

4.08

June -July 2002

The task of civilisation is to protect us against nature – Sigmund Freud

nudibranch
NEWS



editors notes

I thought this issue would never come out. between a busy work schedule, computer problems and deciding whether to go to China to teach, things have been chaotic around here.

Hopefully the newsletter will be back on track as I free up some computer time.

The other time consumer is the tour guide "Silent Sentinels – a guide to the GlassHouse Mountains". When I replaced my old printer I "forgot" to mention I needed duplex printing. The Canon is a great little printer except when it comes to hand feeding hundreds of pages through. Now Steve Irwin's (the crocodile man) Australia Zoo is stocking it, the time has come call in the printers. This will free up my time and computer resources to dedicate to nudibranch NEWS.

Carol Harris sent in a great article this month, regrettably all the images have turned monochrome. We will attempt to sort things out for the second half of the article.

visit www.diveoz.com.au

readers nudibranchs

The waters of the UAE are not the best in terms of visibility (average 3m-10m), but in terms of the multitude of species that one can encounter, this more than makes up for the visibility! Of course, using an underwater camera takes a little bit of practise and I quickly realised that by concentrating on nudibranchs with my macro lenses presented a better return and less disappointment on reject slides! Nudibranchs are my first love, closely followed by seahorses, pygmy seahorses, ghost pipefish, flamboyant cuttlefish, frogfish, sharks and whalesharks, and ... and... and ...

I kept promising Wayne to share some of my pictures since I live in the Middle East and travel several times a year for vacations, so here's the first installment (maybe last?) and the theme is ORANGE nudibranchs. Working for a large courier company (FedEx) whose branding is orange and purple, I always tend to find orange things particularly appealing underwater! I hope you enjoy.

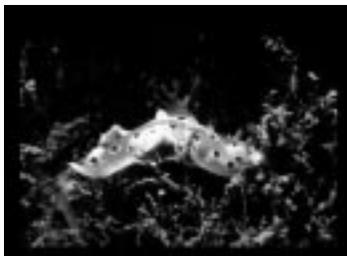
***Thecacera pacifica* (18-28m depth, 30mm)**



We were diving on a dive site called Coral Gardens 24-28m in UAE and found this gorgeous nudi hiding between some featherstars. As the dive time was relatively short and of course not having the right lens I went back the following day searching for our new visitor. It was rather like looking for a needle in a haystack since our dive sites are not buoyed and Coral Gardens is a large sprawling dive site. However, after 10 mins of frantic searching, I found it and took as many photographs as the strobe and time would allow. However, since this initial incident we do see them several times a year. After reading up about them, we are wondering if they were brought to the UAE by sticking to hulls of boats or carried in the ships bilge water tanks as they were plying their trade between South Africa and the UAE.

***Plocamopherus sp.* (16-**

20m depth, up to 140mm)



Adult



Juvenile



Feeding on bryozoans

We (Dave Behrens) believe this to be a new species to science and we are waiting for news on this beautiful creature. We have encountered this on a one off occasion in the UAE about 5 years ago and last year, we were watching it grow between January to April. We were hoping to find one again this April, since it feeds on black branching bryozoans which are in abundance, unfortunately, no sightings so far. This is a large and beautiful nudi, I've added a gorgeous close up with it munching on its favourite food!

Berthella sp. (20m depth, 40mm)

This was a recent find on a night dive on Martini Rock, UAE and it's also the first time we have encountered Berthella's here. It was totally light sensitive and was running off back down a crack quicker than I could get my strobe to recycle, but I did manage to get 3 or 4 photos of it before it disappeared. The lighter spots actually looked like stars as the strobe was firing taking the photos.



Umbraculum umbraculum (16-20m depth, 180mm)

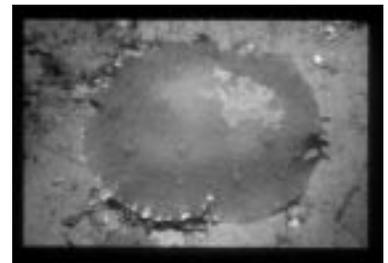
Indonesia
The shell lifts up to expose the
rhinopores?
photo from UAE

We have encountered these in Lambeh Straits, Australia and twice in the UAE, on a dive site called Anemone Gardens. The colourations are slightly varied but always with varying degrees of oranges. Some are more camouflaged than others and it appears to have an additional unnecessary shell stuck on the top which appears to protect its gills.



