# La Conchiglia

INTERNATIONAL SHELL MAGAZINE

The Shell

Year XXVII - n 276, July September 1995 -III Quarter
Quarterly- Sped. Abb. Post. 50% Rome- US $ 12.50 - TAXE PERÇUE P.P. - TASSA RISCOSSA P.T. ROME

# *Bistolida owenii vasta* in Tanzania

**FELIX LORENZ, JR.***

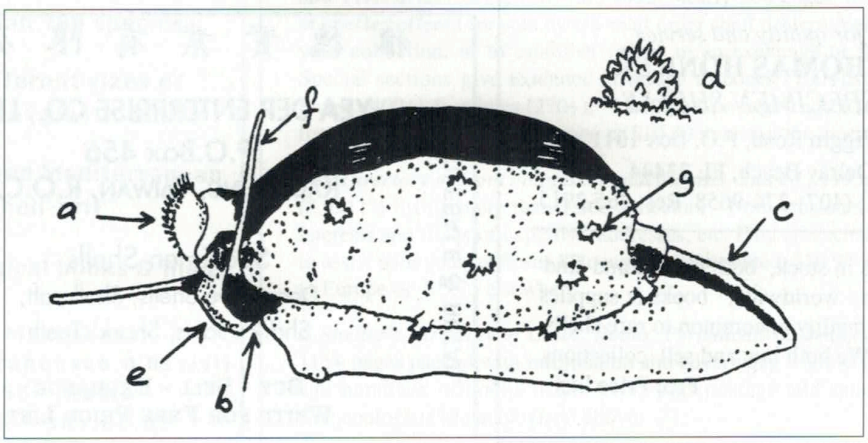
When I started shell collecting in Tanzania back in the Seventies, all the local cowry-collectors were after species like *L. argus contrastriata, B. stolida diauges* and *P. microdon*. The crown of all local rarities, however, always belonged to *Bistolida owenii vasta* Schilder & Schilder 1938. Woltz and Belcher had already pointed out the extreme rarity of this species.

The most active local collector in the Sixties and Seventies, Misha Fainzilber, told me that he had found no more than 5 specimens in the Dar-es-Salaam area and only few more in Zanzibar, always in moderately shallow waters, in association with the "Cauliflower Coral" *Galaxea clavus*. In the wake of excessive dynamite fishing and destruction of almost every reef in Tanzania (including Zanzibar and Pemba) in the Eighties, many of the rarer species disappeared completely, and even some of the common ones (for instance *Lyncina vitellus*) suddenly were no longer available in many areas.
Since about 1982 no more *owenii vasta* were found anywhere in Tanzania, despite a desperate search by both native fishermen and European collectors: it seemed apparent that the species had become extinct in Tanzania.

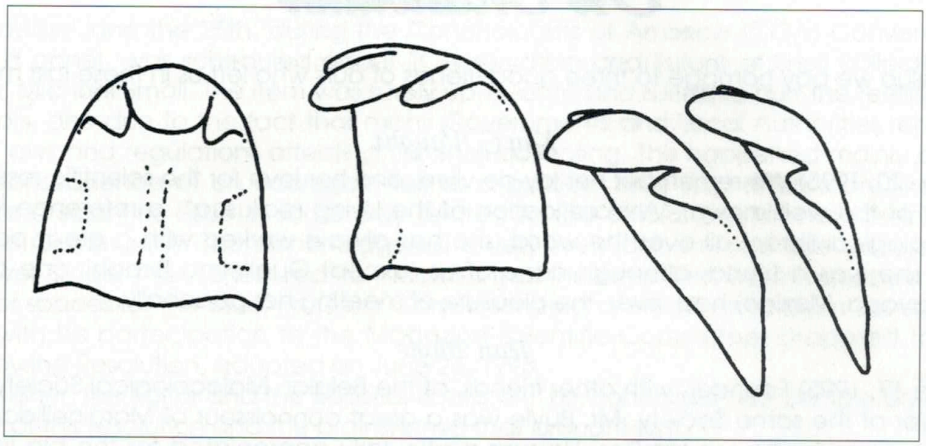
Woltz and Belcher gave three localities for *owenii vasta* from Dar-es-Salaam, Pangavini and Tiles (small islands whose reefs are badly devastated), and Fungu Mkadya, a submerged reef approximately 15 kms north of Dar-es-Salaam, situated in front of the Bahari Beach Hotel, about 2 kms offshore. On this rather remote reef, normally not visited by anybody but local fishermen, some dynamite fishing is done even today. I was snorkelling on this reef and searching among pieces of *Galaxea* corals for *Conus mitratus* and cowries like *teres pellucens, chinensis variolaria* and *punctata berinii* when suddenly a tiny black thing dropped from a piece I had just overturned...

