Volume 22, Number 2 November, 2003



### Message from the President...

Gary C. B. Poore, Melbourne, Australia

This is my last report to members as President of The Crustacean Society, nearing the end of two eventful years. Past-president Jens Høeg established a commission to review where The Crustacean Society had been and was going, how the Society could attract and hold members, and what a group like ours could do for its members. The report by the commission revealed our shortcomings but, to me at least, confirmed that The Crustacean Society had much to offer, and could do more. It fell on myself, and the Board, to act on its recommendations. After considerable debate via email and a few face-to-face discussions, most of the board met and thrashed out issues in Williamsburg, VA, USA, before our Annual Meeting on 31 May 2003. Our discussions and resolutions were made easier by having in front of us a clear statement of the state of our financial affairs, prepared by Treasurer Mary Belk.

We were able to articulate clearly what the benefits of membership were and what additional benefits might be offered to members. These are already on our website thanks to the untiring efforts of Secretary Jeff Shields but deserve to be restated:

- \* Subscription to our Journal of Crustacean Biology at cost
- \* Waiver of publication charges (usually \$50)
- \* Optional rather than mandatory page charges (\$65/page)
- \* A complimentary pdf file of your paper
- \* Lower registration charges at TCS-sponsored meetings
- \* The *Ecdysiast* on line and in print
- \* Breaking news on the new Society list-server CRUST-SOC. In addition, student members receive:
- \* JCB at less than cost
- \* Eligibility for the Denton Belk scholarship (from 2004)
- \* Eligibility for paper and poster awards at TCS-sponsored meetings

Details have not been finalised yet but the Board is working to establish career encouragement awards for students during 2004.

These were just some of the outcomes of the review. The commission presented the board with reminders of the need to review our Constitution and long-forgotten issues to deal with.

The constitutional issues were addressed in the last issue of *Ecdysiast*. All the changes proposed then were put to the Business meeting at Williamsburg and passed without dissent. These changes are, unfortunately, not the end of the constitutional changes required, particularly as a result of the Board's simplification of membership categories (see ballot papers elsewhere in this issue).

The Board discussed whether or not the Society should entertain subgroups. It decided not to formalise subgroups but to liaise more actively with national and taxon-based societies. We do this by holding meetings with these groups when possible and attempting to avoid meeting conflicts. Our meetings in Lodz in 2003 and in Brazil in 2004 are examples of this. As a general policy, the Board hopes to alternate midyear meetings between the USA and elsewhere.

After some disquiet from members about the relationship of The Crustacean Society to SICB (Society for Integrative and Comparative Biology), the Board agreed to be more proactive and to appoint a SICB liaison officer to ensure the Society was represented at the New Year meetings. While we will continue to sponsor symposia at SICB meetings and the Board will report informally, these gatherings of Society members will not be include our main Business Meeting. These have for many years now been in the middle of the calendar year.

The Board agreed to reactivate the Awards Committee to facilitate the presentation of student prizes at conferences and the Distinguished Scientist award. It also re-established the Finance Committee, described in the Constitution.

Our journal, *Journal of Crustacean Biology*, is the Society's flagship. Members owe an enormous debt of gratitude to our Editor, David Camp, whose efforts and labour go unnoticed unless your appreciate how much time and thought goes into such an endeavour. The journal's many issues and pages do not materialise by magic! The Board is reviewing the role of the Editorial Committee whose job it is to assist the Editor in handling the reviewing and acceptance of manuscripts.

The Board has been more active in recruiting over the last year or so - a new recruitment poster has been designed and is available on the website for anyone to download. Membership categories are now simpler and I would ask those in secure positions to encourage students to join at reduced dues.

continued...

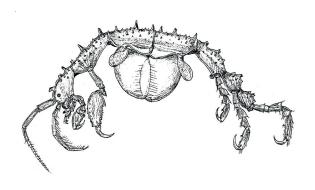


My last task is to thank the members of the Board and the membership for the lively discussion about the issues facing us in a rapidly changing environment. This is a cliché but the ease of transport to meetings at the far side of the world, communication through email, electronic publication, and electronic newsgroups have made change necessary and exciting. All of this is acting on top of new developments in scientific understanding, which leave some of us old-timers racing to keep up. None of these developments could be imagined when The Crustacean Society was formed in 1980 but it is testament to all of us that the Society still has a valuable global role to play through its publications and meetings. I wish incoming President Trisha Spears and the new Board all the best for 2004 and beyond.

Gary C. B. Poore President



President Gary Poore passes on the 'Presidential tie' to Presedent-Elect Trisha Spears in Williamsburg, VA.



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Please remember to vote! (pages 17-20)



### The Crustacean Society Board Members, 2003

President: Gary C. B. Poore Museum Victoria, Melbourne, Australia Tel: (61 3) 8341 7436; Fax: (61 3) 8341 7750 Email: gpoore@museum.vic.gov.au

President-Elect: Trisha Spears
Florida State University
Tel: (850) 644-1847; Fax: (850) 644-9829
Email: spears@bio.fsu.edu

Past-President: Jens T. Høeg University of Copenhagen, Denmark Tel: +45 35 32 12 47; Fax: +45 35 32 12 00 Email: jthoeg@zi.ku.dk

Secretary: Jeffrey D. Shields Virginia Institute of Marine Science Tel: (804) 684-7128; Fax: (804) 684-7186 Email: jeff@vims.edu

Treasurer: Mary Belk San Antonio, Texas Tel: (210) 224-7743; Fax: (210) 222-0360 Email: dbelk@texas.net

Program Officer: Jack O'Brien University of South Alabama Tel: (251) 460-7525; Fax: (251) 414-8220 Email: jobrien@jaguar1.usouthal.edu Editor, Journal of Crustacean Biology: David K. Camp Florida Marine Research Institute (ret.) Tel: (727) 394-0478; Fax: (727) 394-0238 Email: tcsjcb@tampabay.rr.com

Asian Governor: Akira Asakura Natural History Museum and Institute, Chiba Tel: +81-43-265-3274; Fax: +81-43-266-2481 Email: asakura@chiba-muse.or.jp

European Governor: Angelika Brandt University of Hamburg, Germany Tel: +49/40-42838-2278; Fax: +49/40-42838-3937 Email: abrandt@zoologie.uni-hamburg.de

> Indo-Pacific Governor: Colin McLay University of Canterbury, New Zealand Tel: 64 3 364 2887; Fax: 64 3 364 2024 Email: c.mclay@zool.canterbury.ac.nz

Latin American Governor: Marcos Tavares Universidade Santa Ursula, Brazil Tel: (55) (21) 552-5422; Fax: (55) (21) 551-6446 Email: mtavares@alternex.com.br

North American Governor: J. Emmett Duffy College of William and Mary Tel: (804) 684-7369; Fax: (804) 684-7293 Email: jeduffy@vims.edu

The Ecdysiast is published twice yearly and mailed with the May and November issues of the Journal of Crustacean Biology.

In addition, each issue, from May 1997 to present, is now available to be downloaded as a pdf at The Crustacean Society's website (see http://www.vims.edu/tcs/ecdysiast.htm).

Submissions for the May newsletter should be received by mid March, while those for the November newsletter should be received by mid September.

All types of crustacean related contributions are encouraged, including announcements of upcoming workshops and meetings, regional updates, current research, meeting summaries (with pictures!), new publications and any other news related to crustaceans.

Send all material directly to the Editor:

Rachael A. King, Southeastern Regional Taxonomic Center, Marine Resources Research Institute, PO Box 12559, Charleston, SC 29422-2559. Ph: 843-953-9794. Fax: 843-953-9820. Email: rachaelking@crustacea.net



# Amendment to the CONSTITUTION, revised to 2003

The review of The Crustacean Society by a commission appointed by Past-President Jens Høeg recommended, among other things, that membership categories be simplified. Over more than 20 years, membership categories changed from time to time following legitimate ad hoc decisions by different boards. While the Board is able to establish new classes of membership, addition only causes confusion. Two classes of membership existing in the Constitution are also problematic. The Constitution allows for "Institutional" membership. In fact, the Society has never had an institutional member and the concept of an institution voting on Society business is antithetical to some. We do however have many institutional subscribers to our journal but these do not have voting rights. The Constitution allows for two classes of members who chose to pay more than the minimum membership dues. The Board has set these additional fees in the past. It is now proposed that only one class of supporting member be recognized, to be called Patron.

The sections of the Constitution and Bylaws affected by these proposed changes, foreshadowed at the Business Meeting in June 2003, follow. It is proposed that the words struck through in the following sections be deleted. The full Constitution is available on the Society's website.

At the June Business meeting, annual dues for 2004 were established for current membership categories: Member (with and without JCB), Student Member (with JCB), and Patron (with JCB). Members wishing to claim financial hardship may write to the Secretary. Students must show proof of enrolment.

### Article 3: Membership

Section 1: Membership. Membership in the Society is open to individuals or institutions interested in crustaceans. Membership can be obtained upon written application to the Treasurer of the Society with accompanying payment of dues.

Section 2: Types of Members. Member, Sustaining Member, Patron Member, Emeritus Member, Institutional Member and Founding Member are recognized. Other classes of membership may be created by action of the Board of Governors, hereafter referred to as "The Board". An institution or organization that is a member is entitled to designate a representative who may cast a single vote in its behalf.