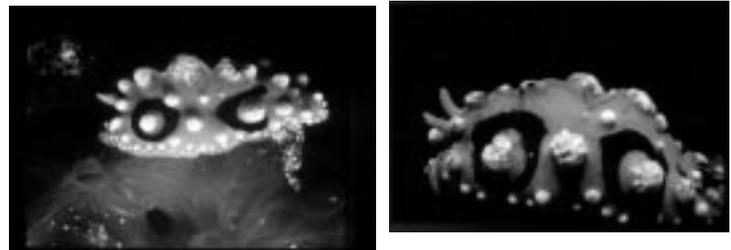
Pleurobranchus sp. (16m depth, 150mm)

This large nudi was found during a night dive in Port Stephens, Nelson Bay, after waiting for slack tide all day. We enjoyed as much time on the dive at this time since the tide really rips through the area making it impossible to dive at any other time except at slack. A large sized nudi with additional raised postules evenly spaced over the mantle.



Phyllidia ocellata (16-22m depth, 30mm)

These nudis are rather common to find in Sipadan, Indonesia and Philippines, with varying colourations.



Carole Harris

Background:

I learnt to dive in 1986 in the temperate waters of the United Arab Emirates (UAE), located between Africa and India. Initially I concentrated on gaining more dive qualifications but after discovering the beauty of the underwater realm, I wanted to capture some of these images. After being run over by a boat, as we were stationary over a well-known wreck/dive site we were awarded some funds for loss of gear/inconvenience, making it possible for me to invest in my first Nikonos underwater camera.

nudibranchs



**miquel
pontes**

Dendrodoris limbata

First described by Cuvier in 1804, *Dendrodoris limbata* is a medium sized nudibranch, as it can reach up to 7 cm in length. The body is variable coloured but the basic color seems to be orange to reddish brown with dark spots. The skin of

the body of this nudibranch is smooth and translucent.

The margin of the body is relatively thin and brightly colored, ranging from yellow to orange. This margin is not as developed as is in *Dendrodoris grandiflora* -which has a much wider and heavily striated margin-, and it is a very characteristic trait to differentiate these two species. The color of the margin becomes highly apparent when the body of the animal is not of the same color or it shows a darker shade of the same color.

This colored margin is a caution message to all predators; several studies reveal that powerful toxic substances are located specifically on the margin of the body. There are also toxic substances in the branches, the reproduction organs, and the egg spawns.

Dendrodoris limbata has retractile lamellate rhinophores with lighter colored tips. The branched gills are tripinnate, also retractile and also with lighter colored tips.

This nudibranch lives in shallow water, usually in depths above 60 meters, and is commonly found on rocky bottoms and in seagrass meadows. Young specimens are commonly found under rocks, while several authors affirm that this habitat is also for the adult animals. This nudibranch is present through all the seasons, but the largest specimens are usually found in winter and spring.

Previously described as an endemic species to the Mediterranean Sea, there are several recent and confirmed reports on *D. limbata* for the near Atlantic Ocean, specifically in the northern coast of Brittany (France). It seems that the geographic range of *D. limbata* is changing lately, probably as a consequence of the rising water temperature, but human introduction can not be discarded as the main cause.

Etimology of the genus name "Dendrodoris" comes from the greek word "dendron", meaning "tree" -related to the characteristic branched gills of this nudibranch- and from the word "Doris" which is the name of a marine nymph of the Greek Mythology. The word "limbata" refers to the brightly colored margin that surrounds the body.





Reader can find more information and pictures in the following sites:
* Opisthobranchios de la costa de Granada: http://www.ugr.es/~Istocino/d_limbata.htm
* Sea Slug Forum: <http://www.seaslugforum.net/dendlimb.htm>
* Medslugs: http://www.medslugs.de/E/Med/Dendrodoris_limbata.htm
http://www.medslugs.de/E/Atl-E/Dendrodoris_limbata.htm

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.

Nudibranchs of the Reef Crest: Family Dorididae (2) – Genus *Platydoris*

Platydorids have flat, relatively stiff bodies with a grainy texture which makes them feel rough to touch. Both their rhinophoral sheaths and gill pockets have raised edges. They are some of the largest of the nudibranchs found at the reef crest at low tide under the dead coral slabs. Platydorids feed on sponges.

