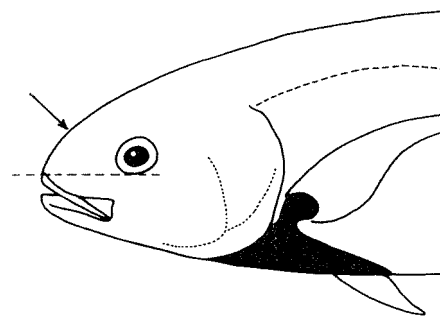
Maximum: Largest specimen examined 76.5 cm fork length; 83 cm total length and 7.2 kg. South African spearfishing record 14.5 kg. Reported to attain at least 90 cm total length.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

Broadly distributed throughout the Indian and Western Pacific Oceans, including the Ryukyu Islands and Australia.

Most common over slightly deeper offshore reefs. Larger individuals tend to be solitary, while juveniles form small schools.

Feeds mainly on small prey, including shrimps.



C. gymnostethus

PRESENT FISHING GROUNDS:

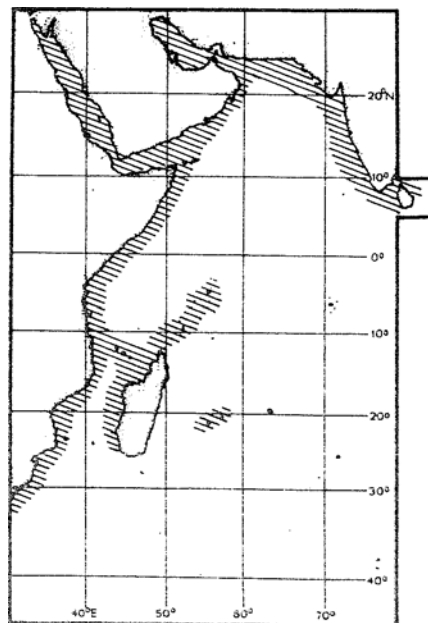
Rocky and coral reef areas throughout its range.

CATCHES, FISHING GEAR AND FORMS OF UTILIZATION:

Separate statistics are not reported for this species.

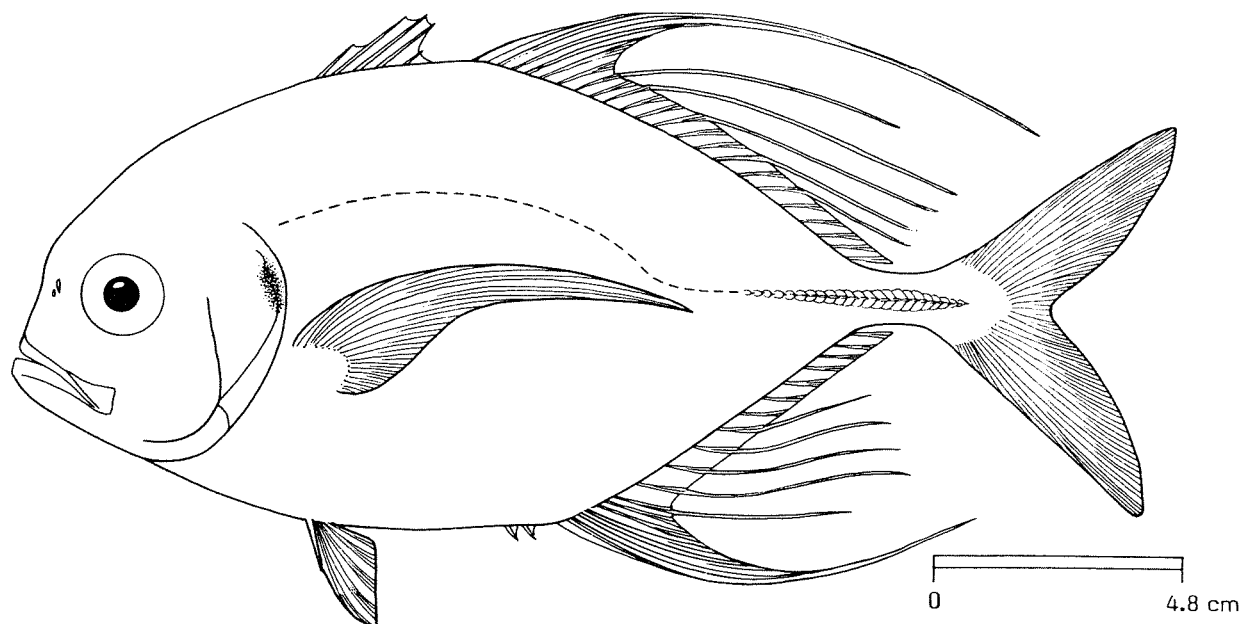
Caught mainly on hook and line. A good sportsfish. Also with several types of artisanal gear, including gillnets and traps.

