

Opisthobranch Newsletter

May, 1997, 23(5):17

Editor: Steven J. Long; 20220 21st Ave. NW, Shoreline, WA 98177; 206-546-5977; 1-800-793-6188. e-mail Steve_Long@opisthobranch.org Web Site: <http://www.opisthobranch.org> Subscriptions by calendar year. Individual \$20.00. Institutional \$30.00. Copyright © 1997.

PERSONAL NOTES:

Mike Miller will be out of the country between April 16 and May 2, diving in the Philippines along with Dave Behrens, Terry Gosliner and Gary Williams from San Francisco; Clay Carlson, Guam; Roger Steene, Australia; Jerry Allen, Jeff Holmes and Bruce Baker from Tucson; Marc Chamberlain, Carlsbad; Mike Miller, San Diego. They will focus for the most part on branches. Will spend one week in Batangas and then on down to Cebu.

Jongrak Lee I am a doctoral student who is studying opisthobranchs at Sung Kyun Kwan Univ. in Korea. My professor and I are supposed to visit Vietnam as a member of a working group for the Survey of Natural Environment in Vietnam, sponsored by Korean authority from the 24th of Jul. to the 3rd of Aug. where I will dive if possible.

I really haven't seen any marine faunal reports (especially about molluscs including opisthobranchs or zoologists etc.) other than we could locate with scientists in the National University of Hanoi. I will appreciate very much your kind information on either zoologist or marine faunal report. Looking forward your reply as soon as possible. - jrlee@yurim.skku.ac.kr

Pat LaFollette's long planned trip to Belize is finally scheduled. He will be departing Los Angeles on May 17 and returning on June 1. - pil@auto-graphics.com

Jeff Arenholz is a Senior High School student in Bellingham, Washington compiling information on nudibranchs for a biology class. - arenholz@juno.com

Phil Slosberg has a great web page at <http://www.cybereef.com> in Pompano Beach, Florida. - "I am presently transferring some new images to CD and will work up a sampler page for you to checkout and select the shots you think would be useful. I can then put them on separate pages that you can reference directly by their URLs. Hope to get this organized before heading to Indonesia on May 15th.

My wife and I spend 4-5 weeks/yr in Indonesia diving and this year will be diving for 2 weeks in the Manado area of Sulawesi and two weeks at Kungkungan Bay on the Lembah Straits off the other coast of Sulawesi. These straits are truly magnificent for nudibranch hunting. We would be happy to keep an eye open for any particular nudibranch and try to bring back a photo of same.

Glad you liked the images, let me know if you can use any of them. Except for the shot of the *Tridachia crispata* where I was just starting out and putting critters on "interesting" backgrounds, the other shots were all in natural environment without subject manipulation. It has only been with experience that I have come to learn that a shot of a

critter in its' natural environment is the "most interesting" backdrop of all. Through looking at your site and others on the net I also realize the usefulness of this type of shot in learning more about eating habits and other behavioral patterns.

I will not be on the internet between May 15 and June 15 during our trip unless some of the fellows in Sulawesi have become more involved in the net than they were last year. Hard to keep that kind of gear going in that environment, and unless my wife picks the winning lottery number next week, a portable computer remains out of reach. - Phil and Jean Slosberg; 3970 Oaks Clubhouse Dr. #501; Pompano Beach, FL 33069; (954) 979-5397; Contact him at slosberg@gate.net

Terra Lang I am constantly looking for more information on the general biology, and specifically nervous system hook-ups of the family Aeolidaceae. I am beginning to do some work with *Hermisenda crassicornis*, on chemoreception and behavior at Portland State University. I would welcome any additional information in these areas. I am always on the lookout for neural maps, general biology, etc. of this species.

I was wondering if you knew anyone's email address off hand that keeps *Hermisenda*, and could tell me how to house them properly? I have some in a large tank now, with plenty of food, rocks, algae, and other invertebrates. They unfortunately are biting chunks off one another and somehow I will have to separate them. Some literature has stated that *Hermisenda* were kept in small finger bowls, or Dixie cups throughout the experiment. However, I would like to provide each one with as natural a habitat as possible. I am worried about my current situation.