***Platydoris cruenta* (Quoy & Gaimard, 1832)**

Platydoris cruenta is distinctive in having numerous short brown streaks and usually large irregular blood-red patches on its mantle. The undersurface of the mantle also has brown lines and scattered red patches. The name *cruenta* means blood spattered but as can be seen in the second photo the patches are sometimes orange rather than red. This species can grow to 100 mm but 40 to 60 mm is usual for adults. It has an Indo-West Pacific distribution and within Australia has been recorded from Western Australia and New South Wales as well as from Queensland.



***Platydoris formosa* (Alder & Hancock, 1864)**

Platydoris formosa also has red patches on its body but differs from *P. cruenta* in having numerous fine blackish-brown specks rather than brown lines. The actual colour of its mantle is creamish but the extensive red patches sometimes make the mantle appear reddish overall as in the second photo.

The undersurface of the mantle is white with numerous red patches. This species can reach over 100 mm in size with most adults being around 75 to 95 mm. It has a wide Indo-Pacific distribution being recorded from Zanzibar in the Indian Ocean to Hawaii in the Pacific Ocean.



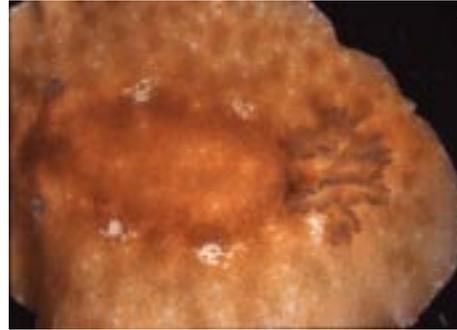
***Platydoris scabra* (Cuvier, 1804)**

Platydorid scabra is the most common platydorid found at Heron Island and also has a wide Indo-Pacific distribution. It has a white mantle with numerous irregular brown blotches made up of tiny granules. In some areas these form large patches on the body. The undersurface of the mantle is dirty white and there are some brown speckles on the foot. It is slightly smaller than the previous two species with most adults ranging from 45 to 75 mm.



***Platydorid cf. tabulata* (Abraham, 1877)**

Platydorid cf. tabulata has a creamish white mantle which appears brown due to most of the dorsal area being covered by fine brown speckles. These are most dense in the central raised area of the mantle which also has two or three irregular bare patches on either side of it allowing the creamish colour of the mantle to be visible as can be seen in the close up photo of part of the mantle. The undersurface of the mantle and foot is creamish-white with a band of brown dots around, and on, the foot. The rhinophores are greyish brown. The gills are brown with grey edges. The animal found at Heron Island was 45 mm in size.



Platydorid sp. 1

This species has a pale yellow mantle with a darker yellow marginal band and a number of brownish black spots of varying size especially near the edge of the mantle. These spots appear solid but are actually formed from microscopic brown speckles as can be seen in the second photo. The rhinophores are yellow and the gills are yellow with brown lines up both axes. This species is smaller than the previous ones with most animals varying between 20 and 30 mm. It has also been found at Vanuatu (Stenhouse, 2001)



Platydorid sp. 2

Platydorid sp. 2 is distinctive in having a deep maroon mantle and an orange-yellow foot. There can also be white speckles on the mantle, especially down the centre and around the margin, which look like sprinkles of sand. The rhinophores are maroon and flecked with white. The gills are creamish white which make them contrast strikingly with the maroon mantle. Animals found have ranged from 30 to 45 mm.



References:

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.

Stenhouse, V. 2001 (January 28). Unknown dorid from Vanuatu [Message in] *Sea Slug Forum*. <http://www.seaslugforum.net/find.cfm?id=1575>