#### Bylaw 1: Types of Membership

The following types of members are recognized for the purpose of assessing dues:

- a. *Member* a person paying the proscribed dues.
- b. Sustaining members contributing a yearly amount as determined by the membership. Sustaining Members shall be recognized in the Society's journal.
- c. *Patron* members contributing a yearly amount as determined by the membership. Patron Members shall be recognized in the Society's journal.
- d. *Emeritus* Honorary membership accorded to outstanding scientists by action of the Board, with rights and privileges as defined in Bylaw 2.
- e. *Institutional* Institutions or organizations shall be classified by the following categories accorded to individual members: Member, Sustaining Member, or Patron Member on the payment of dues higher than those of individual persons; such dues to be set as proscribed in Article 4.
- f. Founding Members contributing \$100 (U.S.) or more in dues in 1980 only.

#### The motion is that:

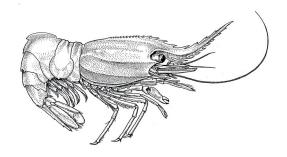
the words "or institutions" be deleted from Article 3, Section 1.

the words "Sustaining Member," and "Institutional Member" and the sentence "An institution or organization that is a member is entitled to designate a representative who may cast a single vote in its behalf." be deleted from Article 3, Section 2 and:

paragraph b "Sustaining — members contributing a yearly amount as determined by the membership. Sustaining Members shall be recognized in the Society's journal." and paragraph e "Institutional — Institutions or organizations shall be classified by the following categories accorded to individual members: Member, Sustaining Member, or Patron Member on the payment of dues higher than those of individual persons; such dues to be set as proscribed in Article 4." be deleted from Bylaw 1: Types of Membership.

I urge you to vote yes for the Constitutional change on the ballot paper in this issue of the Ecdysiast. Voting closes 31 December 2003.

Gary C. B. Poore President





### From the Editor, JCB...

Why can't some authors produce a correct Literature Cited section? Does it matter? Does anyone look closely at the list of literature cited in a paper? Does the Literature Cited section really have to be correct? The answers to these questions are: sloppiness, yes, yes, and yes, respectively.

I estimate that approximately 80-90 percent of all manuscripts I review have incomplete or incorrect Literature Cited sections. Those are the manuscripts that have already been through peer review and have been recommended for publication by the referees. They are the manuscripts have been revised by the authors after review, and yet, they still are not correct. The last thing I do before accepting a manuscript that has been reviewed and revised is to check the text citations against the references in the Literature Cited section. It is a task I detest as a waste of my time, but it is a task I know I must do. It is a task that should have been done by the author before initial submission. It is a task that should have been done, but often is not, by the referees. Rarely do I find a manuscript with a correct Literature Cited section. There may be a paper cited in the text that is not listed in Literature Cited. There may be a reference listed in Literature Cited that is not cited in the text. There may be errors within the references listed, such as incorrect journal titles, missing volume numbers, incorrect dates that do not match those in the text citation, or missing page ranges. The alphabetical listing by authors' surnames may not be in correct alphabetical order, particularly when there are several papers by multiple authors and each has the same first author but different co-authors. The list of errors goes on and on.

We all know the importance of the correct citation of previous works. The avoidance of plagiarism is paramount. The demonstration of previous knowledge and how it pertains to the current research question is necessary to put the results in perspective. A historical listing of works with records, names, and decisions used in the taxonomic literature is often essential. None of these objectives can be accomplished, however, unless the interested reader can actually obtain the papers cited. That can be achieved only when the reference to a paper is correctly listed in the Literature Cited section. The researcher or a librarian must be able to find the referenced paper in archived stacks of literature based solely on the information contained in the Literature Cited section.

In today's world of online publications, the correctness of references in the Literature Cited section is becoming even more critical to one's ability to access other papers if they too are published online. Under many online publishing systems, including the one in which the online version of *JCB* is published, a hyperlink button is added to a reference in the Literature Cited section that potentially allows the reader to access the online full-text version of the cited reference. The addition of that button, and its efficacy when "clicked," is accomplished automatically by an elaborate, interlinked software system. First, the online publications, such as the

online version of *JCB*, must be registered with a clearinghouse such as Medline or CrossRef, and each given a numerical code. The online version of *JCB* is registered with CrossRef. All information about the online publication, including the server on which it is stored, is filed in a database under that code number. When an article is being prepared by the publisher for publication online, each element of the article is coded to identify it, such as title, first author's surname, journal title, volume number, issue number, page range, etc. All of this metadata are saved with the text, tables, and figures of the article. When an article in another online publication is detected in the Literature Cited section of the paper being prepared for publication, the hyperlink button is added that links the reader to that cited paper.

If any element within the reference in the Literature Cited section is incorrect, the hyperlink will not operate properly, and the reader cannot link to the full-text version of the cited paper. This happened to me recently when I was exploring such hyperlinks in the online version of JCB. I had accessed the full text of a JCB article. While I was viewing the Literature Cited portion of the article, I pressed the hyperlink button next to the citation of an article by the same authors that had been published online in a previous issue of JCB. To my surprise, the result of that hyperlink led me not to the paper I wanted to see but to another paper in the same issue. I had jumped to the correct journal, volume, and issue but to the wrong page within that issue. During a conversation with the director of online publications at Allen Press, we discovered that the authors of the subsequent paper (i.e., the one that contained the hyperlink button) had given an incorrect page range for their previous paper. The software had read the journal, volume, and page range published within the Literature Cited section of the authors' second paper and had accessed that page range in the previous issue. The software was not smart enough to know that the authors had made that mistake, so it delivered the article with the page-range data they had published. We corrected the error in the online version of their second paper, but it will forever remain incorrect in the printed version of JCB.

As more and more online publications appear with hypertext links added by software to the Literature Cited references, the need for correctness in reporting such references will become ever more critical. I implore all authors to check and double check their Literature Cited sections before submitting their manuscripts for publication. Perhaps my task will become less detestable.

Respectfully,

David K. Camp, Editor, Journal of Crustacean Biology.





### TCS Mid-year Meeting, 2003

The 2003 Mid-year Meeting of the Crustacean Society featured the return of the meeting to the USA. The last three mid-year meetings were held in Mexico, Australia and Poland, respectively. True to the international character of our society, this year's meeting featured participants from 11 countries giving over 120 papers on the biology of the Crustacea. We had scientists from as far away as South Africa, China, Australia, and Japan attending, not to mention several other countries, and it was a pleasure to meet all of you and to exchange views on our favorite organisms.

The scientific program was outstanding. Symposia included the ecology and systematics of deep water Crustacea, the biology of the Rhizocephala, the sociobiology and behavioral ecology of Crustacea, and the biology and ecology of exploited penaeid shrimp. All symposia were well attended and very successful. In addition to the numerous and fascinating talks in the general sessions, we also featured a well-attended, semi-regular meeting for blue crab biologists, the Blue Crab Symposium. The proceedings of the Blue Crab Symposium are now being prepared for publication in MEPS and JSR.

Two student awards were given. Best Paper went to J. Antonio Baeza, Dept. Biology, The University of Louisiana at Lafayette, for his paper with Ray Bauer entitled "Experimental test of socially mediated sex change in a simultaneous hermaphrodite, the shrimp Lysmata wurdemanni (Crustacea: Caridea)." Best Poster went to Russ Barbour, Dept. Biol. Sci., Univ. North Carolina at Wilmington, for his poster with Martin Posey and T. Alphin entitled "Availability of brachyuran megalopae and settlement patterns of Callinectes sapidus megalopae in the Cape Fear River Estuary, NC." And I know that the judges had many excellent papers to choose from.

For those of you who attended, I hope you remember the fine talks and foods at the meeting, the beauty of the College of William & Mary, the fascination of Colonial Williamsburg, entertainment and dining at the colonial and modern tayerns, she-crab soup at Barretts, soft-shell crab at Cities Grill, the pulled pork barbecue of Gloucester, and of course, our form of Southern Hospitality. For those of you who didn't attend, I hope to see you at the next meeting!

Several participants undertook post-meeting excursions and told me of their trips. I enjoyed hearing from all of you and was happy that the meeting and your trips were successful. For my part, Jens Høeg and I toured 5 major battlefields in 4 days(!): Yorktown, Gettysburg, Antietam, Fredericksburg and Petersburg. In between our bellicose reenactments of Little Round Top and Pickett's Charge, we discussed numerous features of host-parasite relationships with the Rhizocephala. It was a very stimulating trip! Jeff Shields,

Chair, Organizing Committee, TCS 2003 I would also like to give one last thanks to the Organizing

Committee for the meeting: Emmett Duffy, Karen Hudson, Martha Nizinski, Ruben Rios, and Rochelle Seitz.



The organizing committee, left to right, Rochelle Seitz, Jeff Shields, Martha Nizinski, Karen Hudson and Emmett Duffy, and absent Ruben Rios.

#### Best Poster Award winner: Russ Barbour

At the time I was asked to write this article, I had just spent a long week hammering out the discussion section of my thesis (all of which I subsequently scrapped and rewrote the next day). As you can imagine, the last thing on earth I wanted to do at that point was take on some more writing and my initial reply to Rachael was a bit negative (sorry Rachael!). However, after getting a decent night's sleep, I woke up in a more positive mindset and realized I had a good idea for the article.

