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nudibranch NEWS

editorial

What is the world coming too? Two well known researchers Mike Miller and Clay Carlson had a lucky escape from a possible deadly situation in the Phillipines recently when the resort they were staying was attacked by terrorists.

This issue is late. I have had some trouble bending time to fit my needs (hee hee hee).

Enjoy and with luck we will be back on schedule soon.

Correction from last issue

Philinopsis pilsbryi

This is a variable species although most of the animals I have found on Heron Reef have been creamish-white with strong black markings arranged in circles. It has been found subtidally on sand as well as on the intertidal sand flats.

Philinopsis lineolata

The torpedo shape of the body is most obvious in this species. It is a very distinctive species with a creamish body banded with narrow dark brown disrupted transverse lines. The edges of the parapodia and tail are tinged with blue.

in this issue

miquel pontes

Dendrodoris grandiflora

This nudibranch was first described by Von Rapp in 1827. It is a big doridacean for the Mediterranean sea, as it reaches lengths of 10 (19) cm depending on the author, but the animals you may find in a dive are usually smaller.

The body is flattened, rounded and colored white or light gray with darker spots. Body consistency is soft, almost gelatinous, and the skin is transparent. The foot and the lower parts are also colored white with dark spots (a distinctive trait). It has no oral tentacles, but oral folds instead.

The border of the notum is about 5 mm wide, and it's decorated by many dark lines perpendicular to the border. This trait helps to differentiate this animal from the very similar in shape *D.limbata*.

Rhinophores are big, measuring up to 1 cm and they are located near the border of the notum, showing each one from 24 to 30 lamella and a white tip.

Gills consist on 7-8 tripinnate branches that when extended are relatively big, up to 20 mm, a trait that inspired the authors on the gender name: *Dendrodoris* comes from the Greek word "*dendron*", that means *tree*, and *Doris*, the name of a marine nymph. The species name *grandiflora* seems to be related as well to the aspect shown by the extended gills, as *grandiflora* means "big flower". These respiratory organs are located near the end of the dorsum and, as the rhinophores, show white tips.

The *Dendrodoris grandiflora* is a rare species that can be found on rocky bottoms and on sea grass and algal meadows. It is believed that this dorid preys on sponges of the gender *Suberites*, so it's distribution range along the Mediterranean Sea is probably related.

It's bathymetric range goes from surface to great depths. It's more common below 30 meters and occasionally under stones. Reproduction takes place from March to April, then it's easier to spot them. This is a fast moving species, so it's not always easy to photograph it.

Reader can find more information in the following sites:

- **MedSlugs**
  http://www.medslugs.de/E/Mediterranean/Dendrodoris_grandiflora.htm
- **Sea Slug Forum**
  http://www.seaslugforum.net/dendgran.htm
- **Invertebrados de la costa de Granada (in Spanish)** http://www.ugr.es/~lstocino/d_grandiflroa.htm
- **M@re Nostrum (in Spanish)**
  http://marenostrum.org/opistobranquios/dgrandiflora


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heron island opisthobranchs

julie marshall

Heron Island is a coral cay situated in the Capricorn Bunker Group of the Great Barrier Reef about 64 km offshore from the Queensland port city of Gladstone. Last month I showed some of the Cephalaspideans that can be found in the sandy zone which occurs round the Island (unfortunately the captions for *Philinopsis lineolata* and *Philinopsis pilsbryi* were reversed in this article as it appeared on the website). This month I am featuring some of the nudibranchs found in this zone.