If you know anyone who could help, please forward this message to them, or mail me their address. Thank you! You can reach me here by email. - 14940 SW 98th Ave., Tigard, OR 97224, psu14684@odin.cc.pdx.edu

From Paul Sammut: Would anybody be so kind and send me a photocopy [naturally against payment] of the following work: Campani E, & Terreni G. 1987. Nota su Alcuni molluschi opistobranchi della famiglia Pleurobranchidae Deshayes, 1835 presenti nelle acque livornesi. Quaderni Mus. Stor. Nat. Livorno: [8]:103-108. Since this work contains coloured plates, I would appreciate a colour xerox copy. What I need is the reference itself, that is the actual paper. Your site on Opisthobranchia is definitely a very important reference.

Myself, together with two other Maltese Malacologists have published a check-list of the Maltese Marine Mollusca and Vol.1 & 2 of the same mollusca but in greater detail - description, status, distribution, illustration etc. on each species. We need to consult the work of Campani & Terreni for vol. 3 of the same work. - 'Fawkner', Dingli Road, Rabat RBT 07, MALTA; pasammut@dream.vol.net.mt

READER FORUM

Range Extension vs. New Record: Biogeographically, the term "range extension" has specific implications, i.e. that a species has actually modified its range via physiological mutation, a biogeographic event such as rafting, or assistance via human activity, and generally implies that a biogeographic barrier (isthmus, salinity barrier, large distance, etc.) has been breached, so that the "range" has actually "extended". The appropriate term for new distributional data that does not represent such an event, i.e. that someone collected from an unreported locality, contiguous to former records and not separated by such a

Opisthobranch Newsletter

May, 1997, Volume 23(5):18

barrier, is "new record." These data, while certainly valuable in defining the ecospace of an organism, do not represent a modification of the range, because the species in all likelihood was in fact there all along, just undetected: the species' range has not changed, just our knowledge of it. Unfortunately, if someone is doing biogeographic literature retrieval, use of the wrong term substantially increases workload. - Dr. Kerry Bruce Clark, Florida Institute of Technology, Melbourne, FL 32901; kclark@fit.edu, kclark@iu.net

Extension vs. Record: I would think with the fast computer searches available, any researcher would want to see "range extensions", "new distributional records", "new locality data" and anything else relating to the species in question. - editor@opisthobranch.org

NOTES

Locality data; *Eubranchus olivaceus* (O'Donoghue, 1921). Species number 178 from Pacific Coast Nudibranch, *Eubranchus olivaceus* (O'Donoghue, 1921). The range of this species is extended to Amalga Harbor, north of Juneau, Alaska. It was collected feeding on the hydroid species *Obelia* (Rita O'Clair, pers. comm.). - Dave Behrens, PG&E, 2303 Camino Ramon, Ste 200, San Ramon, CA94583 dwb1@pge.com

Family Name Clionidae. While compiling a list containing the families of all animal phyla, I discovered that the family name Clionidae is used in two phyla: Porifera, Demospongiae, Hadromerida and Mollusca, Gastropoda, Gymnosomata.

The situation is as follows: Clionidae Gray, 1840 (Mollusca) - type genus Clione Pallas, 1774, has priority over Clionidae Topsent, 1897 (Porifera) - type species *Cliona* Grant, 1826. This is a clear case of homonymy which apparently was not signaled before by anyone.

My question is: "Was this problem resolved by a ICZN opinion, by any other way, or is it still existing?" - Ron Voskuil, BioSys Software & Multimedia, Houthaak 2-B, 2611 LE Delft, The Netherlands, biosysm@CISTRON.NL

Occurrence of a Rather Unusual Opisthobranch Found off Southern California. The tentative name given by Don Cadien is *Triopella* sp. found off Platform Harvest, and Platform Hildago in approx. 600 feet, Santa Maria Basin. Cadien has tentatively identified it as a *Triopella*, but commented that we should check the Japanese literature and North Atlantic records. To date, I have 4 specimens. - Jay Shrake, 4498 Exbury Ct., San Diego, CA92008, kinetic2@ix.netcom.com

Intertidal sightings of *Tochuina tetraquetra*: *Tochuina tetraquetra* (Pallas, 1788) ranges across the north Pacific from northern Japan to the Kuril and Aleutian Islands and down the west coast of North America to southern California (McDonald, 1983; Behrens, 1991). The species is primarily subtidal in distribution, and I know of only two published reports of this species occurring intertidally. Bergh (1879:99) examined a specimen collected by Dall in 1872 at Unalaska Island in the Aleutians, and Jaeckle (1984) collected an unspecified number of specimens from the rocky intertidal at Trinidad Bay, Humboldt County, California.

