4.03

December 2001

All we are saying is give peace a chance - John Lennon

nudibranchNEWS

Season's greetings to one and all.

editorial and feedback

Dear Wayne,

This is the only (!) Nudibranch photo I took on the Yongala. We did see a few others, but I didnt have my Macro lens.

At first we were not sure it was even a nudibranch (refer correspondance below with Neville Coleman). Photo was taken on 24th November on the night dive using 2:1 Macro kit for Nikonos III.

Cheers

Alison Smith



Nev's comments: See page 39 1001 NUDIBRANCHS. Your critter is an aeolid nudibranch the same as Rogers, BUT yours is wrapped up and probably asleep, (non-active at night?)

Seems interesting (newsletter). I have some photos of Nudibranchs from my diving. This one was taken at Palmbeach Reef on the Goldcoast. – Jamie Mulcahy (jamiem@hn.ozemail.com.au)



in this issue

17.....editorial and feedback 18....mediterranean nudibranchs 20....heron island opisthobranchs 22....book review I have updated the Scottish Nudibranchs site again. There are now 42 species on the site illustrated by more than 150 images. Some new pictures added, a general overhaul and links added to all images to the British Isles Nudibranchs site of Dr. Bernard Picton and Dr. Bill Rudman's Sea Slug Forum to enable you to obtain more detailed information on each species.

Kind regards
Jim Anderson

visit www.diveoz.com.au

<u>nudibranchs</u>



miquel pontes

Photographing nudibranchs

We must not forget the film. Mediterranean nudibranchs are fairly small, unlike their tropical cousins, so the film definition should be high —with a finer grain size- even at the cost of using a slower and less sensitive emulsion. Major vendors have good films for this kind of photographs: you can choose Fuji Velvia 50 ASA or Kodachrome 64 ASA for instance. They are not cheap films, but their definition and colour saturation are outstanding.

The Mediterranean Sea has almost no tides (40 cm is the usual difference among high and low tide) so there are very few rock pools that give nature lovers the possibility to photograph nudibranchs without wetting their feet as in the big oceans' shores. In ex-

change, you can find nudibranchs at almost any depth; I have often photographed nudibranchs in just 5 cm of water and at depths greater than 30 meters.

Photographing nudibranchs is at its best when we have an underwater camera with strobe light and we use a diving mask and fins. Many beautiful nudibranchs show their colours in the shallow waters surrounding rocky formations near the shore, so at times there's no need to get our full diving gear, but several species are only found at certain depths only available to divers.

My favourite configuration for photographing nudibranchs in the Mediterranean Sea –due to the small size of these animals- is a Nikonos V camera equipped with a 2:1 extension tube and a small strobe light. I do set the camera in the A-mode (adjusts speed according to the aperture or f/stop) and the f/stop fixed to 16. That set allows me to take good pictures with great details. Users of the more common 1:1 extension tube should change the f/stop to 22 instead of 16, as it lets pass double the amount of light to the film than the 2:1. Focal distance should be set to infinite.

Big ones...

Several times you find big nudibranchs that simply don't fit the frame of your good old Nikonos. This is true even in the Mediterranean, "the sea of the small nudibranchs". It is time for a reflex camera in a waterproof housing.

Autofocus cameras have only one problem when used underwater: they simply don't focus easily when light conditions are poor. So apart of attaching a strobe light to our housing, it is always a

good idea to attach a tiny dive light to illuminate the animal so the camera can focus on it quickly before it disappears in a crevice.

My favourite configuration for taking pictures of big nudibranchs (and crabs, and fishes and almost everything of a respectable size) is a Nikon F90 camera mounted with a 90mm macro Tamron lens in a Subal metal housing. I use a Sea&Sea YS120 strobe light in central position and a tiny diving light to enhance autofocus performance. Some strobe lights include a diving light inside of the mount, greatly simplifying the photographic equipment, but these are really very expensive.



Photographing nudibranchs in the Mediterranean is not always an easy task, they are often quite small (less than 1cm in length) and they could be brightly coloured, yet undistinguishable from their surrounding (disruptive colouration). They could be cryptic instead, that is, of the very same colour of the substrate they live on. They usually prefer to run around at night, and some years you find more animals than other years. Some nudibranchs hide well under rocks, in sand, among algae or in shadows, so the observer has to seek them by "fine tuning" his/her vision to detect them. Once you see the first, the other ones appear as if by magic.

If you haven't ever seen a nudibranch, you have missed a whole world of colour and beauty. Inform yourself, seek and if you don't yet find them, try and try and try again. A nice reward is waiting for you.



References

Good books about Mediterranean Nudibranchs:

- · Cattaneo-Vietti, R.; Chemello, R.; Giannuzzi-Savelli. *Atlas of Mediterranean Nudibranchs*. Editrice La Conchiglia, Roma, 1990
- · Calvín, Juan Carlos. El ecosistema marino mediterráneo. Guía de su flora y fauna.
- · Göthel, Helmut. Fauna marina del Mediterráneo. Editorial Omega.
- · Ocaña, A.; Sánchez-Tocino, L.; López, S.; Viciana, J.F. *Guía submarina de invertebrados no artrópodos.* Editorial Comares.
- · Riedl, Rupert. Fauna y flora del Mar Mediterráneo. Editorial Omega.
- · Weinberg, Steven. Découvrir la méditerranée. Ed. Nathen.

Good books about Nudibranchs:

- · Coleman, Neville. *1001 Nudibranchs*. Neville Coleman's Underwater Geographic.
- · Behrens, David. *Pacific Coast Nudibranchs*. Sea Challengers.
- · Picton, Bernard. A Field Guide to the Nudibranchs of the British Isles. Immel Publishing.