Marketed fresh and dried salted.



FAO SPECIES IDENTIFICATION SHEETS

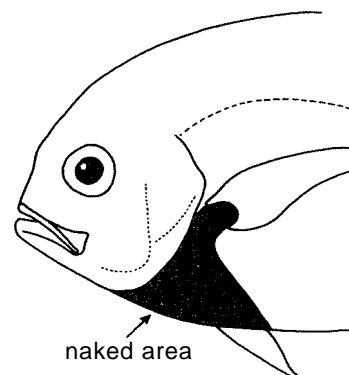
FAMILY: CARANGIDAE

FISHING AREA 51
(W. Indian Ocean)Carangoides hedlandensis (Whitley, 1933)OTHER SCIENTIFIC NAMES STILL IN USE : Caranx plumbeus of authors

VERNACULAR NAMES:

FAO : En - Bumpnose trevally
Fr - Carangue nez bossu
Sp - Jurel hoción

NATIONAL:



DISTINCTIVE CHARACTERS:

Body strongly compressed and deep; head profile extremely steep in adults with a distinct break in contour "bump" in the interorbital region which becomes more pronounced with increasing size. Eye diameter about equal to or larger than snout length; both jaws with bands of villiform teeth, the bands widest anteriorly; vomerine tooth patch wedge-shaped without a posteromedian extension; gillrakers (including rudiments) 6 to 11 upper, 14 to 17 lower and 20 to 27 total on first gill arch. Two separate dorsal fins, the first with 8 spines, the second with 1 spine and 20 to 22 soft rays; anal fin with 2 detached spines followed by 1 spine and 16 to 18 soft rays; lobe of second dorsal fin elongate and filamentous, longer than head length; dorsal fin sexually dimorphic, in mature males (only) larger than .16.5 cm of fork length, 3 to 8 of the central rays produced into filaments of greatly varying lengths. Lateral line anteriorly with a moderate regular arch, with junction of curved and straight parts below second dorsal fin between 10th and 12th soft rays; chord of curved part of lateral line longer than straight part of lateral line, contained 0.6 to 0.9 times in straight part; straight part of lateral line with 17 to 29 weak scutes and 29 to 41 total elements (including anterior scales). Breast naked ventrally to behind origin of pelvic fins; laterally, naked area of breast extends diagonally to naked base of pectoral fin. Vertebrae 10+14.

Colour: greenish-blue above with dusky tinge, shading to silvery grey below; blackish blotch on upper margin of opercle. Spinous dorsal fin, elongated dorsal rays and edges of caudal fin blackish; filamentous lobe of anal fin either blackish or pale brownish, elongated rays always pale brownish. Pelvic fins generally black in specimens smaller than 10 cm fork length, at larger than 15 cm fork length pelvic fins variable in colour from pale to dusky-blackish.