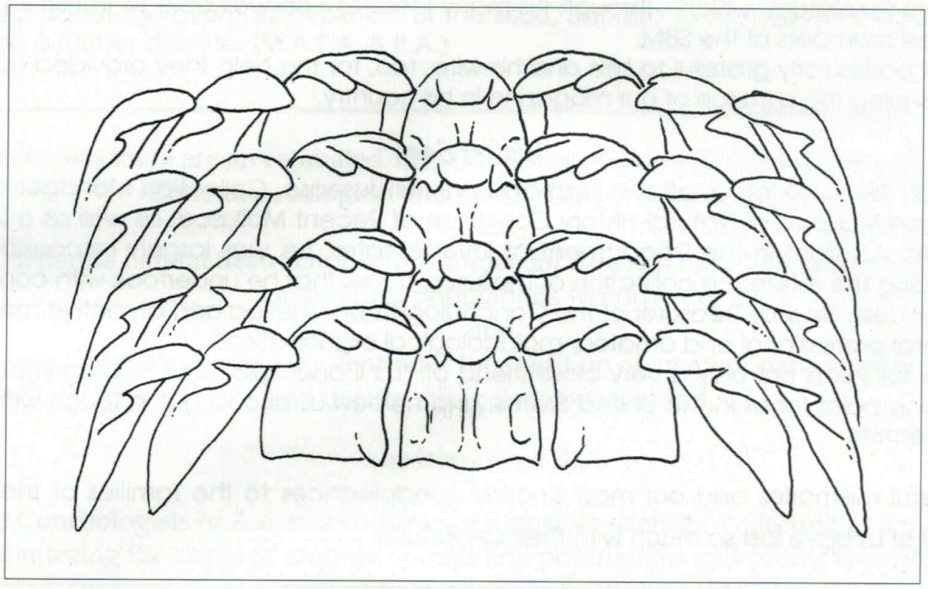
My *owenii vasta* was not a gem: it had a little healed fishbite, but that did not matter to me at all. The animal had immediately retired deep into the shell and did not show until late in the evening. I kept it in a dark, cooled container of seawater. The slightest light made it retract immediately. Unfortunately taking a photograph turned out an impossible task. More sadly still, although kept under optimal conditions, the animal died that very night. But at least I can furnish a drawing and detailed description of it.

Woltz and Belcher described the mantle of *owenii vasta* as being "clear yellow and smooth". My specimen revealed a bright yellow mantle obscuring the dorsal pattern almost completely. There are numerous branched papillae of the same colour (d, g), typical for *Bistolida* species. The foot of *owenii vasta* is clear white, with a black stripe reaching from the posterior end of the shell to the tip of the foot (c). The proboscis is yellow-orange with a dark brown ring at its base (e), the tentacles are bright red (f), the eye-stalks are black (b). The translucent white siphon is framed with fine papillae (a). Like its close relative, also *B. owenii vasta* seems to be able to release the posterior portion of the foot (in the freshly dead animal the



striped part of the foot simply fell off). This mechanism to confuse predators is quite common in Cypraeidae. The radula is illustrated below.





The shells of East African *B. owenii vasta* are characterized by being rhomboidal-callous, with bent up, densely spotted margins. The teeth are coarse and dense, reaching far across the base. The dark greenish, rarely bluish dorsum shows a prominent dark brown blotch. The tips are yellowish, with distinct terminal spots. Base and margins are white. Fresh shells can be almost black dorsally but fade quickly.

*B. owenii vasta* ranges from the Transkei Coast up to Natal, where it is most common. Few specimens have been found from Mozambique to Tanzania, which is the Northern distribution limit of the subspecies. In recent years several specimens have been found in Northern Madagascar.[1]

The typical *B. owenii owenii* (Sowerby, 1837) is restricted to the Mascarene Islands and the Seychelles. It is mostly narrower and paler bluish than *o. vasta* and only rarely presents a dorsal blotch. The base is more flattened, while the margins are angular and not as callous and bent up as in *o. vasta*.

1 - Chip Woltz & Claude B. Belcher (1968). "Collecting Cowries in Dar-es-Salaam", privately published.
2 - Felix Lorenz, jr. & Alex Hubert (1993). "A Guide to Worldwide Cowries", Christa Hemmen Verlag, p. 12.

* Rosenstr. 4, D-35418, Gr. Buseck, Germany