On 2 June, 1996, Thomas A. Wayne (retired head of the Science Department at Lane Community College in Eugene, Oregon, a careful and meticulous observer, and an experienced 'brancher in his own right) observed an 8 cm long specimen underneath a low intertidal ledge at Middle Cove, Cape Arago, Oregon. Tom confirmed the identity of this specimen in the field using Behrens (1991) (Wayne, pers. comm.). *Tochuina* is known to feed on alcyonarians (McDonald, 1983:214); the specimen from Middle Cove was near an aggregation of colonies of *Alcyonium rudyi* Verseveldt & van Ofwegen, 1992 (Wayne, pers. comm.).

I've never seen this species intertidally; has anybody else? - Jeff Goddard jgoddard@oimb.uoregon.edu Oregon Institute of Marine Biology, Charleston, OR97420

***Chrysallida cincta* actually *Evalea tenuisculpta*:** Thank you [Jeff Tupen] for sending along to the LACM the two odostomid specimens that you found on the operculum of *Norrisia norrisi*. I was able to examine them on Monday. They are indeed NOT *Chrysallida cincta* as I had guessed in postings to MOLLUSCA last week. Goes to show that it's not wise to offer identifications based purely on circumstantial evidence!

The specimens turn out to be *Evalea tenuisculpta* (Carpenter, 1864) (synonyms: *Odostomia (Evalea) phanea* Dall and Bartsch, 1907; *O. (E.) atossa* Dall, 1908 and *O. (E.) santarosana* Dall and Bartsch, 1909; and probably also *O. (E.) strongi* Bartsch, 1927 and *O. (E.) martinensis* Strong, 1938). Jim McLean and I both examined the specimens and are in agreement as to their identify.

The shells do appear to be completely smooth, as you described, when examined in alcohol. Jim was fooled by this at first as well. When the shell is dried off, however, the fine spiral sculpture characteristic of *Evalea* becomes apparent. The shape and relatively large size (5.5-6.0 mm) place them squarely in *E. tenuisculpta*.

The host relationship of *Evalea tenuisculpta* with *Norrisia norrisi* has not previously been reported. An association with *Haliotis rufescens* has been published and is well documented by museum specimens, including several large lots from San Luis Obispo County. Lots collected "from pilings" hint at additional hosts yet unknown. Based on the number of lots in the LACM collection, *Evalea tenuisculpta* appears to be moderately common in the intertidal and shallow subtidal from Washington to Baja California. - Patrick I. LaFollette, Auto-Graphics, Inc., 3201 Temple Ave., Pomona, California 91769-3200, pil@auto-graphics.com

***Evalea* on *Norissia* at San Luis Obispo** Thank you both for taking the time to look at and identify the Pyrams I recently mailed down. We've not identified that particular taxon from this area, but this is likely due to our taxonomic inability, rather than a lack of presence.

Incidentally, Pat [LaFollette], I was measuring my aquaria-held *Norissia* yesterday, and I noted that one of the ten specimens DOES have an *Evalea* on it's operculum, still firmly attached. Unfortunately, I'm not able to gather feeding/perturbation data on the association, as this would upset the experiment that I have in progress. - Jeff Tupen

Feeding observations pretty much require a tripod mounted binocular microscope that allows you to look through the aquarium glass. The odostomid proboscis is too thin to see with the naked eye (at least mine). Perhaps you could have a look when your present experiment is over? Something else of special interest that you might be able to do without disturbing your experiment is to check the infected *Norissia's* operculum for eggs. Perhaps you

Opisthobranch Newsletter

May, 1997, Volume 23(5):19

could do this while taking routine measurements. The *Evalea* specimens you sent to LACM were full adults, so the event could happen any time. "*C. cincta*" laid their eggs in translucent whitish gelatinous masses 2-3 mm in diameter, though egg capsules have been reported for other species. - Pat LaFollette

However, if you ever plan on heading up this way (to San Luis Obispo), I would be happy to get you cleared to come on-site and examine the specimen alive. I find it interesting that three of the ten *Norissia* that I collected had an *Evalea* attached. Apparently, this association may not be uncommon in our area? - Jeff Tupen

In my (admittedly limited) experience, once a host relationship has been recognized, a careful search will find a fairly high percentage (10% to 50%) of other adults of that host species to be parasitized as well, at least at **that locality**. At a different locality, the association may be different.