The poster I presented was the first one I've ever done. I was always under the impression that giving an oral presentation was more prestigious than doing a poster and believing (as most of us do) that my project was extremely important, I would only settle for giving talks when I attended various conferences. Unforeseen circumstances resulted in my not having adequate time to prepare a high quality talk for the June 2003 Crustacean Society meeting and my advisor talked me into presenting a poster instead. While it was quite a boost to my ego to receive the Best Poster Award and another boost to be congratulated by my Department Chair, the real beauty of the poster presentation was the level of interaction I had with my fellow crustacean lovers! I spent at least two full hours talking with lots of different people about various aspects of my project and I was able to get into a lot of the details you just don't have time for when giving an oral presentation. You also get to see people's reactions to what you're saying when you are face to face and you can adjust if you realize you're losing them. This is much harder to judge when you're giving a talk as, at least for me, I'm so focused on giving a smooth presentation (who said nervous?) that I have very little recall of the reactions of people in the audience. Another key aspect of the poster presentation for me was talking to other students who were doing similar types of research. While you always get to meet your peers at conferences, it was nice to be at one where most of the people attending were doing the kind of work you're really interested in.

Thanks to the organizers for putting together a really excellent conference and a special thanks to the brilliant judges who picked my poster as the best! For those who are interested, I am working on brachyuran megalopal dispersion in the Cape Fear River estuary in N.C. and I'd be happy to talk to you about it. My email address is decapodsrus@yahoo.com.



## Recent Research and Expeditions...

# The "NORFANZ" Deepsea Research Cruise (9 May 2003 to 7 June 2003)

A number of us crustacean-types were lucky enough to be invited to take part in an expedition to investigate the marine biodiversity of the Norfolk Ridge and Lord Howe Rise seamount communities (NORFANZ). This month long sea voyage (9 May 2003 to 7 June 2003) was jointly funded by the New Zealand Ministry of Fisheries and the National Oceans Office of Australia.

The Norfolk Ridge and Lord Howe Rise are prominent bathymetric features of the Tasman Sea region between New Zealand and Australia. They once formed part of the old coastline of Gondwanaland, so have existed in one form or another for over 70 million years. Seamounts are complex yet fragile communities with much higher diversity than surrounding waters, and Australia and New Zealand have designated them priority areas for marine biodiversity research. What we already know about distribution patterns indicates that some rare and endemic species are confined to individual seamounts, while others may be distributed more widely, perhaps representing a "biological highway" connecting New Zealand and New Caledonia.

Twenty-four scientists from more than eleven research organisations were represented onboard, with the crustacean contingent including Peter Davie (Queensland Museum, Brisbane), Rick Webber (Museum of New Zealand, Te Papa Tongarewa, Wellington); Bertrand Richer de Forges (IRD, Noumea), and Penny Berents (Australian Museum, Sydney).

The expedition used a variety of sampling gear including 'Orange-Roughy' and 'Rat-catcher' trawl nets, a 'Sherman' epibentic sledge, beam-trawls, and mid-water trawl nets. The collected fauna was identified on board to the highest taxonomic resolution possible, and species composition, location and other data were recorded on a database. In addition every species was digitally photographed to record fresh colours. This was supplemented, where possible, by photographs of the bottom fauna in situ by deployment of underwater camera equipment. Tissue samples were collected from selected taxa for genetic studies to aid taxonomic identification and to gain an understanding of phylogenetic relationships. Sediment and rock samples were also collected for examination of microfauna, and later analysis. Extensive hydrographic data was compiled, by regular deployment of conductivity-temperature-depth and sound-velocity instruments, and a bathymetric profile of seamounts was made, where practicable, by use of R.V. Tangaroa's EM300 multibeam echo-sounder.

This research is providing a major increase in our knowledge of marine biodiversity in this region of the Tasman Sea, and will contribute to conservation assessment and regional marine planning under Australia's Oceans Policy. The cruise has for the first time provided baseline biodiversity data for the most diverse habitats along the Norfolk Ridge at depths of around 200-1500 m. Around 550 species of fish and over 1200 species of invertebrates were recorded and photographed during the cruise. In all, around 370 species of crustacean were collected, including: ostracods (1), copepods (7), barnacles (26), stomatopods (2), mysids (12), isopods (16), amphipods (30), euphausids (4), penaeoid prawns (35), Stenopids (2), caridean shrimps (80), thalassinids (3), lobsters (8), hermits (33), lithodids (3), Galatheids (28), chirostylids (22), & brachyurans (57). It is still rather early in the sorting process to have any firm results, but we have definitely rediscovered several very rare species only known from their original descriptions, and there is already a growing list of probable new species. It is hoped that the material will be worked up reasonably quickly, so if anyone is interested in receiving specimens of their favourite groups you should contact Peter (Peter.Davie@qm.qld.gov.au) or Rick Webber (RickW@tepapa.govt.nz) and register your interest.

Peter Davie, Queensland Museum, Brisbane, Australia.

### Announcement

### **Invertebrates from Mongolia**

In an expedition to south-central Mongolia in 2002, we collected branchiopod crustaceans. Invertebrates as well as other crustaceans incidentally collected with the branchiopods are available for study.

This unsorted material is curated to highest museum standards, is in 95% ethanol, and is useful for both molecular and morphological studies.

A website describing this collection allows researchers to search the database for locality data, field photos, and common taxonomic names (e.g., copepod, cladocera, ostracod, insect, etc.): http://collections.nhm.org/mongolia.

Researchers interested in accessing this material should contact: Drs. Joel Martin or Regina Wetzer Crustacea, Natural History Museum of Los Angeles County.

jmartin@nhm.org rwetzer@nhm.org



## Recent Research and Expeditions...

# The Charleston Bump Expedition August, 2003

(http://www.dnr.state.sc.us/marine/sertc/)

The Charleston Bump is a deep-water, rocky bottom feature on the Blake Plateau southeast of Charleston, South Carolina. It includes areas of nearly vertical, 300-ft-high rocky scarps with outcrops and overhangs; other complex bottom, such as coral mounds; and flat hard bottom consisting of phosphorite-manganese pavement. The Bump's topography deflects the Gulf Stream offshore, causing downstream eddies, gyres and upwellings that concentrate plankton, fishes and other organisms along thermal fronts downstream from the Bump, and therefore increase overall productivity.

The rocky relief features of the Bump, changing currents and unpredictable sea states make it a very difficult area to sample. However, the success of past investigations using the Johnson-Sea-Link and other manned and unmanned submersibles indicates an opportunity to continue to learn more about the Charleston Bump and how it functions as habitat for a diverse crustacean fauna.

In August, I had the pleasure to participate with staff from the Marine Resources Research Institute, University of South Carolina, University of Southern Mississippi and University of Georgia in a two-week expedition funded by NOAA's Ocean Exploration program that focused on describing small habitat features created by the interaction of currents and erosion resistant features. The goal of the expedition was to characterize the fauna associated with steep rocky scarps, scour depressions, and other hard bottom areas. During the two weeks, numerous collections were made in an effort to examine assemblages associated with various habitats and with larger sessile invertebrates.

Perhaps the most conspicuous and colorful mobile crustaceans encountered on our dives were crabs. Often seen on a rocky ledge or crawling among the coral branches and fan-shaped sponges, crinoids, and other sessile organisms that cover deep-sea coral mounds, the galatheid *Eumunida picta* and the portunid *Bathynectes longispina* were the larger crabs seen on our dives. These colorful crabs largely ignored the submersible until we tried to collect them using either the suction device or the scoop sampler. They would then assume an agonistic stance with arms outstretched toward the source of disturbance in their normally dark world.

In addition to using the submersible to photograph and collect crustaceans, sampling activities that took place on the R/V Seward Johnson included measurement of temperature, salinity, oxygen content, and current speed and direction throughout the water column. This information will be used to describe the water column and dynamics of water flow at the Charleston Bump and to characterize the habitat of the organisms that we collected. We also used a neuston plankton net to collect small crustaceans and fishes in surface waters and a pipe dredge to collect organisms in the top few centimeters of sediment on the ocean bottom.

We also deployed carrion traps in order to attract crustaceans that weren't readily collected by the submersible's scoop or suction samplers. In the early 1980s, I deployed carrion traps at depths of 194-212 m on ridge areas off the coast of South Carolina. The main organisms caught in these traps were crustaceans, most of which were necrophagous amphipods and isopods. I decided it would be worthwhile to repeat the experiment on this cruise at the deep depths under the Charleston Bump.

The buckets that we deployed from the submersible were filled with dead oysters that would not only provide food for the scavengers of the deep, but would also provide a complex substrate within which the organisms could hide. The deployment of the buckets involved using the claw on the sub's mechanical arm to lift each baited bucket from the front basket of the sub. One bucket was placed at the bottom of a high relief ridge while the other was placed on top of the ridge. Once the sub was secured back aboard the Seward Johnson, we took the carrion traps out of the front basket and carefully began to wash each oyster shell. Two species of shrimp, tentatively identified as Plesionika and Heterocarpus sp., were in the bucket, as were hundreds of amphipods with bright orange eyes. It isn't known from what distance these scavengers are attracted to the baited buckets, but clearly, they must have highly developed sensory receptors. Perhaps they make use of the currents that occur near the bottom and move in the direction of the bait's odor trail until they locate the odiferous food. It has been suggested that these amphipods move like hovering buzzards above the sediment surface until they locate the chemical plume of the odor and follow it either upstream or downstream of the current. The energetic cost of hovering or swimming may be offset by the use of fat deposits in the organism that keep it near buoyancy.

