



The Ecdysiast

Newsletter of The Crustacean Society

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Happy 25th anniversary to us! As many of you know, 2005 marks the 25th year of The Crustacean Society. Accordingly, we have changed the color of the cover of volume 25 of JCB to silver to mark the occasion. TCS will also mark the occasion by hosting a celebratory “jubilee” during the upcoming Sixth International Crustacean Congress to be held July 18-22 in Glasgow, Scotland. ICC6 is offering an excellent scientific and social program and I urge all members to attend. Please visit the congress website at <http://www.gla.ac.uk/icc6/>.

An anniversary is indeed a time to celebrate, but it is also a time to pause and reflect on past accomplishments and future directions. TCS and JCB exist because of the vision and initiative of a small band of carcinologists “*who recognized a need for an organization and journal to satisfy the requirements of crustacean biologists*” and for a society whose “*purpose shall be to advance the study of all aspects of the biology of crustaceans and to enhance the exchange of information among persons interested in carcinology*” (Preamble and Article 2 of the TCS Constitution). We owe a huge debt of gratitude to these founding members. There were, of course, the inevitable growing pains in the early years and some occasional bumps along the road, but the mission and relevance of TCS has been steadfastly upheld over the years by the efforts of truly dedicated officers and members. Hence, the society today remains in an excellent position to benefit its members.

Look at how far have we come! We publish a widely respected peer-reviewed journal. We have fiscal security that permits TCS-sponsored annual meetings, symposia, graduate fellowships and awards. And we have a membership roster that is increasingly international in scope.

TCS has also shown that it can change with the times. The recent association of JCB with BioOne (and now JSTOR) has facilitated our transition into the “electronic age.” Authors now receive PDFs of their papers. Volumes of JCB since 2000 are now available on-line to members, and an electronic (digital) archive of all volumes of JCB is currently being prepared to ensure access to old issues and to increase availability of JCB to a wider audience of both institutions and individuals.

It is also a healthy sign that TCS can learn from its mistakes. In response to the concerns of members, the Board has, for example, (1) invigorated the participation of TCS at the annual SICB meetings, (2) revised membership categories to accommodate students, (3) waived the mandatory manuscript handling fee and made page charges optional for members to encourage submissions to JCB, (4) conducted student award competitions at multiple meetings per year, and (5) instituted graduate research fellowships. These were all excellent suggestions! TCS officers always welcome members’ ideas and comments, but unfortunately we do not receive these often enough. Later this year members will receive a questionnaire to complete that will assist the governing board as it reviews current practices and makes plans for the *next* 25 years! In addition to the change in cover color, Volume 25 of JCB marks a permanent change to a larger format that will reduce the total page charges per manuscript for authors (i.e., same *optional* page charge for members, but now fewer pages per article!). Hopefully the larger format will be a relatively painless change for the “neat-freaks” among us who will have to cope with having the taller issues standing alongside all those past issues of lined up neatly and chronologically on our shelves.

continued...



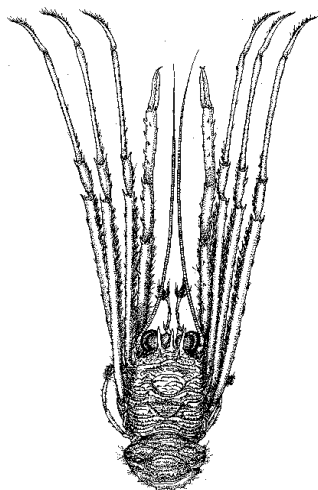
Message from the President...

Granted, all is not *entirely* the rosy picture I have painted! Membership is down, as are institution subscriptions (a trend that many journals are facing). Our association with BioOne and JSTOR has made up a large part of lost revenue, *but revenue is not a substitute for flesh and blood members!* It is up to each and every one of us to encourage colleagues and students to join TCS...*not for the revenue...* but to have more numerous viewpoints, to have larger and more diverse meetings, to encourage more journal submissions, and to facilitate more scientific collaborations. Display the beautiful TCS poster that can be downloaded from our website (<http://www.vims.edu/tcs>). If you know of a student or colleague who is not a member, personally hand them a membership form from the website and encourage them to join.