Aquarium experiments on "*Chrysalida*" *cincta* showed that when removed from its host, *cincta* would eventually find its way back to the same host species. But if the original host was not among the choices presented, the odostomid would usually pick an alternate host. This may account for *cincta* showing on *Tegula eiseni* at San Pedro but on *Tegula aureotincta* (and not *eiseni*) at Corona del Mar. At Isthmus Cove, *Haliotis* seemed to be the preferred host. I've no idea what the spatial patchiness of this tendency might be, or if several different hosts might be infested at one locality. Regarding *E. tenuisculpta*, known hosts are now *Norissia* (yours) and *Haliotis* (museum specimens and literature). The odds are there are others. *Astraea* seems a good candidate. - Pat LaFollette

Also... I collected another Pyram? a couple of weeks ago, this one intertidally from an exposed, rocky bench. May I also send this specimen to you, via Jim [McLean], to have a look at? Let me know, and I'll put it in the mail. - Jeff Tupen

We would be very interested in seeing the "Pyram?" that you found crawling on the rock shelf. Chances are it is something different. (Here I go sticking my neck out again!) Please do send it along to Jim McLean. - Pat LaFollette

Jeff Tupen, TENERA, Diablo Canyon Marine Lab, JW79@PGE.COM, Patrick I. LaFollette, Auto-Graphics, Inc., 3201 Temple Ave., Pomona, California 91769-3200, pil@auto-graphics.com

Autofluorescence in Marine Mollusc Shells: *Acteon eloiseae* fluoresced corresponding with the spot pattern. A portable UV unit was used in a darkened room. From the CONCH-L listserver, 4/29/97. - Paul Monfils
Pmonfils@LIFESPAN.ORG

Videocamera for Tiny Animals: I often use a videocamera to monitor tiny things in aquaria. If you can remove the "standard" camera lens, and replace with a 35 mm macro lens, you have a rather powerful 'scope (up to 100x on a 13" monitor, depending on focal length and imager size of the camera) that can be watched for long periods with negligible fatigue; further, running the signal through a computer allows easy capture (though somewhat fuzzy and grainy) of images and video clips. The resolution can be surprisingly high; I have video of polychaete feeding with 10 mu particles clearly visible. - Kerry Bruce Clark, Florida Institute of Technology, Melbourne, FL 32901-6988

EDITOR'S NOTES

As Dr. Stohler would say "The editor's face is red!" I typed in the wrong species name for Dr. Kerry Clark's note on *Phyllaplysia engeli* in the title. My apology.

I have started two new user lists. One is a list of full publication names together with the abbreviation I use in the bibliography. The second is a list of published illustrations for opisthobranchs. For a short time I lost my head and thought I would put them all on the Internet. That is simply beyond my resources. I would welcome some help with these lists if someone wants a good project.

The two lists will be searchable from the Opisthobranch Site. It will take quite a while before the lists are anywhere near comprehensive. If anyone has good lists of journal titles or opisthobranch illustrations, please e-mail them as attachments or give me the URL where they are located on your server. I can convert from many of the word processing text formats. - editor@opisthobranch.org

The ON will go about \$560 in the hole this year with additional website expenses and publishing costs. There are also several students and others who should receive the newsletter but are unable to subscribe. Perhaps some of you would be willing to sponsor someone. Twenty-eight new subscriptions would also help although they add additional costs as well.

I have publications available -- donated by an inactive brancher. Many of these are free to a good home as soon as I can pull out the reference material for the bibliography. A few are for sale with part of the proceeds going to the ON and the rest to the provider.