Because of the uniqueness of the Charleston Bump and its importance in the life history of oceanic fishes like swordfish and wreckfish, it has been suggested that the Bump be incorporated into the U.S. National Marine Sanctuaries Program, or that some other type of ecosystem management be employed to protect the area's natural resources. Our expedition to the Charleston Bump will provide much more information on the invertebrates and the importance of the Bump's habitats to them. We have just begun to examine the videotapes from sub dives and the samples and data that were collected. Many more interesting findings will result in the months ahead as we work through the material from the expedition. I look forward to future expeditions to the slope where more exciting areas will be explored and new species collected.

Elizabeth Wenner, PhD. SC Marine Resources Research Institute and Southeastern Regional Taxonomic Center



## Recent Research and Expeditions...

### The Daphnia Genomics Consortium (DGC)

(Taken from the website: http://daphnia.cgb.indiana.edu/)

The Daphnia Genomics Consortium (DGC) is an international network of investigators committed to mounting the freshwater crustacean Daphnia as a model system for evolutionary / ecological genetics and genomics. This project draws together an interdisciplinary team of researchers with a unified goal of understanding one of biology's deepest mysteries - the evolutionary causes and consequences of recombination. The investigative team consists of cell biologists, ecologists, parasitologists, quantitative geneticists, genomicists, and mathematicians, all with considerable experience with specific aspects of recombination. The study organism, the planktonic microcrustacean Daphnia pulex, provides an exceptional array of opportunities for research in this area that is unavailable with any other system: a wide range of recombination intensities among natural populations, the presence of multiple sexual and asexual lineages, a powerful set of genomic tools, well understood ecology, ease of experimental manipulation, and a living-fossil record.

The National Science Foundation has recently announced \$5 million funding that provides a number of opportunities for graduate student and postdoctoral research over the next five years. Interested students and postdoctoral candidates are encouraged to request more information by contacting Dr. Michael Lynch, the lead PI, Department of Biology, Indiana University, USA, (email: mlynch@bio.indiana.edu).

Research activities of the DGC are primarily focused on creating genomic tools and information. When completed, the current projects will offer a first view of the Daphnia genome's topography, including regions of high and low recombination, the distribution of transposable, repetitive and regulatory elements, the size and structure of genes and of their neighborhoods. This information is crucial in formulating testable hypotheses relating genetics and demographics to the evolutionary potential or constraints of natural populations. Projects aiming to compile identifiable genes with their function are also underway, together with robust methods to verify these findings. Finally, these tools are being tested, by exploring their uses in key ecological and toxicological investigations. Each project benefits from the leadership and expertise of many individuals. For further details, begin by contacting the project directors.

Along with research activities, the DGC is: (1) coordinating efforts towards developing the *Daphnia* genomic toolbox, which will then be available for use by the general community; (2) facilitating collaborative cross-disciplinary investigations; (3) developing bioinformatic strategies for organizing the rapidly growing genome database; and (4) exploring emerging technologies to improve high throughput analyses of molecular and ecological samples. It is not

unrealistic to think that with appropriate planning, a complete sequence of the *Daphnia* genome can be accomplished over the next 2-3 years. If the *Daphnia* Genomics Project is to be successful, it will have to be a community-wide effort, and we hope that you will be interested in participating and contributing at some level.

### **CRAYNET**

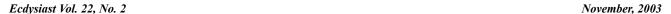
CRAYNET is an EU Thematic Network focusing on European crayfish as keystone species – linking science, management and economics with sustainable environmental quality. The network consists of a core group of scientists from 11 European countries with the co-ordinator being Catherine Souty-Grosset from the Université de Poitiers in France.

As a forum for presentation of current status, new research and roundtable discussions, CRAYNET will arrange three meetings, each with a special focus on one of the three most endangered European crayfish species. The first meeting with a special focus on Austropotamobius pallipes was held in Kilkenny, Ireland in June 2003 and the second with a special focus on Astacus astacus was recently held in Halden, Norway in September 2003. The third meeting, focusing on Austropotamobius torrentium, will be in Innsbruck in September 2004. The meetings are aimed at bringing together not only the core scientists but also other crayfish researchers and managers, to identify necessary research for a common approach to management techniques, and to develop recommendations for optimal management strategies at a European scale. Papers from the meetings and recommendations from the roundtable discussions will be published in special editions of the BFPP-journal (The Bulletin Français de la Pêche et de la Pisciculture). CRAYNET will also produce an Atlas of distribution of freshwater crayfish species in Europe.

The special objective of the recent Halden meeting on September 1 - 4 was to focus on the cultural and socioeconomic significance of the noble crayfish, *Astacus astacus*, and the important link between conservation and use. The meeting gathered 58 participants from 17 countries. The program included 14 plenary talks, 17 posters and four roundtable discussions as well as a field trip ending in a crayfish party aimed at demonstrating the sociocultural significance of crayfish in the Scandinavian countries.

For more information about CRAYNET, the different meetings and a downloadable version of the abstract booklet from the Halden meeting, see: http://labo.univ-poitiers.fr/craynet/index.htm.

Submitted by Dr. Trond Taugbol, Norwegian Institute for Nature Research, Lillehammer, Norway.





### The IBMANT/ANDEEP Symposium & Workshop. Interactions between the Magellan Region and the Antarctic/Antarctic Benthic Deep-sea Biodiversity. Ushuaia, Argentinia

October 20-24, 2003

http://www.tierradelfuego.org.ar/cadic/ibmant.htm

This Symposium, which continues the approach initiated during the first IBMANT Symposium held in 1997 at the Magellan University, Punta Arenas (Chile), was held during the publication of this edition of The Ecdysiast. It is included here because of its important crustacean content. More than 100 contributions were submitted for this meeting, with many international attendees.

Regionally, the gradient from high Antarctic waters across the low and subantarctic regions to cold-temperate areas was well covered, and presentations relating to the deep sea contributed about a quarter of the total. Faunistics dominated, with a preponderance of benthic papers and biogeographic aspects, and some major taxa such as crustaceans were particularly well covered. Important paradigms were challenged, and brand-new data provided on formerly largely unknown areas as the deep sea. The impressive amount of information summarized in the extended abstracts gave some indication that this would be a successful, interesting and most enjoyable conference.

Crustacea played an important role in this workshop and topics, ranging from the recolonization of Antarctica by benthic Decapoda after the Tertiary extinction events via comparisons of the Magellanic and Antarctic Crustacean fauna, to the question of the origin of the Antarctic Crustacea, were covered. A central debate of this workshop was whether there might has been a recent exchange between the Magellanic and Antarctic fauna via the Scotia Arc or whether species have colonized Antarctica via the deep sea.

A more detailed summary of the meeting will be in the next Ecdysiast edition.

#### The organisers:

Wolf Arntz, Alfred Wegener Institute for Polar and Marine Research, Bremerhaven, Germany.

Gustavo Lovrich, Centro Austral de Investigaciones Científicas, Ushuaia, Argentina.

Angelika Brandt, Zoological Institute and Museum, University of Hamburg, Germany.

### Submitted,

Angelika Brandt, European Governor, TCS



### International symposium: Ecology of Large Bioturbators in Tidal Flats and Shallow Sublittoral Sediments - From Individual Behavior to their Role as Ecosystem Engineers Nagasaki University, Japan

November 1-2, 2003

The symposium, centered on the ecology of thalassinidean shrimps, will examine the following subjects, scheduled in as many sessions. Also welcome, are those interested in the ecology of tidal flats and estuaries.

Organizer: Akio TAMAKI (Professor, Faculty of Fisheries, Nagasaki University, e-mail tamaki@net.nagasaki-u.ac.jp)

### SICB, Ecophysiology and Conservation: The Contribution of Endocrinology and Immunology New Orleans, USA

January 5-9,\* 2004 \*note slight date change!

http://www.sicb.org/meetings/2004/index.php3

From hormones to antibodies: Physiologists offer new approaches in the global biodiversity conservation effort.

This year the Society of Integrative and Comparative Biology is sponsoring a symposium titled "Ecophysiology and Conservation: The Contribution of Endocrinology and Immunology" to help address the loss of biodiversity. Physiologists from many sub-disciplines (integrative, comparative, evolutionary, and environmental) are gathering to compare approaches and to define the unique contributions they can make in the emerging field of Conservation

A host of conservation issues are being addressed. Scientists are developing new tools that identify stressed and unhealthy animals in the field based on immunological and endocrine signals. They are also using physiological tools to investigate the mechanistic underpinnings of behavioral choices that determine source and sink populations and the carrying capacity of specific habitats.

Physiology.

The goal of the symposium is to initiate a field the organizers have termed Conservation Physiology. Conservation physiology will help establish better mechanistic and theoretical linkages across levels of biological organization and between the ecological, behavioral, and genetic studies currently of focus in Conservation Biology.