After 25 years, many of us take TCS and all it has to offer for granted. But complacency is dangerous to a scientific society. If you can imagine living and working quite comfortably without TCS and JCB (i.e., without the fellowship, without an avenue for your publications, and without the support for meetings, symposia and student research), then I propose that you are likely not sufficiently involved in TCS or taking advantage of its benefits to the extent that you could be! Perhaps it is wise, on this 25th anniversary, for each of us to recall the very real *need* our founding members felt for fellowship that motivated them to establish TCS, and for each of us to be grateful for their foresight and initiative. The best way I can imagine to honor and thank those who came before us is to do all we can to ensure that a *golden* anniversary is in our future.

I wish you well,

Trisha Spear



JCB and JSTOR

The Crustacean Society has recently signed a contract with JSTOR, a not-for-profit organization founded to create and preserve a digital archive of scholarly journals. The contract gives JSTOR permission to digitally scan and archive a complete back run of the *Journal of Crustacean Biology* at no cost to TCS. This means that there will now be an electronic archive of JCB that will not only enhance access to older literature but will also ensure the availability of JCB for future generations. It also means that *JCB* will reach a wider audience and be accessible to the growing number of institutions both within the United States and internationally that participate in JSTOR. JSTOR also offers a revenue-sharing program, from which TCS will benefit every time an institution agrees to participate in JSTOR. The current contract allows JSTOR to offer digitized issues with a moving wall of 5 years.

JCB never lacked relevance, and now its relevance will become apparent to an ever-growing audience. So members: continue to submit your original research articles to *JCB* and encourage your colleagues to do the same!



JCB Online!

Subscribers are reminded that on-line access to the *Journal of Crustacean biology* is now available through BioOne. Online access to JCB is available from 2000 to the present.

To access JCB online, go to <http://www.bioone.org>; after choosing a full-text article from JCB, you will be prompted for your username and password. Your username can be obtained from the journal mailing label (CRUS#####) and your password is likely to be your last name (first letter capitalized, all other letters lower case). If you have any trouble logging on, please contact our friendly and helpful representative at Allen press, Kay Rose (krose@allenpress.com).



The Crustacean Society Board Members, 2005

President:

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

President-Elect:

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

Past-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

Treasurer:

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

Secretary:

Chris Tudge
Biology Department, American University
and Department of Zoology,
National Museum of Natural History
Tel: (202) 885 2033
Fax: (202) 885 2182
Emails: ctudge@american.edu;
tudge.christopher@nmnh.si.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:

Michel Hendickx
Unidad Academica Mazatlan, Mexico
Tel: (55) (21) 552-5422
Fax: (55) (21) 551-6446
Email: michel@ola.icmyl.unam.mx

North American Governor:

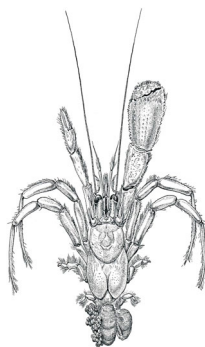
J. Emmett Duffy
College of William and Mary
Tel: (804) 684-7369
Fax: (804) 684-7293
Email: jeduffy@vims.edu

Program Officer:

Pending

SICB Liason Officer:

Brian Tsukimura
California State University, Fresno
Tel: (209) 278 4244
Email: briant@csufresno.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 available to be downloaded as a pdf at The Crustacean Society's website (see <http://www.vims.edu/tcs/ecdyasiast.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 crustacean news.

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, USA.

Ph: 843-953-9794. Fax: 843-953-9820. Email: rachaelking@crustacea.net



TCS Treasurer's Report...