Nudibranchs found in the Inner Sandy Zone

The most common nudibranchs found on the sand flats round Heron Island are the Gymnodorids although a number of other species are also found including the flamboyant Spanish Dancer, *Hexabranchus sanguineus.* The pictures below are of three gymnodorids and the spectacular aeolid, *Cerberilla affinis.*

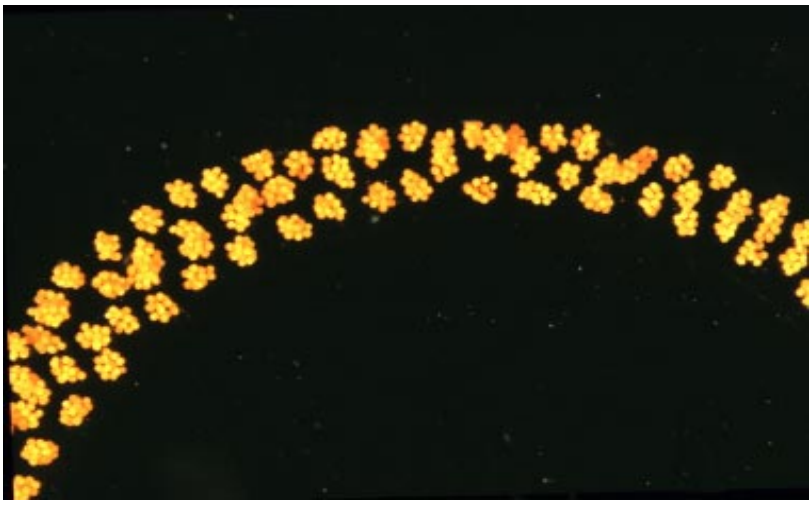
Although all nudibranchs are carnivores, most species feed on sedentary animals such as sponges, hydroids and bryozoans. The gymnodorids, however, are voracious predators of other opisthobranchs, some of which they find whilst crawling over the sand. They all have very soft bodies and lack a notal brim.

Gymnodoris sp.

This large unnamed species is regularly found on the sand in all months of the year. It is pale yellowish brown although occasionally dark brown animals are found. There are low pale pustules over the whole body and the large gills form a circle. Most animals vary between 50 and 70 mm in size.

Gymnodoris ceylonica

This is another large species which has only been found on one visit in November 1997, but then it occurred in large numbers. It is white with large orange spots, which are usually raised on low pustules. The gills are very large and form a circle. Its food is other opisthobranchs, especially the sea hare, *Stylocheilus longicauda* (Gosliner et al. 1996). The size of adults is usually 40 to 60 mm although some animals grow much larger. *Gymnodoris ceylonica* lays an orange spawn mass with the eggs arranged in clusters (see second photo).



Analogium striatum

This species is distinguished from other species of *Gymnodoris* by having its gills in a transverse row rather than a circle. Its colour is translucent white with longitudinal gold lines on the body. According to Johnson and Boucher (1983) it preys on the sand-dwelling sacoglossan, *Plakobranchus ocellatus.* It grows to 55 mm in size.

Cerberilla affinis

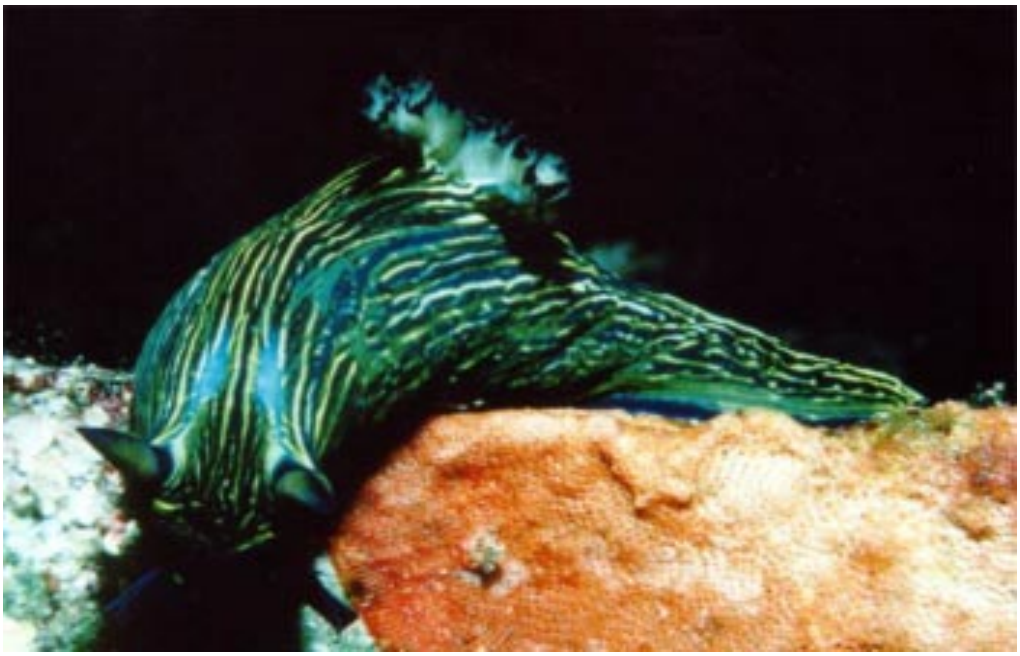
This large aeolid nudibranch is difficult to find as it can bury itself very rapidly. Its cerata are very long and numerous and they are arranged in rows with the longest in the centre of the body. When an animal is disturbed the longest cerata are extended and writhe about (see second photo). It has a very broad foot which it uses for crawling across the sand, and also exceptionally long oral tentacles. *Cerberilla affinis* feeds on burrowing sea anemones. The Californian specialist on sea anemones, Cadet Hand, has described how a similar species, *Cerberilla mosslandica,* uses its long oral tentacles to wrap round the anemone, whilst rasping its flesh with its radula (R. Willan, pers.comm.). *Cerberilla affinis* can grow to 45 mm in size.