This symposium will begin the process of drawing these scientists together and identifying conservation as a new direction in physiology. This symposium is supported in part by The Crustacean Society, the U.S. Environmental Protection Agency, and the SICB Divisions of Comparative Endocrinology and Invertebrate Zoology.

continued...



## Conferences, meetings and workshops...

Organizers 2004 SICB: Robert Stevenson (UMass Boston), Shea Tuberty (Appalachian State University), John Wingfield (University of Washington) and Peter deFur (Virginia Commonwealth University; Environmental Stewardship Concepts).

At this same meeting, The Crustacean Society will be sponsoring a Best Student Paper Competition. The deadline for abstract submission has passed, but if you are interested in attending this meeting, please visit the SICB website (given above) for registration details. The Crustacean Society will also hold a mid-year business meeting and set up a Crustacean Society membership and information booth.

## A Taxonomic Workshop on the Identification of Decapod Crustacea of the Southeastern United States

South Carolina Department of Natural Resources Marine Resources Research Institute, Charleston, South Carolina, USA January 21-23, 2004

The workshop will serve to train advanced students, educators and scientists in the systematics and identification of decapods of the Southeastern United States. Emphasis will be placed on diagnostic morphological characteristics and the use of keys. Participants can expect to gain practical knowledge in the identification of decapods as well as a grasp of their current systematics.

Instructors: Dr. Darryl Felder (University of Louisiana), Dr. Richard Heard (University of Southern Mississippi) and Dr Elizabeth Wenner (South Carolina Department of Natural Resources).

Registration will begin in October 2003 and enrollment will be limited to approximately 25 participants. For additional information, visit the workshop webpage http://www.dnr.state.sc.us/marine/sertc/workshop.htm or contact Dr. Rachael King (kingr@mrd.dnr.state.sc.us)

### Seventh International Conference and Workshop on Lobster Biology and Management

Hobart, Tasmania, Australia. 8-13 February, 2004.

http://www.cdesign.com.au/lobster2004/
Possible symposia: Stock Assessment, Management
Strategies, Marine Protected Areas, Physiology, Behaviour,
Aquaculture & Enhancement, Oceanic Processes & Ecology,
Benthic Ecology, Transport & Marketing Issues, Genetics,
Phylogeny & Taxonomy, Ecosystem Dynamics, Technology.

## Third Brazilian Crustacean Congress and 2004 TCS Mid-year Meeting

Florianópolis, Santa Catarina State, Brazil October 24-28, 2004

Dear TCS Members,

It is my pleasure to announce that the 3<sup>rd</sup> Brazilian Crustacean Congress and the 2004 TCS mid-year meeting will take place on Brazilian soil in South America. After considering several wonderful potential sites available along the 8.000 km of Brazilian coast, the city of Florianópolis, Santa Catarina State, southeastern coast of Brazil, was selected.

We have chosen the Costão do Santinho Resort (www.costao.com) as the official hotel for the meeting. The Costão do Santinho Resort is the most complete tourist and residential complex in Southern Brazil. It unites complete facilities and international quality services with the natural beauty of one of Brazil's most striking beaches - the Praia do Santinho. The resort is located 35 km from the center of Florianópolis. The island has 42 beaches, lagoons, dunes, mountains, a wonderful quality of life and good security. The resort is situated in an ecological paradise, occupying a one million square meter site, with 750 thousand m² of Atlantic Forest preserve, sand dunes, and rocky coastal areas, all for meeting participants and their families to explore!

This congress will convene from October 24 to 28, 2004. English is the official language for activities that will commence on Sunday afternoon (Oct 24) with registration and an evening welcome ceremony. The formal sessions will begin on Monday morning and continue through Wednesday (Oct 27) when the meeting will conclude with a banquet. The option for post meeting excursions is planned for Oct 28.

The congress will provide a forum for focused scientific presentations, workshops, conferences and discussions, but also include contributed papers in divisional and topical session on all aspects of crustacean biology. The SBC and TCS boards are presently considering several themes for focused sessions. If you have suggestions, please contact us. The deadline for receipt of session proposals is November 15, 2003, so please start developing your ideas and talking with your colleagues.

The first announcement with detailed information concerning the preliminary program, location, special prices (hotel and facilities), registration, visa requirements, and general information for the participants will be available in October 2003 on the TCS (www.vims.edu/tcs) and SBC (www.ib.usp.br/sbc) web sites.

We plan to keep all costs as low as possible, and will try to provide some alternatives to expensive airfares, along with exemption from hotel taxes for visitors. We hope to provide you an enjoyable and informative meeting along with the opportunity to visit this incredibly beautiful and comfortable part of Brazil.

continued...



## Conferences, meetings and workshops...

Please join us for some interesting science and the opportunity to make new friends and contacts in the crustacean research community. We look forward to hosting you in 2004.

Fernando L. Mantelatto President, Brazilian Crustacean Society and Meeting Chairman E-mail: flmantel@usp.br

### San Diego, California, (with SICB),

January 4-8, 2005 http://www.sicb.org/meetings/2005/index.php3

Sixth International Crustacean Congress (ICC6) University of Glasgow, Scotland, UK.

July 18-22, 2005

This is the first announcement that The Sixth International Crustacean Congress will take place at the University of Glasgow, Scotland UK from July 18<sup>th</sup> – 22<sup>nd</sup> 2005. The conference is organised on behalf of the International Crustacean Council by The Institute of Biomedical and Life Sciences, University of Glasgow.

The Meeting will also host the 5th European Crustacean Conference, the 4th International Crustacean Larval Conference and the 2005 Summer Meeting of the Crustacean Society. It therefore promises to be a celebration of all things Crustacean!

### SCIENTIFIC PROGRAMME

The Meeting will comprise daily Plenary Lectures, followed by a number of parallel sessions on different themes. In addition, poster sessions will be organised, with authors in attendance.

At present the following themes are planned:

**Phylogeny of Crustacea**: Molecular Systematics, Morphology and Molecules, Crustaceans and other arthropods, Biogeography of anchialine faunas.

**Crustacean Larvae:** Behaviour, ecology, physiology, taxonomy and evolution.

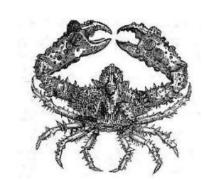
Ecophysiology of Crustacea
Behaviour – including welfare issues
Ecology and Biogeography
Crustacean diseases
Crustacea as parasites and hosts
Commercially important crustaceans: threats and opportunities

### Crustaceans in Crisis - conservation issues

One purpose of this announcement is to invite proposals for additional themes from interested organisers. For further information about the venue and arrangements, visit the ICC6 website. There you can also register an expression of interest via a webform, and so will receive further updates.

ICC6 Website: http://www.gla.ac.uk/icc6/ ICC6 Email enquiries: icc6@bio.gla.ac.uk Glasgow Tourist Board Website: http://visitors.seeglasgow.com/

Dr. Douglas M. Neil Chair of ICC6 Organising Committee Institute of Biomedical and Life Sciences, Graham Kerr Building, University of Glasgow Glasgow G12 8QQ, Scotland, UK. email: d.neil@bio.gla.ac.uk



The Crustacean Society Website

The Crustacean Society website, http://www.vims.edu/tcs, is designed to provide our members with information on meetings, society news, business, instructions for the Journal of Crustacean Biology, the Ecdysiast, and other helpful links. Noteworthy features include: (1) membership applications and new benefits to members; (2) society poster and page for recruitment (great pics!); (3) fliers and offical info for upcoming meetings; (4) an official copy of Martin & Davis (2001) Classification of the Crustacea; and of course the classic (5) manuscript tracking page for JCB submissions (updated monthly). This website is designed to serve you and our society's diverse interests, if you have an idea, item, link, or information of general interest, please forward it to jeff@vims.edu for inclusion in our website.



# New publications...

# CONTRIBUTIONS TO THE STUDY OF EAST PACIFIC CRUSTACEANS Ed. Michel E. Hendrickx

The second issue of this series is now being prepared and will be available in December 2003.

The content is enclosed below. Volume 3 will be published between June and December 2004 and manuscripts (in English or in Spanish) can now be sent to the editor. Volume 1 is still available. Cost is 25 US\$ for Latin America and 35 US\$ elsewhere (plus shipment). Please contact Michel E. Hendrickx (michel@ola.icmyl.unam.mx).

#### VOLUME 2

"Patrones de la Riqueza de Especies y Evolución del Registro Taxonómico de Anfipodos del Pacifico en el Territorio Mexicano". **Escobar-Briones, E. & I. Winfield.** Instituto de Ciencias del Mar y Limnología, México D.F., México.

Distribution of species of *Munidopsis* (Decapoda: Anomura: Galatheidae) on the continental slope of the SE Gulf of California, Mexico. **Hendrickx, M.E.** Unidad Académica Mazatlán, ICML, UNAM, Mazatlán, Sinaloa, México.

Abundance of *Calanus pacificus* (Copepoda, Calanoida) related to "El Niño" event off Baja California, México. **Hernández-Trujillo S.¹ & E. Suárez-Morales²**. ¹CICIMAR-IPN. Av. IPN s/n 23096 La Paz, B.C.S. 23000. México. ²ECOSUR-Unidad Chetumal. A.P. 424. Chetumal, Q. Roo 77000. México

List of Malacostracan Type Material in the Mazatlán Crustacea Reference Collection. **Hendrickx**, **M.E.** Unidad Académica Mazatlán, ICML, UNAM, Mazatlán, Sinaloa, México.