This year has been a bumpy one so far on the stock market. This is where our major investment accounts now stand.
(April 1, 2005)

Name	Qty	Market Value
HARBOR CAP APPRECIATION FUND INST CL	713.793	\$19,208.17
HARBOR HIGH YIELD BOND FUND INSL CL	217.466	\$2,405.17
NAVELLIER MID CAP GROWTH	1,302.962	\$34,293.96
VANGUARD WELLINGTON FD INVESTOR SHARE	1,722.097	\$51,266.83
VANGUARD WINDSOR II FD INVESTOR SHARE	6,327.531	\$194,255.20
Totals		\$301,429.33
Cash		\$12,503.28
Total:		\$313,932.61

We have about \$61,610.85 in CD's. We have two checking and one savings account in addition to these that were \$88,899.77 on Dec. 31, 2004, giving us a total of \$150,510.16 in these standard bank and CD accounts.

We have invested more of our money as it became available. In 2004 this amounted to \$30,000.00. We announced scholarships applications were being taken, which will be cash for education, for students who are interested in crustacean biology. This is something dear to the hearts of all members of TCS and is now coming to fruition. The first awards will be made this year in 2005. The board will be announcing the winners.

I am still working on income and expense figures for 2004 but we just received the check for our income from the BioOne project. Last checks from them were \$7,293.23 in April 2003, \$10,539.98 in April 2004 and \$16,438.00 in April 2005. This shows nice progress being made in our partnership with BioOne.

Submitted by TCS treasurer, Mary Belk

Denton Belk Memorial Fund

The Crustacean Society would like to remind our readers that it is soliciting contributions to an endowed fund to honor the memory of Denton Belk, a founding member and past treasurer of TCS. The endowment will be used to fund scholarships for students performing large branchiopod research, a field in which Denton excelled and made significant contributions. Students will be able to use funds to support research costs and/or travel (either to scientific meetings or for research purposes).

Denton was exceptionally generous in his lifetime to students in need who expressed an interest and passion for large branchiopods. We feel it is a fitting tribute to our colleague and friend to continue this tradition in his passing. We encourage and appreciate your contribution!

Please note that you do not need to become a member of TCS to make a donation!

Personal checks (in U.S. Dollars) may be made out to "TCS – The Denton Belk Fund". Alternatively, contributions using Visa or Master Card can be made by printing out a copy of the membership application from the Society's website (<http://www.vims.edu/tcs>), indicating the amount (in U.S. Dollars) that you are willing to contribute on the appropriate line, and mailing the form to the Business Office at the address below.

Please send contributions to:
Business Office
The Crustacean Society
P.O. Box 1897
Lawrence, Kansas 66044-8897
U.S.A.

For additional inquiries, please contact Mary Belk (TCS Treasurer) by email (dbelk@texas.net), phone (210-224-7743) or fax (210-222-0360).



Some Recent Trends in The Crustacean Society

Many of you may wonder why our subscriptions have gone up over the last few years. Several factors have contributed to increases in the operation of the journal and therefore the society as a whole. Figure 1 shows that the costs of producing a volume of the journal, JCB, increased markedly over the last 20 years and have only recently started to stabilize at around \$75,000. Given that the cost of publishing has nearly doubled in 20 years, it makes sense that our subscription fees would also double in that time.

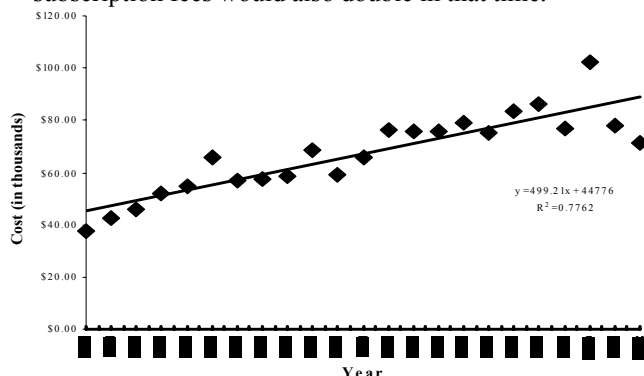


Figure 1. Annual cost of producing a volume of the Journal of Crustacean Biology over time. Note the variation in cost in 2000, 2001, and 2002.