Mediterranean nudibranchs in the Internet:

- · Sea Slug Forum: http://www.seaslugforum.net/species.htm
- <u>• M@re Nostrum:</u> http://marenostrum.org/opistobranquios
- · Medslugs: http://www.medslugs.de
- <u>Nudibranchs of the British Isles:</u> http://www.pictonb.freeserve.co.uk/nudibranchs
- · Opistobranquios de la costa de Granada: http://www.ugr.es/
- ~lstocino

Images:

- 1. Daco & Miquel looking for nudis. Finding nudibranchs is no easy task, they are masters of camouflage.
- 2. Lluis Aguilar with camera. Diver holds a very compact Nikonos V camera with macro 2:1 extension tubes, ideal for small nudibranchs.
- 3. *Dondice banyulensis*. This picture shows the almost microscope detail of the face of this Dondice banyulensis.
- 4. Dondice banyulensis. This nudibranch is photographed with macro 1:1, many details are visible.







<u>sthobranchs</u>







Heron Island Opisthobranchs

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 Chromodorididae (2) – Genus Glossodoris

Members of the genus Glossodoris have a relatively high body and an undulating mantle edge. Their gills also wriggle rhythmically which possibly may assist in the flow of oxygen. Bill Rudman (2001) recently noted that "as species of Glossodoris get larger, the circle (or horse-shoe) of gills extends at each end into a secondary spiral so greatly increasing the number of gills. Whether these secondary spirals and rhythmic 'wiggling' makes their breathing more efficient would be a very interesting study."

Like all Chromodorids they feed on sponges.

Glossodoris atromarginata (Cuvier, 1804)

This large, attractive species has a widespread Indo-Pacific distribution. The colour of its mantle can vary from white to creamish-white, lemon-yellow or buff-brown although all the animals found at Heron Island have had a white or cream mantle. It also has a black marginal band and the gills have black streaks up both axes. This species can reach 100 mm in size although adults are usually from 50 to 75 mm. They can be found at both the reef crest and subtidally.





Glossodoris cincta (Bergh, 1888)

This species also has a widespread tropical Indo-West Pacific distribution. It can be recognised by its mottled purple-brown body with irregular white patches and its wavy margin which bears narrow bands of blue, then black, then yellow on both the upper and lower surfaces. Although it can be found subtidally, it usually occurs in the open in shallow water and can be found in pools just behind the reef crest. It is smaller than *Glossodoris atromarginata* usually measuring between 25 and 45 mm in size.





Glossodoris rufomarginata (Bergh, 1890)

This species is the smallest of the three species featured this month with most adults at Heron Island ranging from 25 to 35 mm in size. It is usually found at the reef crest under dead coral slabs. It has a smooth mantle which is densely speckled with orange-brown. It also has a broad orange-brown mantle border and an equally broad white submarginal band. This species is also widely distributed through out the Indo-Pacific region.





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.

Rudman, W.B., 2001 (December 5). Comment on Interesting characteristic of *G. atromarginata*'s gills by Nick Gill. [Message in] Sea Slug Forum. http://www.seaslugforum.net/find.cfm?id=5722

Realm of the Pygmy Seahorse 2001 By Constantinos Petrinos

256 pages, 9 1/4" x 11 3/4", full colour (280 outstanding colour photos)

Award-winning photographer Constantinos Petrinos, has chosen the Lembeh Straits in North Sulawesi, Indonesia to document some of the most fascinating underwater creatures in the World. The diverse fauna found in the Realm of the Pygmy Seahorse is the product of a millennia of climatological and geological processes which have created the necessary conditions for the tropical Indo-Pacific to evolve into the most diverse area among marine ecosystems. The Indonesian-Philippines area is the epicentre of this amazing biodiversity. Constantinos spent 5 months in the region, made 320 dives and took 25,000 slides. Realm of the Pygmy Seahorse features 280 of these amazing photographs. Underwater photographers will find a wealth of information on technique. For the naturalist, the rich text explains the spectacular behaviour seen in the photographs.

Constantinos takes you by the hand and introduces you to the many unique and fascinating wonders of the Straits. To say that a whole new world unfolds is an understatement. That which first appears as simply a large colourful coral head, now reveals dozens of inhabitants and relationships, previously over looked. That so many animal species can live together, some commensally and some more competitively will open an entire new vista for you. Feast on these fascinating images and enjoy the informative text.

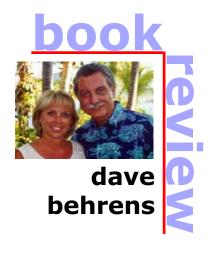
Constantinos' underwater sojourns will introduce you to what many of us refer to as the fascinating "muck" dive, an experience you will want to repeat over and over. Little could we imagine that there was so much to discover by swimming away from the brightly coloured creations blossoming from the patch reef, and venture out over sand bottoms, often in areas where the visibility wanes from that boasted in vacation resort brochures.

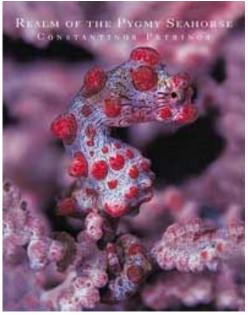
For the diver, Constantinos' masterpiece will excite and inspire you before your next trip, giving you ideas of what to look for and how to make that next, really great discovery, and it will offer a post trip remembrance, tickling the memory of things you saw and moments you experienced. For the non-diver, the coral reef admirer, this is a documentary of the most valuable environmental

heritage we have. It is a statement to the importance of protecting this self-sustaining microcosm. It is a legacy of what you and I can leave for our children and theirs, if we respect it, and protect it.













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