An updated checklist of benthic marine and brackish water penaeoid, stenopodidean and caridean shrimps (Decapoda: Penaeoidea, Stenopodidea and Caridea) from the Eastern Tropical Pacific. **Wicksten, M.K.¹ & M.E. Hendrickx²**. ¹Texas A & M University, College Station, USA. ²Unidad Académica Mazatlán, ICML, UNAM, Mexico.

Digestives enzymes and biochemical physiology of crustacean species of the Mexican Pacific Ocean. **Muhlia Almazán, A. & F.L. García Carreño.** Centro de Investigaciones Biológicas del Noroeste (CIBNOR). A.P. 128, La Paz, BCS, 23000, México.

Variación temporal del zooplancton en las costas de Jalisco y Colima, México, durante un ciclo anual (1996). Siordia Cermeño, M.P., L. Sánchez Velasco, C. Franco Gordo & M. Sánchez Ramírez. Depto. de Plancton, CICIMAR, La Paz, BCS, México

Reproducción de *Potimirim glabra* (Kingsley, 1878) (Crustacea, Decapoda, Atyidae) en el Río Coyuca, Guerrero, México. **Martinez Mayen, M. & R. Roman Contreras**. Instituto de Ciencias del Mar y Limnología, UNAM, México D.F.

Individual growth of the white shrimp, *Litopenaeus vannamei* (Crustacea: Penaeidae) in an intensive culture system: Fitting a model. **Aragón-Noriega, E.A., D.P. Alvarado-Romero, J.C. Romero-Sedano & J.H. Córdova-Murueta**. Centro de Investigaciones Biológicas del Noroeste, S.C., Unidad Guaymas. Guaymas, Sonora, México.

Doce nuevos registros para los estomatópodos (Crustacea: Hoplocarida) del Pacífico colombiano. **Murillo-Bohórquez, C.¹ & R. Álvarez-León²**. ¹Corporación para la Protección Ambiental. Santa Fe de Bogotá D. C. Colombia & ²Conservación Internacional-Colombia. Apartado Aéreo 101372. Santa Fe de Bogotá D. C. Colombia,

Evaluación biológica y pesquera de las jaibas Callinectes bellicosus y Callinectes arcuatus en las bahías de Guasimas y Lobos, Sonora. Nevárez-Martínez, M.O.<sup>1,2</sup>, J. López-Martínez<sup>2</sup>, C. Cervantes-Valle<sup>1</sup>, E. Miranda-Mier<sup>1</sup>, R. Morales Azpeitia<sup>2</sup> & M. L. Anguiano-Carrasco<sup>1</sup>. Centro Regional de Investigación Pesquera Guaymas. Calle 20 Sur 605 Col. La Cantera, Guaymas, Sonora, 85400, México.

Commercially important crabs, shrimps and lobsters of the North Pacific Ocean. **Otto, R.S.¹ & G. Jamieson²**. <sup>1</sup>Alaska Fisheries Science Center, Kodiak, Alaska; <sup>2</sup>Fisheries and Oceans Canada, Pacific Biological Station, 3190 Hammond Bay Road, Nanaimo, BC, Canada.

Winter egg production rates of four calanoid copepod species in Bahía de La Paz, México. Centro Interdisciplinario de Ciencias Marinas (IPN-CICIMAR). **Palomares-García, R., A. Martínez-López & R. De Silva-Dávila**. Depto. de Plancton y Ecología Marina, La Paz, BCS, México.

Diversidad y abundancia de los crustáceos asociados a la esponja *Mycale parishi* (Bowerbank, 1875) en la Bahía de Mazatlán (México, Pacífico Oriental). **Vega Juárez, C. & J.L. Carballo Cenizo**. Universidad Nacional Autónoma de México, Instituto de Ciencias del Mar y Limnología, Unidad Académica Mazatlán, México.

Distribución de *Cancer johngarthi* en la costa occidental de Baja California Sur, México. **Ramírez-Rodríguez, M.¹, F. Arrequín-Sánchez¹, G. de la Cruz-Agüero¹ & E. Balart-Páez². ¹CICIMAR-IPN, P.O. Box 592, La Paz, BCS, 23000 México. ²CIBNOR, Apdo. Postal 128, La Paz, BCS, 23000 México** 

Population biology of *Callinectes bellicosus* (Decapoda: Portunidae) in Bahia Magdalena lagoon system, México. **Villareal-Chávez, G¹, P.G. González-Ramírez², F.A. García-Domínguez², E.F. Félix-Pico², & O.E. Holguín-Quiñones²**. ¹Facultad de Ciencias del Mar, UABC, Ensenada, BC, ²CICIMAR-IPN, La Paz, BCS, México.

Diversity of Chilean Peracarids (Crustacea: Malacostraca). Thiel, M.,¹ E.R. González,¹ M.J. Balanda,¹ Pilar Haye,¹ R. Heard² & L. Watling³. ¹Universidad Católica del Norte, Coquimbo, Chile; ²University of Southern Mississippi, Ocean Springs, USA; ³University of Maine, Walpole ME 04573, USA.

continued...



### New publications...(continued)

Cangrejos asociados a los manglares de la costa oriental de Baja California Sur. Félix Pico, E.F.¹, O.E. Holguin Quiñones¹, E. Campos² & J. Salgado Barragán³. ¹CICIMAR-IPN. La Paz, BCS, México. ²Facultad de Ciencias Biológicas. UABC, Ensenada, México; ³Unidad Académica Mazatlán, ICMyL UNAM, Mazatlán, Sinaloa, México.

Reproducción y desarrollo de la langosta espinosa de Juan Fernández, *Jasus frontalis* (H. Milne Edwards, 1837). Revisión. **Dupre M., E.** Departamento de Biología Marina, Facultad de Ciencias del Mar, Universidad Católica del Norte, Coquimbo, Chile.

Acción de los fenómenos el niño y la niña sobre los ecosistemas de manglar y la producción de camarones peneidos en el pacífico colombiano. Álvarez-León, R.¹, J.A. Díaz-Ochoa² & E. Ñañez-Martínez³. ¹Conservación Internacional-Colombia, Apartado Aéreo 101372. Santa Fe de Bogotá D.C., Colombia. ²Departamento de Oceanografía, Universidad de Concepción, Concepción, Chile. ³Comisión Colombiana del Océano, Santa Fe de Bogotá D.C., Colombia.

Distribución espacial y afinidades zoogeográficas de los anfípodos e isópodos (Crustacea: Peracarida) de los sistemas estuarinos de Michoacán. **Corona, A.¹ & A. Raz-Guzman²**. ¹Instituto de Ciencias del Mar y Limnología, Universidad Nacional Autónoma de México. México, DF. ²Instituto de Investigaciones sobre los Recursos Naturales, Universidad Michoacana de San Nicolás de Hidalgo, Morelia, Michoacán, México.

Size and abundance of deep water shrimps on the continental slope of the SE Gulf of California, Mexico. **Hendrickx, M.E.** Unidad Académica Mazatlán, ICML, UNAM, Sinaloa, Mexico.

# **CANDID SCIENCE III. More Conversations with Famous Chemists**

by István Hargittai (Budapest University of Technology and Economics, Hungary). Edited by Magdolna Hargittai (Eötvös University, Hungary.

In this volume, 36 famous chemists, including 18 Nobel laureates, tell the reader about their lives in science, the beginnings of their careers, their aspirations, and their hardships and triumphs. The reader will learn about their seminal discoveries, and the conversations in the book bring out the humanity of these great scientists. Highlighted in the stories are the discovery of new elements and compounds, the VSEPR model, computational chemistry, organic synthesis, natural products, polysaccharides, supramolecular chemistry, peptide synthesis, combinatorial chemistry, X-ray crystallography, the reaction mechanism and kinetics, electron transfer in small and large systems, non-equilibrium systems, oscillating reactions, atmospheric chemistry, chirality, and the history of chemistry.

Other books on Candid Science are also available: Candid Science I: Conversations with Famous Chemists Candid Science II: Conversations with Famous Biomedical Scientists

### **CRUSTACEAN ISSUES**

Evolutionary Developmental Biology of Crustacea VOLUME 15 by Dr. Gerhard Scholtz (Dr. Ronald Vonk, General Editor)

The great diversity of their body organization, segmentation patterns, tagmatization, limb types, larval forms, cleavage, and gastrulation modes unmatched by any other arthropod group makes crustaceans desirable and well-suited objects for studies dealing with questions at the interface of evolution and development. In fact, this has a long tradition in biology and even Charles Darwin took cirripede crustaceans as examples to show interdependencies between ontogeny and evolution. The modern interest in evolutionary developmental biology (evo-devo) results from the powerful molecular genetic approach. Genes and their products that underlie body architecture, segment formation, limb differentiation etc. can now be made visible in expression patterns related to morphological structures. Furthermore, the function of these genes can be tested in an increasing number of animal species by RNA injection and similar techniques. The volume treats all aspects of crustacean "evo-devo" in a comprehensive way. In an introductory chapter the implications of the typological Bauplan and phylum concepts versus historical concepts such as ground pattern and monophylum for the formulation of conceptual questions in evolutionary developmental biology are discussed. The remaining chapters of the book are arranged in three sections. In the first section, "Genes and body organisation" three papers present the results of Hox gene expression in various crustacean taxa and their implications for our views on tagmatization in Crustacea and arthropods in general. The section on "Cells and segments" comprises three articles dealing with aspects of segment formation at the cellular and genetic levels and the formation of segmental structures such as neurons, ganglia, and limbs. The two articles of the third section "Morphology and phylogeny" beautifully demonstrate that morphological ontogenetic characters are very powerful in resolving phylogenetic relationships. All chapters are written by the leading international experts in their fields.