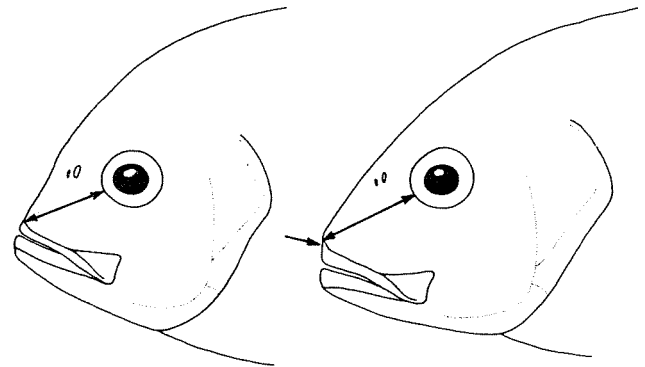
DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

Carangoides armatus: more lower limb gillrakers on first arch, 20 to 24, total 31 to 37 (14 to 17 and 20 to 27, respectively, in C. hedlandensis); and adults without a distinct break "bump", in profile in the interorbital region.

C. caeruleopinnatus and C. uii: eye diameter slightly to much smaller than snout length; central soft dorsal and anal fin rays not elongated in mature males; and adults without interorbital "bump".

C. chrysophrys: in addition to sharing the distinguishing characters of C. caeruleopinnatus and C. uii, dorsal profile of snout gently sloped, then abruptly vertical just above mouth cleft; and usually fewer dorsal fin rays, 18 to 20 (versus 20 to 22).

Atropus atropus: belly with a deep median groove into which conspicuously long and black pelvic fins fit when folded; junction of curved and straight parts of lateral line more anteriorly positioned, below 6th or 7th soft dorsal fin ray (versus below 10th to 12th ray in C. hedlandensis); and lateral line ratio larger, 1.5 to 2.0 (versus 0.7 to 0.9).



C. caeruleopinnatus

C. chrysophrys

SIZE:

Maximum: Largest specimen examined 28 cm fork length.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

In the Western Indian Ocean, known from Durban (South Africa), the Seychelles, southern India and Sri Lanka. Elsewhere reliably reported from northern Bay of Bengal, Gulf of Thailand, Taiwan Island, Okinawa, Japan, the Philippines, Indonesia, New Guinea, Australia and Samoa.

A coastal demersal species.

PRESENT FISHING GROUNDS:

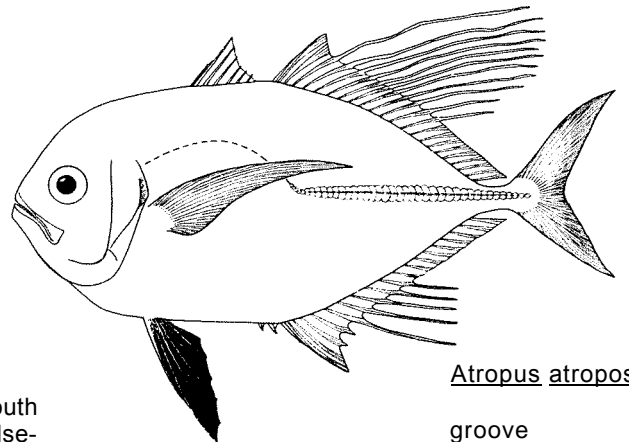
Coastal waters throughout its range.

CATCHES, FISHING GEAR AND FORMS OF UTILIZATION:

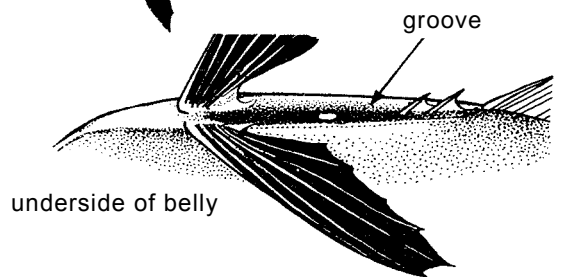
Separate statistics are not reported for this species.

Caught on hook and line, bottom trawls and several types of artisanal gear.

Marketed fresh and dried salted.



Atropus atropus



underside of belly