If you are looking for something in particular, send me an e-mail. If you want a list of the larger items, e-mail or snail-mail me and I will return the list to you. If you have excess opisthobranch literature, please contact me. -

Books@opisthobranch.org

The Malacological Society of London has a very nice new web site at <http://www.sunderland.ac.uk/~es0mda/msl1.htm>

BIBLIOGRAPHY:

- Bao, J.-X.; Kandel, E.R.; Hawkins, R.D. 1997-02-14. Involvement of pre- and postsynaptic mechanisms in posttetanic potentiation at *Aplysia* synapses. *Science* 275(5302):969-973.
- Behrens, D.W. 1997-02. *Flabellina* sp. 2 (= *Flabellina vansyoci* Gosliner, 1994). *Opisthobranch Newsl.* 23(2):5. reprint@opisthobranch.org
- Behrens, D.W. 1997-03. Locality Data: *Triopha*, *Chromodoris* & *Atagema*. *Opisthobranch Newsl.* 23(3):9. reprint@opisthobranch.org
- Behrens, D.W. 1997-04-07. Locality Data: *Doto lancei*, *Chlamylla* sp. 1, *Flabellina iodinea*, *Peltodoris* sp. 1. *Opisthobranch Newsl.* 23(4):13. reprint@opisthobranch.org
- Behrens, D.W.; Haucke, E. 1997-02. New Pleurobranch off Mexico. *Opisthobranch Newsl.* 23(2):5. [*Pleurobranchus aureolatus*] reprint@opisthobranch.org
- Campari, E.; Terreni, G. 1987. Nota su alcuni molluschi Opistobranchi della famiglia Pleurobranchidae Deshayes, 1835 presenti nelle acque livornesi. *Quaderni Mus. Stor. Nat. Livorno* 8: 103 - 108.
- Chemello, R. 1997-03-02. *Caulerpa* & *Oxyyno*. *Opisthobranch Newsl.* 23(3):9. [*Oxyyno olivacea*] reprint@opisthobranch.org
- Choe, B.L.; Lee, J.R. 1994-07. Opisthobranchs (Mollusca: Gastropoda) from Ull ng and Dog-do Islands, Korea. *Korean J. Zool.* 37(3):352-376, pls 1-4, figs. 1-2. [*Aplysia parvula*, *A. kurodai*, *Berthellina citrina*, *Pleurobranchaea japonica*, *Chromodoris tinctoria*, *C. orientalis*, *Hypselodoris festiva*, *Cadlina japonica*, *Aldisa cooperi*, *Dendrodoris denisoni*, *Tritonia festiva*, *Notobryon wardi*, *Hermisenda crassicornis*, *Sakuraeolis modesta*, *Protaeolidiella atra*] jrllee@yurim.skku.ac.kr
- Clark, K. 1997-04-07. Feeding Behavior of *Phyllaplysia taylori*. *Opisthobranch Newsl.* 23(4):14. [Editor error for *P. engeli*] reprint@opisthobranch.org
- Darchen, F.; Poulain, B. 1996. Evidence for a functional link between Rab3 and the SNARE complex. *J. Cell Sci.* 109(12): 2875-2884. [*Aplysia*]
- De Moreno, J.E.A.; Gerpe, M.S.; Moreno, V.J.; Vodopivec, C. 1997. Heavy metals in Antarctic organisms. *Polar Biology* 17(2): 131-140. [Nudibranch]