25% discount for members of the Crustacean Society ISBN 90 580 9637 8, Bound, Price EUR 119.00 / US\$ 135.00) (PLEASE ADD POSTAGE AND LOCAL SALES TAX). In Europe, please add EUR 8.00 when ordering one copy, and an extra EUR 4.00 for each additional copy. In North America, please add US\$ 8.00 when ordering one copy, and an extra US\$ 1.00 for each additional copy. A.A.Balkema Publishers, P.O.Box 825, 2160 SZ Lisse, The Netherlands Tel.: (+31) 252 435 111; Fax: (+31) 252 435 447; E-mail: orders@swets.nl

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# Journal Spotlight...

#### The Brazilian Crustacean Journal - NAUPLIUS

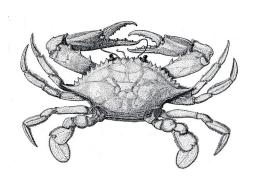
The Brazilian Crustacean Society (SBC) is an exclusively cultural-scientific non-profit non-governmental Brazilian organization devoted tocrustacean research. The journal *Nauplius* is the official scientific publication of the Brazilian Crustacean Society. Within *Nauplius*, original articles of crustacean biology, including taxonomy, phylogeny, morphology, development, physiology, ecology, biogeography, bioenergetics, aquaculture and fisheries biology are published.

The journal has a new format, A4 size, with high quality printed-paper, and all articles are published in English. *Nauplius* is published annually, with two issues per year. For SBC members, part of the costs for printed pages is paid by the SBC and the authors will be charged per printed page regardless of the total length of the article. Authors other than the SBC members must pay full-page charges.

We would like to extend an invitation to submit your research papers to *Nauplius*. Instructions for preparing and submitting manuscripts are published in the 'Author Guidelines' section on Journal's home page at http://www.ib.usp.br/sbc or directly with the Editor, Maria Lucia Negreiros-Fransozo (email: mlnf@ibb.unesp.br; FAX: +55 14 68026268), Department of Zoology, UNESP, Botucatu, São Paulo, Brazil, 18618-000.

We look forward to working with you.

Submitted by
Fernando L. Mantelatto
President of the Brazilian Crustacean Society
Department of Biology – FFCLRP - University of São Paulo (USP), Brazil



### WANTED: Alcohol-preserved Sphaeromatidae (Crustacea, Isopoda) specimens for molecular analyses

Regina Wetzer, Niel Bruce and Jody Martin, are working on an NSF-supported morphological and molecular-based phylogenetic and biogeography study of sphaeromatid isopods (ca. 97 genera and 670+ species). Our goals include accumulating taxonomic, literature, specimen, and other data and making this information available in web accessible databases at a website devoted to the group (http://isopods.nhm.org/).

We are soliciting donations of sphaeromatid isopods from around the world preserved in 95–100% ethanol for the molecular work. Specimens for morphological studies are also welcome.

Coastal benthic habitats that are most productive include coral reef habitats (dead coral heads, coral rock and coral rubble), algae, sand, mangroves, sponges, oyster and barnacle tests, and similar. In temperate and cool waters, algae often have associated isopods. If you are collecting in these habitats and can preserve specimens in ethanol, we would be most grateful to receive them. We will happily pay for shipping and acknowledge your donation.

We have an active collecting program (California, Baja California, Caribbean, Great Barrier Reef, East Africa, Seychelles) and as we collect and sort samples for sphaeromatids, we retain the associated fauna. We will gladly exchange invertebrate specimens with you.

At present any and all alcohol-preserved specimens are welcome. If you don't want to or cannot sort to family, we will happily accept all alcohol-preserved isopods.

For further information regarding priority regions, taxa or aids to identification of sphaeromatids please contact one of us.

Please direct your *questions* regarding habitats, collecting techniques to NLB or RW. *Specimen exchanges*: contact RW.

Thanking you in advance for your sphaeromatid donations, Regina.

1. Regina Wetzer, Ph.D.

Research and Collections

Natural History Museum of Los Angeles County 900 Exposition Blvd., Los Angeles, CA 90007, USA Tel. +213 763 3217, FAX +213 747 0204 rwetzer@nhm.org

2. Niel L. Bruce, Ph.D.

Marine Biodiversity and Biosecurity

National Institute of Water and Atmospheric Research Private Bag: 14-901, Kilbirnie, Wellington, New Zealand

Tel. +64 4 386 0352, FAX +64 4 386 2153 n.bruce@niwa.co.nz







# CRUST-SOC@VIMS.EDU, The Crustacean Society's listserver

The Crustacean Society now has an email listserver that is only open to members of the society. The sole function of this listserver is to provide you with timely official society business and important society announcements. CRUST-SOC is moderated and closed and is not a forum for discussion. It is not meant to replace CRUST-L because the latter is open to nonmembers and is for broader discussion on Crustacea. For suggestions, contact me, jeff@vims.edu, your TCS Secretary, or any member of the board (listed at our website http://www.vims.edu/tcs).

You can subscribe to CRUST-SOC by becoming a member of the society. Members who aren't subscribed can send SUBSCRIBE CRUST-SOC YOUR NAME (not your email address) as the message body to LISTPROC@VIMS.EDU. You can unsubscribe by sending UNSUBSCRIBE CRUST-SOC to LISTPROC@VIMS.EDU.

We have taken every effort to ensure that your email address has been correctly entered into CRUST-SOC. Thus, if you are a member and are not on the list, please enter your correct email address on the annual subscription form, and please subscribe as detailed above. Remember, CRUST-SOC is the official email listserver for society information and not a forum for discussion.

## CRUST-L@VIMS.EDU, the discussion list for Crustacea

CRUST-L@VIMS.EDU is the email listserver for those interested in Crustacea. It is an informal scientific forum for discussion on all aspect of the Crustacea. CRUST-L is a moderated, open list, but you have to be a member to post messages to it. You can subscribe to the list by sending SUBSCRIBE CRUST-L YOUR NAME (not your email address) as the message body to LISTPROC@VIMS.EDU. You can unsubscribe by sending UNSUBSCRIBE CRUST-L to LISTPROC@VIMS.EDU. Use LISTPROC@VIMS.EDU to post administrative commands such as SUBSCRIBE, INFO, HELP. Use CRUST-L@VIMS.EDU to post messages to CRUST-L. The listproc software includes several features such as searchable archives, and a digest mode for intermittent mailings.

### HOST NEEDED FOR 2006 TCS Mid-year meeting

The Board of The Crustacean Society is seeking a host for the Society's 2006 "Summer/mid-year" Meeting. This is a great opportunity to show off your program, your town and your institution!

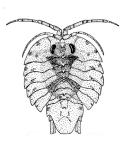
A North American meeting site is preferred because the 2004 meeting will be held in Brazil, and the 2005 meeting will be a part of ICC6 in Scotland. Summer meetings attract roughly 100-200 participants and typically take place in May, June, or July. They extend over five days (day 1: registration and evening reception; days 2-4: oral and poster presentations; day: 5 optional post-meeting excursion and/or field trip). One evening is reserved for a meeting banquet.

The location for the meeting should be relatively accessible to travelers with reasonably priced accommodations within a short distance of the meeting venue. An inexpensive housing option for students would be a bonus, but not absolutely necessary. The meeting venue should accommodate oral and poster sessions, coffee breaks, easy access to lunch and have a sufficient number of meeting rooms for symposia and at least two concurrent sessions if necessary. Meeting rooms should support the standard audio visual aids (including power -point presentations). It would be nice if there were a few points-of-interest in the surrounding area for meeting participants and their families to visit, either on their own or as part of a post-meeting excursion.

It is expected that conferences financially "break even", but the Crustacean Society can provide seed money to help get the program started.

If you're interested in hosting a Summer Meeting, we encourage you to discuss the matter with hosts of previous meetings, TCS officers, and past TCS officers. Please notify Jeff Shields, the current organizer of our 2003 meeting if you have specific questions.

Thank you for considering the task!







The Crustacean Society officers and governors serve for two-year terms, half being elected each year. The term of the President and President-Elect is limited to two years but other officers and governors may serve multiple terms. Four offices are now open for the period 2004-2005, the positions of President-Elect, Latin American Governor, Asian Governor and Program Officer. No nominees were found for the position of Program Officer (see page 18) and so a special election will be held, either in the next Ecdysiast, or through Crust-SOC. Brief biographies of the nominee or nominees for each office are given below. You may vote either by email or by the ballot attached at the end of this newsletter. Email is the preferred method as it expedites the process. Please take the time to vote for the candidates nominated or you may write-in a candidate of your choice. Voting will close on **31 December 2003**.