References

Gosliner, T.M., Behrens, D.W. & Williams, G.C. 1996. Coral reef animals of the Indo-Pacific. *Monterey, California, Sea Challengers. 314 pp.*

Johnson, S. & Boucher, L.M. 1983. Notes on some Opisthobranchia (Mollusca: Gastropoda) from the Marshall Islands, including 57 new records. Pacific Science *37(3): 251-291.*

Marshall, J.G. & Willan, R.C. 1999. Nudibranchs of Heron Island, Great Barrier Reef: a survey of the Opisthobranchia (Sea Slugs) of Heron and Wistari Reefs. *Leiden, Backhuys Publishers.*



Photos by:
Dave Mulliner
Hans Bertsch
Anne DuPont
from
A Field Guide to Marine Molluscs of Galapagos

A Field Guide to Marine Molluscs of Galapagos - An Illustrated Guidebook to the Common Intertidal and Shallow-water Snails, Bivalves, and Chitons of the Galapagos Islands.

1999. By Cleveland P. Hickman, Jr and Yves Finet

book review

dave behrens

Marine Molluscs of Galapagos is one of a growing series of field guides written by colleague Cleve Hichman on the invertebrate fauna of the Galapagos. Other guides available in this series include: the Crustacea and the Echinoderms. These small spiral bound guides are the perfect size and weight to carry with you on your trip to Galapagos. The text begins with a description of the islands and the origin of the molluscan fauna found there. Organized in phylogenetic order, by family, species presentations include common name, scientific name with author and date of description (an attribute I personally would like to see more often presented), size, complete morphological description, habitat preferences and the geographic range of the species. As the subtitle indicates, the guide include all mollusca except the cephalopods. Thirty-one species of opisthobranchs are included.

An excellent photo accompanies each species description. In the opisthobranch section the authors have used photos by Paul Humann and Terry Gosliner to supplement their own shots. I find the species coverage to be very comprehensive, even including the undescribed Roboastra shown here.

Paging through the dorids I am reminded that although the Galapagos are primarily temperate, the fauna is richly represented by more tropical Chromodorids, which make up 1/6th of the fauna.

The sections covering the prosobranchs, bivalves, pulmonates and chitons contain great photos showing, not only the appropriate view of the critter necessary for a good ID, but variations in colour and live animal shots for groups like the cowries and other species where the characteristics of the mantle are important features for the reader to know.

You will find the taxonomy to be impeccably accurate, due to technical editing by Terry Gosliner. Presently this compact (150 page), yet comprehensive and useful guide is the only text available on the mollusc fauna of this part of the world.