Opisthobranch Newsletter

May, 1997, Volume 23(5):20

- Demir, S.S.; Butera, R.J., Jr.; Defranceschi, A.A.; Clark, J.W., Jr.; Byrne, J.H. 1997. Phase sensitivity and entrainment in a modeled bursting neuron. *Biophysical J.* 72(1 PART 2): 579-594. [Aplysia]
- Dong, C.; Willerford, D.; Alt, F.W.; Cooper, M.D. 1996. Genomic organization and chromosomal localization of the mouse Bp3 gene, a member of the CD38-ADP-ribosyl cyclase family. *Immunogenetics* 45(1): 35-43. [Aplysia kuroda]
- Drushel, R.F.; Neustadter, D.M.; Shallenberger, L.L.; Crago, P.E.; and others. 1997-02. The kinematics of swallowing in the buccal mass of *Aplysia californica*. *J. Exper. Biol.* 4:735-752.
- Edgar, G. 1997. Australian Marine Life: The Plants and Animals of Temperate Waters. Reed Books, Kew, Victoria, 544 pp. ISBN 0 7301 14745. [descriptions & photos 34 opisthobranchs: *Bulla quoyii*, *Bullina lineata*, *Philine angasi*, *Sagaminopteron ornatum*, *Chelidonura hirundinina*, *Aplysia parvula*, *A. dactylorella*, *A. sydneyensis*, *A. gigantia*, *Bursatella leachi* (though the illustrated specimen is not *leachi*), *Oxynoe viridis*, *Elysia expansa*, *Stiliger smaragdinus*, *Tyrodina corticalis*, *Umbraculum sinicum*, *Berthellina citrina*, *Pleurobranchaea maculata*, *Tambja verconis*, *Aphelodoris varia*, *Neodoris chrysothema*, *Ceratosoma amoena*, *Ceratosoma brevicaudatum*, *Chromodoris epicuria*, *C. tasmaniensis*, *C. splendida*, *C. westraliensis*, *Hypselodoris bennetti*, *Glossodoris atomarginata*, *Dendrodoris peculiaris*, *Pteraeolidia ianthina*, *Austraeolis ornata*, *Spurilla macleayi* (the illustrations for the latter two species are transposed), *Flabellina rubrolineata*, *Armina* sp., The Publisher's address is: Reed Books Australia, 35 Cotnam Road, Kew, Victoria 3101. Cost is \$(Australian)60 plus postage]
- Edmunds, M.; Preece, R.C. 1996. A collection of opisthobranch molluscs from the Pitcairn Islands. *Journal of Conchology* 35(5): 407-421. [*Phyllobranchillus orientalis*; *Peltodoris fellowsi*; *Bornella irvingi* new recs.]
- Emptage, N.J.; Mauelshagen, J.; Mercer, A.; Carew, T.J. 1996. Pharmacological dissociation of different forms of synaptic plasticity in the marine mollusc *Aplysia*. *J. Physiol.* 90(5-6):385-386.
- Fang, X.; Clark, G.A. 1996-12. Differential responses of *Aplysia* siphon motor neurons and interneurons to tail and mantle stimuli: Implications for behavioral response specificity. *J. Neurophysiol.* 76(6):3895-3909.
- Farfan, B.C. 1988. Spawning and Ontogeny of *Bulla gouldiana* (Gastropoda: Opisthobranchia: Cephalaspidea). *Veliger* 31(1-2):114-119.
- Fischer, T.M.; Carew, T.J. 1997-02. Activity-dependent regulation of neural networks: the role of inhibitory synaptic plasticity in adaptive gain control in the siphon withdrawal reflex of *Aplysia*. (The Future of Aquatic Research in Space: Neurobiology, Cellular and Molecular Physiology). *Biol. Bull.* 192(1):164-166. [A. californica]
- Fitzgerald, K.K.; Carew, T.J. 1997-02. Multiple forms of facilitation produced by aversive tentacular stimuli in cerebral ganglion sensory neurons of *Aplysia*. *Learning & Memory* 3(5):376-388.
- Fitzgerald, K.K.; Takacs, C.A.; Carew, T.J. 1997-01/02. Nonassociative and associative modification of head-waving produced by aversive tentacular stimuli in *Aplysia*. *Learning & Memory* 3(5):366-375.
