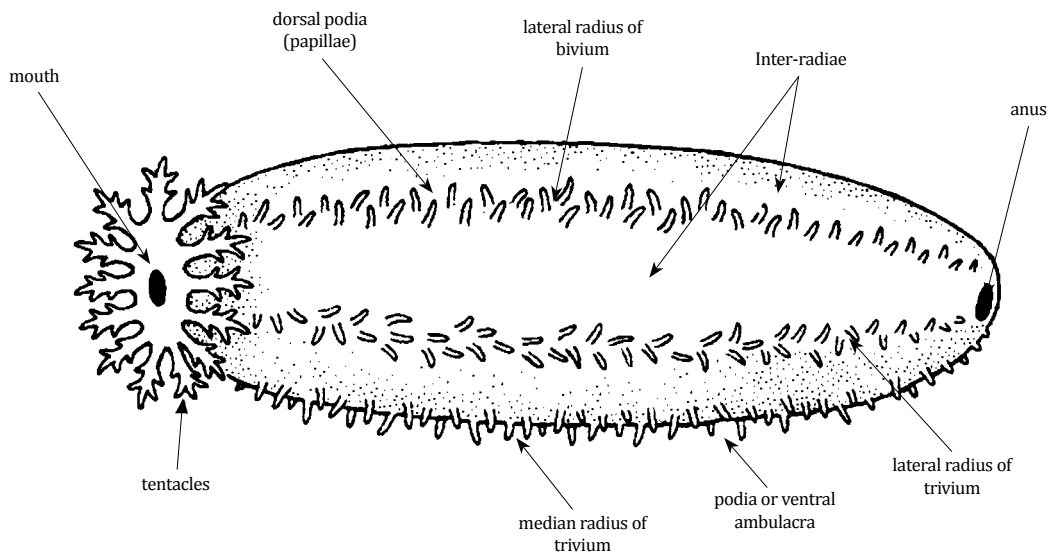


# SEA CUCUMBERS

The sea cucumber fishery is an important source of livelihood to many households in the coast of Kenya (Conand et al., 2006), although they are not eaten by local people. There are several commercially important sea cucumber species in Kenya. In the southern coast, *Holoturia scabra* is the most commonly landed species, followed by *Stichopus hermani* and *Holoturia nobilis*. Sea cucumber catches have significantly decreased over the years. Some low-value species are increasingly getting important to fishers' catches to make up for the decrease in the size and quantities of high value species.

## TECHNICAL TERMS AND MEASUREMENTS



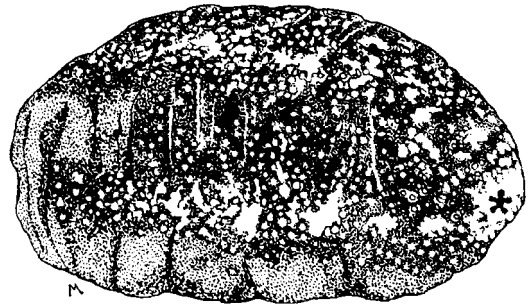
Sea cucumbers have an orally-aborally elongated body. The body is formed like a short or long cylinder, with the mouth (at the anterior end) encircled by tentacles, and the anus (at the posterior end) often edged by papillae. The pentamerous symmetry is sometimes recognizable by the presence of 5 meridional ambulacra bearing podia. Sea cucumbers often lay on the substrate with their ventral surface or trivium, formed by the radii A, B, and E in the Carpenter system for orientation. This creeping sole bears the locomotory podia, while on the dorsal surface, or bivium, the podia are often represented by papillae. Consequently, a secondary bilateral symmetry is evident. The mouth is terminal or displaced dorsally, surrounded by a thin buccal membrane, and generally bordered by a circle of tentacles.

**HOLOTHURIIDAE**

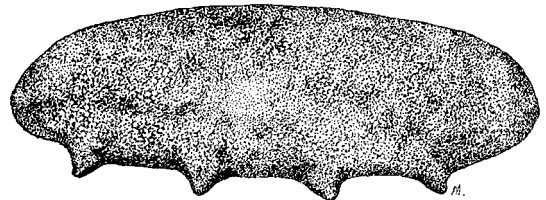
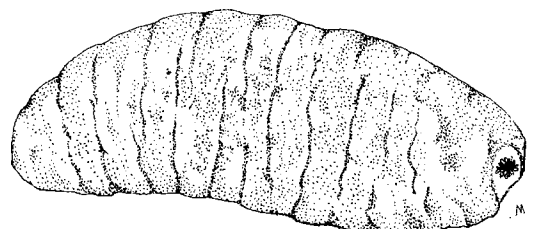
## Sea cucumbers

***Actinopyga mauritiana*** (Quoy & Gaimard, 1833)**FAO names:** Surf redfish (En)

Holothurie brune des brisants (Fr)

**Local name(s):** N: Jongoo; S: Jongoo (M/K).**Habitat:** Benthic, neritic in great abundance in sand stone and dead corals close to luxuriant coral reefs.**Fisheries:** Hands.**Distinctive characters:** Body arched dorsally (bivium) and flattened ventrally (trivium); bivium sometimes wrinkled, wider in the middle and tapering towards both ends; papillae on bivium long and slender; podia numerous on trivium; mouth ventral, surrounded by 25 short and stout tentacles.**Colour:** In life, when contracted is deep chocolate brown with crevices bordered with a light grey border; uniformly deep brown immediately surrounding cloaca; grey below.**Size:** To 35 cm, common 20 cm***Holothuria nobilis*** (Selenka, 1867)**FAO names:** Black teatfish (En)

Holothurie noire à mamelles (Fr)

**Local name(s):** N: Jongoo; S: Jongoo (M/K).**Habitat:** Benthic, neritic less common in deeper water surf reddish on sand stone and dead corals down to 20 m.**Fisheries:** Hands.**Distinctive characters:** Body sub oval, stout, firm and rigid, arched dorsally (bivium), and flattened ventrally (trivium); bivium with characteristic large lateral papillae (teats) and often covered by sand; podia on trivium stout, arranged irregularly; mouth ventral, surrounded by 2 rows of black papillae and 20 stout tentacles.**Colour:** In life, dark chocolate brown with large raised white areas adjacent to sole; tube feet milk white but background brown.**Size:** To 60 cm, common 37 cm***Holothuria scabra*** Jaeger, 1833**FAO names:** Sand fish (En)**Local name(s):** N: Jongoo jeupe; S: Jongoo (M/K).**Habitat:** Benthic, neritic, abundant on mud, sand and sea grass beds from 2 m to 70 m.**Fisheries:** Hands.**Distinctive characters:** Body oval, arched dorsally (bivium) and flattened ventrally (trivium); bivium with characteristic wrinkles, covered by sediment when the animal is coming out of the bottom; bivium with small papillae within black dots, and black podia; podia on trivium arranged irregularly; mouth ventral, surrounded by a collar of papillae and 20 short and stout tentacles.**Colour:** In life, brown with small white spots dorsally, or a few pale blotches; sides becoming pale and sole milky white.**Size:** To 40 cm, common 22 cm