**Guide to Marine Invertebrates of Valdivia
 2001. By Carolina Zagal and Consuelo Hermosilla**

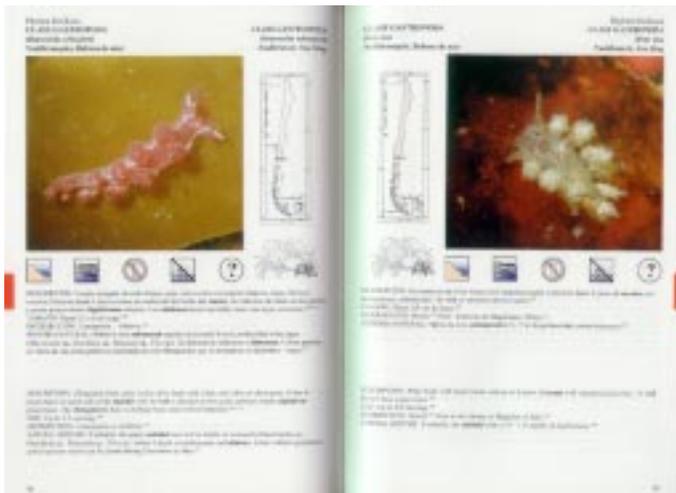
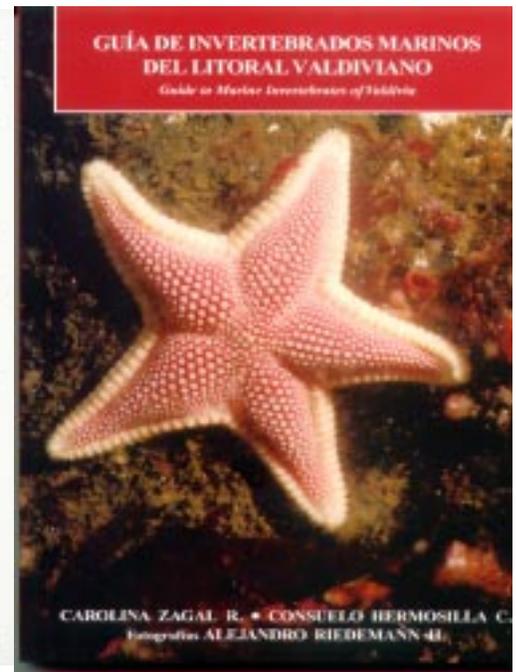
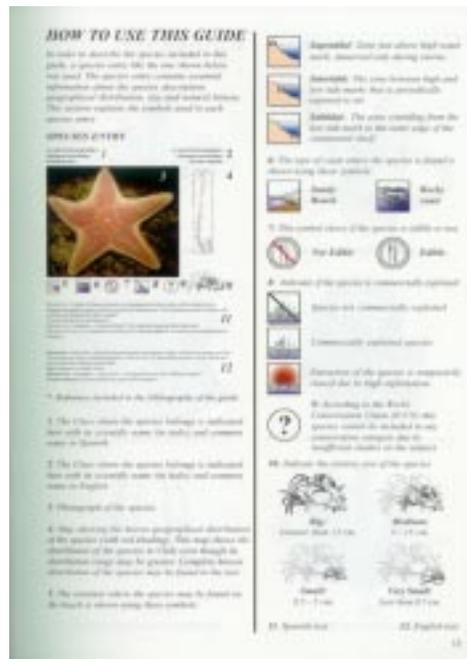
This month the Australian Nudibranch News brings you a book review from the tip of Chile, South America. Yes, that's right, and yes Valdivia, near the southern end of Chile has a diverse and interesting marine invertebrate fauna.

This field guide is one of the best regional guides we have seen. Each species description is written both in English, and Spanish for the local scientific and diver population. The authors have gone to much farther than most guides by providing an incredible user friendly format, which consists of a series of "Key" symbols and figures with the text of each species (see "How to Use This Book" page, shown here). These symbols and figures show the species range along the coast of Chile, it's depth preference from supratidal through intertidal and subtidal, sandy beach or rocky shore occurrence, whether or not it is edible, commercial uses, and size. The species descriptions are complete repeating size, distribution and natural history for those readers who are not into symbols.

The book covers about 153 invertebrate taxa. For the *Brancher*, Carolina and Consuelo have included 10 species of nudibranchs, each with a high quality colour photo. I have to say it has all ready come to my rescue in identifying species from this area. The book is very well researched and contains 248 literature citations. It also includes a section with maps and tables presenting the documented occurrences of each species. A glossary and systematic list of species is also included.

Whether you plan to visit this region or just want a well written account of the species occurring here for your library, this is a guide we definitely recommend.

Softcover, 217 pages, 153 color photos, dozens of black and white drawings and 100's of maps
 Retail price - \$35.00 USD.



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