To vote by email, please type "The Crustacean Society 2003 Ballot" in the subject field and send your votes to Dr. Trisha Spears at spears@bio.fsu.edu. Please limit the message field to:

President-Elect: name of candidate
Latin American Governor: name of candidate
Asian Governor: name of candidate

To vote by regular mail, please mark your ballots and return them to: TCS Fall 2003 Elections, Care of: Dr. Trisha Spears, President-Elect, The Crustacean Society, Department of Biological Science, Florida State University, Tallahassee, Florida 32306-1100 USA.

### **President-Elect:**

### **Jeffrey Shields**

Associate Professor, Virginia Institute of Marine Science, Gloucester Point, VA 23062, USA.

Education: B.A., Aquatic Biology, Univ. Calif., Santa Barbara, 1980; M.S., Parasitology, Univ. Calif., Berkeley, 1983; Ph.D., Aquatic & Population Biology, Univ. Calif., Santa Barbara, 1987. Professional Employment: Postdoc. Assoc., Univ. Calif., Santa Barbara, 1988; Research Fellow & Assoc., Dept. Parasitology, Univ. Queensland, Australia 1989-1993; Visit. Instruct., Purdue Univ., 1991; Research Coordinator, CBNERRSVA, VIMS, 1992-1997; Assist. Res. Prof., VIMS, 1994-2000; Assoc. Res. Prof., VIMS, 2000-2002. Assoc. Prof., VIMS, 2002-. Publications: 44/95. Member: AAAS, TCS, Natl. Shellfish. Assoc., Am. Soc. Microscop., Am. Soc. Parasitol. Other: List Admin. for CRUST-L and MARINE\_PATHOL; ICES delegate, 2000-. Offices: Secretary, TCS, 1999-. Research Interests: Epizootiology and pathology of diseases in Crustacea and other marine organisms, taxonomy of parastic organisms, host-parasite relationships, *Pfiesteria*.

### **Latin American Governor:**

#### Michel E. Hendrickx

Unidad Académica Mazatlan, ICML, UNAM. Mazatlán, Mexico.

Michel E. Hendrickx was born in Brussels, Belgium, and remains a Belgian citizen although he has been living in Mexico for the last 24 years. He studied Agronomy (two years) and Zoology (full career) at the Université Libre de Bruxelles where he also got a Doctorate in Sciences. After a year working at the University in Brussels, he worked as an invited scientist at the Phuket Marine Biological Center, Phuket Island, Thailand, from August 1974 to October 1976, where is was involved in a study on plankton communities. In May 1977 he moved to Mexico as an UNESCO Associate Expert in Marine Sciences and arrived in Mazatlán, on the Pacific coast of Mexico, in August 1977, where he has worked ever since then. As a UNESCO staff member, he was involved in advising students and in local projects dealing with plankton and benthos, particularly with crustaceans and molluscs. In March 1981 he officially became part of the research staff of the Universidad Nacional Autónoma de México, in the research station in Mazatlán (Instituto de Ciencias del Mar y Limnología). His research projects are aimed at the study of natural communities in coastal areas and in offshore water (shelf and slope), mostly dealing with taxonomy, biogeography and fishery of crustaceans. Since 1976 he has authored or co-authored 146 papers, book chapters, books, catalogues and electronic data bases, including 102 refeered papers. Chief scientist of 13 research cruises, Head of the Marine Station in Mazatlán from 1995 to 2000, member of several editorial committees and of the CONACyT reviewers panel, profesor of the posgraduate program of his institution, Curator of the Marine Invertebrate Collection in Mazatlán, he is presently editing the series "Contributions to the Study of East Pacific Crustaceans" with first volume edited in December 2002 and a forthcoming second issue due December 2003.



## TCS Board Fall Elections, 2003

### **Latin American Governor:**

### Eduardo D. Spivak

Departamento de Biología, Facultad de Ciencias Exactas y Naturales, Universidad de Mar del Plata, Argentina I have been an Adjunt Professor at Mar del Plata University since I recieved my Ph.D. in 1987 from the University of Buenos Aires, working on growth, molt and limb regeneration of a South American intertidal crab. Previously, I have studied the ecology of fouling barnacles (1973-75) and I have remained far from scientific research (1976-1980) for "typical latin-american problems". My major interest is the reproductive and larval biology of estuarine crabs and prawns. I have published 45 papers, received several grants from Argentine agencies, and spend short periods as a visiting researcher at Helgoland (Germany) and Cádiz (Spain), working with my friends Klaus Anger and Antonio Rodríguez. I was vice-president and president of the Asociación Latinoamericana de Carcinología; this association is now in "diapause". I teach General and Invertebrate Zoology and supervised the doctoral thesis of Tomás Luppi and Claudia Bas.

#### **Asian Governor:**

### Akira Asakura (INCUMBENT)

Senior Researcher, Crustacea, Zoology Department, Natural History Museum and Institute, Chiba, Japan.

Dr. Akira Asakura received a Dr. Sci. in 1987 from Kyushu University, working on population dynamics of hermit crabs. He developed a second major interest, the systematics of hermit crabs, after he occupied a permanent position in the Natural History Museum and Institute, Chiba in 1989. His research interest range broadly across ecology, biogeography, systematics and environmental sciences, focusing on crustaceans and other invertebrates. He was a leader of the Japan - USA - Commonwealth of the Northern Marina Islands Collaborative Expedition to the Northern Mariana Islands, Micronesia in 1992 and the Chairman of the Organizing Committee for the International Symposium on Natural History of Izu-Ogasawara-Mariana Arc in 1995. He visited over 20 natural history museums all over the world for his research. He has attended in 12 international congresses or meetings, including ICC3 in Brisbane, ICC4 in Amsterdam, ICC5 in Melbourne, Senckenberg Symposium on Decapods in Frankfurt, 4ECC in Lodz, Poland, the TCS Summer Meeting in Lafayette and Williamsburg. He serves on the Board of the Council of the Carcinological Society of Japan as well as the Boards of the Executive Committees of the Japanese Society of Biological Scientists, the Japanese Association of Benthology and the Malacological Society of Japan. In the International Crustacean Council at Melbourne 2001, he acted as the official representative of the Carcinological Society of Japan. In addition to his ca. 70 papers, he is the Editor-in-Chief of the Japanese Journal of Benthology, a frequent reviewer for several international journals, and an editor for several scientific books.

#### Won Kim

Professor, School of Biological Sciences, Seoul National University, 151-747, Korea; Ph.D. 1985, Florida State University; Post-doctoral fellowship and Research Associate at Florida State University, 1986-1989.

General Research Interests: Systematics of crustaceans, especially decapods; molecular phylogenetics, pattern and process of molecular evolution in invertebrates; use of molecular genetic techniques in biological conservation;

Editorial and Society Position: Managing Editor, Korean Journal of Zoology 1991-1992; Secretary, Korea Bioldiversity Council 1994-1996; Secretary, Korean Society of Systematic Zoology 1989-2003; Editorial board, Korean Journal of Systematic Zoology 1991-present; Committee member of Program on Man and the Biosphere of the Korean National Commission for UNESCO 1990-present. Over 100 publications on systematics and evolution.

### **Program Officer:**

The Crustacean Society is looking for a dedicated member to perform the role of Program Officer. The Society's Program Officer is an Officer of the Board of Governors whose role is to be "responsible for arranging and/or coordinating all symposia, workshops, conferences and similar activities in which the Society takes part." He or she also coordinates the Awards Committee, which judges student's prizes at conferences. The term of the officer is two years, commencing 2004, and can be renewed.

If you are interested in helping The Crustacean Society in this way contact Dr Trisha Spears at spears@bio.fsu.edu. Because part of the responsibilities of the Program Officer revolves around the Society's interaction with meetings of SICB (Society of Integrative and Comparative Biology), a person in North America would be preferred.





## **BALLOT** The Crustacean Society Fall Elections, 2003

### Deadline for return of ballots is **December 31, 2003**

Please indicate your choice of candidate for each of the TCS offices listed below and vote for the constitutional changes. Fold, staple, affix a stamp, and mail this ballot to Dr. Trisha Spears at the address on the reverse. If you prefer, you may vote via email by placing "The Crustacean Society 2003 Ballot" in the Subject line and sending your selections to Dr. Spears at spears@bio.fsu.edu. See pages 17-18 of this Ecdysiast for detailed email voting instructions and for brief biographies of the candidates.

### THANKS FOR TAKING THE TIME TO VOTE!!!

Predicent-	Elect
-	Jeffrey Shields
-	other
Latin Ame	rican Governor
-	——Michel E. Hendrickx
-	Eduardo D. Spivak
	ernor Akira Asakura (incumbent) Won Kim
Vote for Constitue and Bylaw 1:	utional changes, detailed in this issue of <i>Ecdysiast</i> , to Article 3, sections 1 and 2
-	I VOTE <b>YES</b> FOR THE PROPOSED CHANGES
	I VOTE <b>NO</b> FOR THE PROPOSED CHANGES

Please detach, fold, staple, stamp and mail your ballot.





Fold 2

Place Stamp Here

### **TCS Fall 2003 Elections**

Care of: Dr. Trisha Spears President-Elect, The Crustacean Society Department of Biological Science Florida State University Tallahassee, Florida 32306-1100 USA



Fold 1