Opisthobranch Newsletter

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EDITOR'S NOTES

I will be putting more of the personal notes and comments onto the seaslug listserver. I am trying to reformat the ON to make the online version and printed version identical. It is beginning to look as though I will put all of the preliminary information onto seaslug and have the final "official published" version in paper only.

Thanks to all of you who have sent material or otherwise assisted making this issue possible. As usual, Gary McDonald has provided invaluable citations. Bob Bolland, Mike Miller and Sara Campiani have sent new links for the photos on the Web. Dave Behrens, Pat LaFollette and Sandra Millen have provided advice and support. Others have provided much help with the issue.

PERSONAL NOTES

From Paul Monfils: I too have seen a few shells damaged / destroyed by ultrasonic cleaning. But, to put this in perspective, the only specimens I have ever seen damaged, after cleaning well over a hundred thousand specimens, have been a few extremely fragile ones. When I say fragile I don't mean things like *Bulla, Ficus, Sinum, Scaphander*, etc. Those can be cleaned with no problem whatsoever. I refer to those shells that are difficult to pick up with your fingers without crushing them, like *Haminoea, Hydatina, Akera, Micromelo, Lobiger, Oxynoe*, etc. Even in these forms, I believe all the damage I have seen was attributable to one of two causes: (1) the tendency of small shells to dash around inside the tank, colliding with other shells. If you put a *Haminoea* in the tank with a few small *Marginella* specimens, all the shells will move around the bottom of the tank, sometimes very rapidly, and in a high speed collision between a *Marginella* and a *Haminoea*, the *Haminoea* is going to lose. Shells a half inch or more in length tend to lie in one place, and not race around. Even in the absence of major collisions, two shells lying in contact will vibrate against each other, possibly causing damage to a fragile specimen. You notice this effect if you try to pick up a shell with metal forceps while the cleaner is running - the shell vibrates out of the forceps, and is almost impossible to pick up without turning the machine off. (2) the presence of unseen cracks in thin, fragile specimens. If a shell is cracked, then actually there are already two objects present, even though they may remain in close contact. The water will penetrate the crack, and just like two shells lying in close contact, these two objects will vibrate against each other, causing the crack to open. If you didn't know the shell was cracked, you would simply conclude that the shell "broke". Actually, it was already broken, and the break just became more obvious. Theoretically, a sturdy shell with a deep crack might well respond the same way. However, sturdy shells are not likely to have such cracks, unless they were thrown directly into boiling water for cleaning. Shells like those listed above are quite likely to have such fine cracks, so placing them in a UC does involve some risk. Problem (1) above can be addressed in a number of ways, which I alluded to in a previous posting. Briefly, the shell can be isolated from collisions and vibrations by wrapping it gently in cotton, and enclosing it in a small separate container, which is then filled with water and immersed in the UC. As long as the water surrounds the shell, the sound waves will reach it and clean it. [From CONCH-L]. - P.O. Box 6183, Providence, RI 02940, PMonfils@LIFESPAN.ORG

John Cramer is a new subscriber to the CONCH-L group and likes to work with micro-shells and SEM.

As a new member, I'm asked to introduce myself. I'm John Cramer, a professor of physics at Oglethorpe University in Atlanta and an amateur collector of modern and fossil shells. I have a good scanning electron microscope and like to photograph miniatures with it. I'd be happy to photograph stuff for people but you need to be aware that shells must be coated with gold to be photographed. They are never the same afterward. Yes, they look neat with that gold coating but natural they will never be again. - 73150.1633@COMPUSERVE.COM

From Irina Roginskaya: I have my own e-mail now - irina7@hotmail.com.

From Kerry Clark: I have put together a website containing complete instructions, fully illustrated, on construction of the "Clark Sucker," the device our lab uses for collection of opisthobranchs (and lots of other kinds of animals / plants) underwater. The current design (the "Mark XVI") has many improvements over my original 1971 Veliger article, including much stronger and simplified construction. The collector uses commonly-available parts (500 ml Nalgene washbottle, gasoline siphon bulbs) and costs about $10 to build and about 15-30 minutes labor. The URL is: http://users.aol.com/metazoa/sucker - kclark@fit.edu, kclark@iu.net

From Alexei Victorovich Chernyshev: I found the new species of the genus *Runcinida* Baba, 1937 (Runcinidae) among *Corallina pilulifera* in the intertidal zone of the Sea of Japan. Adult molluscs are 3,0-4,5 mm in length, notum is dark-brown with posterior terminal yellow-orange area. The epidermis with small spicules. This mollusc has 5 gills. The development is direct. The juvenile specimens 0,4-0,5 mm only have special provisional radula, which is replaced by typical triserial radula later on. Dr-s Minichev and Starobogatov consider runcinid as separate order Runciniformes Burn, 1963. I know that Burn has not considered Runcinacea as order or suborder and so he can not be the author of this order. But it is quite possible Colosi (1915) separated runcinid molluscs in suborder Runcinidea? Unfortunately, Colosi's work is absent in libraries of Vladivostok. If somebody has this work (Observazioni anatomo-histogiche sulla *Runcinida calarita* n.sp.), please inform me about status runcinid molluscs in Colosi's sense. - tsher@bio.dvgu.ru, Vladivostok 690041, Institute of Marine Biology.

From Ross Gundersen: I currently have a large number of smaller shelled mollusc specimens preserved in alcohol. The specimens are preserved in alcohol to facilitate later radula and DNA strudies. After starting to sort the

material, I realized that the when the specimens are in alcohol a lot of the smaller shell details are obscured. Of course the visualization of these details is necessary. If I take the specimens out of the alcohol they dry up very quickly and are not as useful. Has anyone got any ideas around this difficulty (no drying allowed)? - gundersr@CS.UWP.EDU

INFORMATION WANTED

From Katherine Cross: I was wondering if you could give me any information on what eats sea hares particulary *Aplysia dactylomela*? - 4kmc6@qlink.queensu.ca

From Nathalie Yonow: No, nothing that I know of. In Mauritius they use *Dolabella auricularia* as fish bait, if I remember correctly. Will check this with my colleague when he returns next week. - N.Yonow@swansea.ac.uk

From Gilianne D. Brodie: Adults -- Humans do in the Pacific islands. Also some fish such as puffers and box fish I suspect. Eggs masses -- *Favorinus* and other such beasts. - gilianne.brodie@jcu.edu.au

From Richard Willan: Whilst studying the ecology of *Aplysia dactylomela* in New Zealand for my PhD, I saw *A. dactylomela* being eaten by the starfish *Coscinasterias calamaria* (Asteriidae) on a few occasions. I do have photos. In tropical waters the aeolid *Favorinus japonicus* (Facelinidae) eats *Aplysia* spawn. - Richard.Willan@DWNMUS.MAGNT.nt.gov.au

From Nancy Spillane: I'm looking for information on invading species (non-native species) of nudibranchs to the U.S. for a science project and was wondering if you could help me. - nspillane@snet.net

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