- Gabso, M.; Neher, E.; Spira, M.E. 1997-03. Low mobility of the Ca²⁺ buffers in axons of cultured *Aplysia* neurons. *Neuron* 18(3):473-481.
- Garcia, F.J.; Garcia Gomez, J.C.; Lopez De La Curada, C.M. 1990. *Runcina macrodenticulata*, New Species, a New Gastropoda Opisthobranchia from the Strait of Gibraltar. *Bull. Mus. Natl. Hist. Nat. Sect. A Zool. Biol. Ecol. Anim.* 12(1):3-8. fgarcia@cica.es
- Gavagnin, M.; Ungur, N.; Castelluccio, F.; Cimino, G. 1997. Novel verrucosins from the skin of the Mediterranean nudibranch *Doris verrucosa*. *Tetrahedron* 53(4): 1491-1504.
- Geiger, D.L.; Jung, P. 1996. A shell of *Floribella aldrichi* (Dall, 1890), a large seahare (Mollusca: Opisthobranchia: Aplysiidae) from the Neogene of the Northern Dominican Republic. *J. Conchol.* 35(5): 437-444.
- Geusz, M.E.; Foster, R.G.; Degrip, W.J.; Block, G.D. 1997-01. Opsin-like immunoreactivity in the circadian pacemaker neurons and photoreceptors of the eye of the opisthobranch mollusc *Bulla gouldiana*. *Cell & Tissue Res.* 287(1): 203-210.
- Goddard, J.H.R. 1996-01-02. Lecithotrophic Development in *Doto amyra* (Nudibranchia: Dendronotacea), with a Review of Developmental Mode in the Genus. *Veliger* 39(1):43-54, figs.1-6, tpls. 1-2. [D. ussi, D. japonica, D. yongei, D. coronata, D. doerga, D. eireana, D. fluctifraga, D. fragaria, D. koenneckeri, D. lemchei, D. maculata, D. millbayana, D. obliqua, D. paulinae, D. rosea, D. tuberculata, D. verdicioi, D. yongei, D. sp., D. fragilis, D. pinnatifida, D. kya, D. lancei, D. form A, D. form B, D. acuta jgoddard@oimb.uoregon.edu]
- Goddard, J.H.R. 1997-04-07. Range Extensions of Eight Northeastern Pacific Nudibranchs. *Opisthobranch Newsl.* 23(4):13. [*Acanthodoris lutea*, *A. rhodoceras*, *Aldisa sanguinea*, *Catrina rickettsi*, *Cerberilla mosslandica*, *Cuthona lagunae*, *Dirona aurantia*, *D. picta*] reprint@opisthobranch.org
- Godoy, M.E.; VonBrand, E.; PalmaRojas, C. 1997-01-02. Karyotype of the nudibranch, *Phidiana inca* (Mollusca: Opisthobranchia). *Veliger* 40(1):43-46.
- Gosliner, T.M. 1997-01. *Caulerpa* Controversy. *Opisthobranch Newsl.* 23(1):1. [*Philine auriformis*] reprint@opisthobranch.org
- Gosliner, T.M.; Behrens, D.W. 1997. Description of four new species of phanerobranch dorids (Mollusca: Nudibranchia) from the Indo-Pacific, with a redescription of *Gymnodoris aurita* (Gould, 1852). *Proceedings of the California Academy of Sciences*, v.49, n.9, (1997): 287-308. [*Nembrotha mullineri* n.sp.; *Nembrotha milleri* n.sp.; *Nembrotha chamberlaini* n.sp.; *Nembrotha serena* n.sp.; *Nembrotha lineolata*; *Gymnodoris aurita*] tgosliner@calacademy.org
- Gosliner, T.M.; Draheim, R. 1996. Indo-Pacific Opisthobranch Gastropod Biogeography: How do We Know What We Don't Know? *Amer. Malacological Bull.* 12(1-2):37-43. tgosliner@calacademy.org
- Gosliner, T.M.; Johnson, R. 1997-03-15. Phylogeny of *Hypselodoris* (Nudibranchia: Chromodorididae). *West. Soc. Malacol. Ann. Rep.* 29:17. tgosliner@calacademy.org
- Gyang-Yu, Lin 1990. A New Species and a New Record of the Genus *Petalifera* (Opisthobranchia) of China (Anaspidea: Aplysiidae). *Acta Zootaxonomica Sinica* 15(1):21-24. [*P. ginggaonensis* n.sp.; *P. ramosa*]
- Haase, M.; Wawra, E. 1996. The genital system of *Acochlidium fijense* (Opisthobranchia: Acochlidioidea) and its inferred function. *Malacologia* 38(1-2): 143-151.
- Hadfield, M.G.; Strathmann, M.F. 1990. Heterostrophic Shells and Pelagic Development in Trochoideans: Implications for Classification, Phylogeny and Paleoecology. *J. Molluscan Stud.* 56(2):239-256. [Py,O]
