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# CITER



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# DISCOVERY OF FRINGING REEFS OFF KARNATAKA COAST

Recently, Mangalore Research Centre has completed the field work along Karnataka coast under the consultancy programme "Survey, inventorying and database creation of marine and coastal aquatic biodiversity" for the Karnataka Biodiversity Board, Forest, Ecology &

reefs were found on granitic base. Sea depth surrounding this island was 6 to 40 m and water visibility was 15 to 30 m. The diving support for the study was given by the professional diving group, M/s. Barracuda Diving Services, Miramar, Goa.



Coral: Porites sp.

Coral: Favia favus

Environment Department, Govt. of Karnataka. The survey has revealed the existence of a rich fringing coral reef ecosystem surrounding Netrani Island (Lat. 14<sup>0</sup> 00' 95 N; Long. 74° 19' 78.1" E) located off Murdeshwar, nearly 19 km away from the mainland (see the map). The fringing

The survey team has observed the following benthic coverage in the Netrani Island: hard coral (14.7%), sponges (2.7%), algae (63.2%), boring polychaetes (13.3%) and mussel (0.3%). Twelve coral and four sponge species were collected from the area. Several small giant clams (*Tridacna* 



Coral: Coscinaraea monile

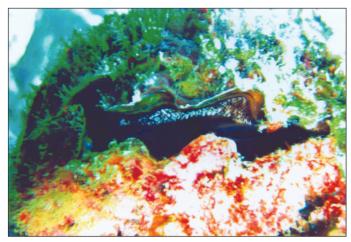


Coral: Pocillopora verrucosa

(Contd...)

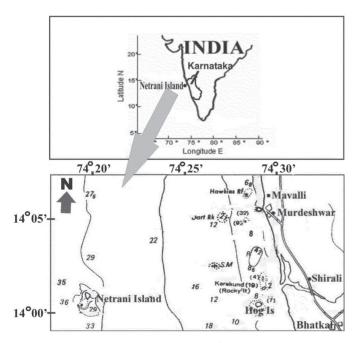
### (Discovery of ...... Contd. from page 1)

maxima) which are protected under the Indian Wildlife (Protection) Act and included in the IUCN Invertebrate Red Data Book as 'Lower Risk: Conservation Dependent' species were observed from this area. This is the first report of existence of small giant clams from the west coast of



Giant Clam Tridacna maxima

India. Twelve species of corals such as *Porites* sp., *Favia favus*, *Pocillopora* sp., *Pocillopora verrucosa*, *Goniastrea pectinata*, *G. retiformes*, *Goniopora* sp., *Plesiastrea versipora*, *Coscinaraea monile*, *Turbinaria* sp., *Leptastrea* 



Map showing the location of Netrani island

sp. and *Dendrophyllia* sp. have been identified from this island. The coral ecosystem was very rich in biodiversity with nudibranchs, schools of blue trigger fish, fusiliers, groupers, parrot fish, gobies, lion fish and scorpion fish.



Toad fish

Nine grouper species were observed, out of which two were included in the IUCN Red List of Threatened Species and not recorded previously from this region. Even another threatened and valued fish species, Napoleon wrasse (*Cheilinus undulatus*) was known to inhabit this island (Mr. Venkat Charloo, Barracuda Diving Services, pers. obs.).

This is the first record of corals, small giant clams and grouper species such as *Aetheloperca roga*, *Cephalopholis sonnerati* and *Epinephelus longispinis* from the islands situated off Karnataka coast. At present, Netrani Island is used for target practice by the Indian Navy, and it was pretty obvious by the scars on the sides and the large white target marks inscribed on the rockfaces. Several exploded bomb shells were found lying in and around the island. Wide spread damage to corals due to shelling was observed in the area. Based on the study, it is recommended to protect and conserve the Netrani Island ecosystem as a marine protected area (MPA) and as a place for watching fish and other marine life in their natural environment.

(Article contributed by Dr. P. U. Zacharia, DFD, Dr. P. K. Krishnakumar, FEMD, Shri. A. P. Dinesh Babu, CFD, Dr. P. Kaladharan, FEMD and Shri. K. Vijayakumaran, FEMD)

### **RESEARCH HIGHLIGHTS**

## Pinctada margaritifera in Minicoy Waters

The availability of black lip oyster, *Pinctada margaritifera* in Minicoy waters was noticed from June 2003 onwards. Two spats (one live & one dead) of the same measuring 52.25 mm (live) and 49.97 mm (dead) were collected from the Eastern side ship mooring buoy when it was hauled for the maintenance on 11.06.2003. The live one was reared along with the *P. fucata* in the Eastern side raft, off old