- Heierhorst, J.; Tang, X.; Lei, J.; Probst, W.C.; Weiss, K.R.; Kemp, B.E.; Benian, G.M. 1996. Substrate specificity and inhibitor sensitivity of Ca²⁺-S100-dependent twitchin kinases. *European J. Biochem.* 242(3): 454-459. [Aplysia]
- Homayouni, R.; Nunez Regueiro, M.; Byrne, J.H.; Eskin, A. 1997-03-07. Identification of two phosphoproteins affected by serotonin in *Aplysia* sensory neurons. *Brain Res.* 750(1-2):87-94.
- Hsu, E.W.; Aiken, N.R.; Blackband, S.J. 1996. Nuclear magnetic resonance microscopy of single neurons under hypotonic perturbation. *Amer. J. Physiol.* 271(6 PART 1): C1895-C1900. [Aplysia californica]
- I.C.Z.N. 1996-09-30. Opinion 1844. *Aplysia juliana* Quoy & Gaimard, 1832 (Mollusca, Gastropoda): Specific Name Conserved. *Bull. Zool. Nomencl.* 53(3):
- Illich, P.A.; Walters, E.T. 1997-01-01. Mechanosensory neurons innervating *Aplysia* siphon encode noxious stimuli and display nociceptive sensitization. *J. Neurosci.* 17(1):459-469.
- Jensen, K.R. 1990. *Splanchnotrophus elysiae* n.sp. (Copepoda: Splanchnotrophidae), found parasitizing in the sacoglossan opisthobranch *Elysia australis* (Quoy and Gaimard, 1832). - Pp. 291-296 in: *Proceedings of the Third International Marine Biological Workshop: The Marine Flora and Fauna of Albany, Western Australia*, Vol. 1 (F.E. Wells, D.I. Walker, H. Kirkman and R. Lethbridge, eds), Western Australian Museum, Perth.
- Jensen, K.R. 1991. Foraging behaviour of two Australian species of *Elysia* (Mollusca, Opisthobranchia). - Pp. 541-551 in: *Proceedings of the Third International Marine Biological Workshop: The Marine Flora and Fauna of Albany, Western Australia*, Vol. 2 (F.E. Wells, D.I. Walker, H. Kirkman and R. Lethbridge, eds.), Western Australian Museum, Perth.
- Jensen, K.R. 1991. Sacoglossa - snegle der næsten er planter. *Dansk naturhistorisk Forenings Årsskrift* 1989/90:38-39.
- Jensen, K.R. 1992. Anatomy of *Onchidium hongkongensis* Britton, 1984. - Pp. 705-722 in: *Proceedings of the Fourth International Marine Biological Workshop: The Marine Flora and Fauna of Hong Kong and southern China*, Hong Kong, 1989. (B. Morton, ed.), Hong Kong University Press.
- Jensen, K.R. 1992. Review of the usage of the synonyms Sacoglossa Ihering, 1876 and Ascoglossa Bergh, 1876. - Pp. 541-544 in: *Proceedings of the 10th International Malacological Congress*, Tübingen 1989 (C. Meier-Brook, ed.).
- Jensen, K.R. 1993. Evolution of buccal apparatus and diet radiation in the Sacoglossa (Opisthobranchia). - *Bolletino Malacologico*, Milano 29: 147-172.
- Jensen, K.R. 1993. Sacoglossa (Mollusca, Opisthobranchia) from Rottneest Island and central Western Australia. - Pp. 207-253 in: *Proceedings of the Fifth International Marine Biological Workshop: The Marine Flora and Fauna of Rottneest Island*, Western Australia (F.E. Wells, D.I. Walker, H. Kirkman and R. Lethbridge, eds), Western Australian Museum, Perth.
- Jensen, K.R. 1993. Sacoglossa (Mollusca: Opisthobranchia) - specialist herbivores and partial predators: integrating ecological, physiological and morphological data. - Pp. 437-458 in: *The Marine Biology of the South China Sea*. *Proceedings of the First International Conference on the Marine Biology of Hong Kong and the South China Sea*. Hong Kong, 28 Oct. - 3 Nov. 1990 (B. Morton, ed.), Hong Kong University Press.