Page charges to members have been based on relative costs per page of producing the journal. Don't forget that members are not obligated to pay page charges, but they are encouraged to pay, and, too, publication in the journal doesn't require payment of page charges. Figure 2 shows that the costs per page steadily increased from around \$65 per page in 1980 to over \$95 per page in 1999. The recent decline in page charges is likely due to our printer switching software for marking up articles and our editor's hard efforts to reduce costs by handling the copy editing in house (i.e., functioning in part as a managing editor). The number of pages per issue (pink line) shows marked variation. The clear outlier in the number of pages produced in volume 6 is hard to explain, but note that the per page charge didn't change because the relative cost of producing the journal is reflected in the total cost of the volume (see Figure 1, 1985) and not in the page charges.

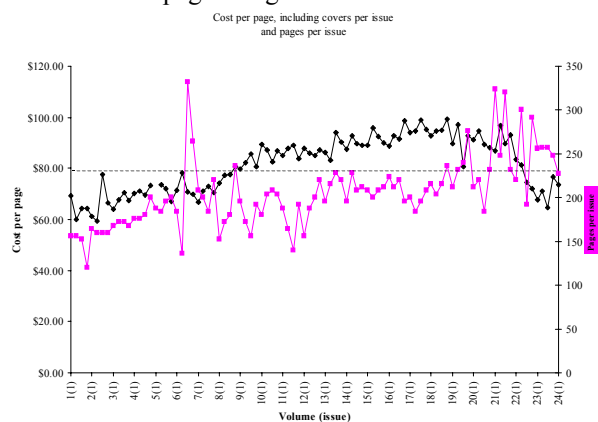


Figure 2. Cost per page and pages per issue over time. Note that special issues are not included in these numbers.

The increase in the number of pages per issue is also interesting because we see a significant trend ($y = 0.9378x + 160.87$, $r^2 = 0.4061$) over time, but the variability is high, particularly over the last few years. The society has been tinkering with submission cost, page charges, and subscription fees, and I wonder how much of this variation can be explained by our policies. The good news is that we've dropped the mandatory handling fee for submissions and have stabilized our page charges, while still making the latter optional to members. With this in mind, I hope we continue to see an increase in submissions to our journal, and I encourage you to submit your original research to JCB. That also means that I'd better get busy and do some writing!

There is one last, more worrisome trend to consider. Figure 3 shows a relative decline in subscriptions to the society over time. In 1997 there were over 1000 members subscribed and 80% of these included subscriptions to the journal. In 2004 there were 603 subscribers and 85% of these included the journal.

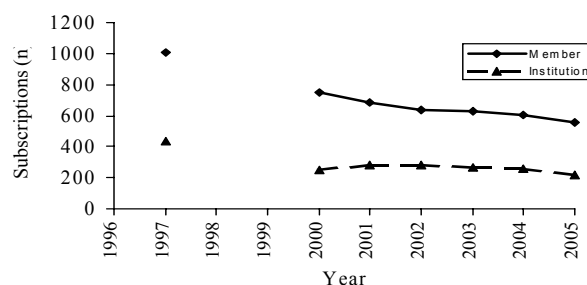


Figure 3. Member and institutional subscriptions over time. Data for 1996, 1998 and 1999 have not been compiled as of this writing.

Note that there is also a downward trend in the number of institutional subscriptions, from 285 in 2002 to 255 in 2004. I am pleased to report that our association with BioOne has increased our revenues through their electronic subscription efforts which markets to more institutions, but at the same time there has been a decrease in our institutional subscribers. However, revenues from BioOne more than make up for the loss in institutional subscribers. Thus, our decision to enter an agreement with BioOne was the right move at the right time, and it has made JCB more accessible to all of us, too.

The data for 2005 are somewhat incomplete due to vagaries in when we resubscribe, but the trend is obvious. We are losing subscribers and I know that this isn't due to our recent loss of carcinologists. Thus, we need to refocus our efforts to bring in more subscribers, either in the member, no journal category, or as student members.

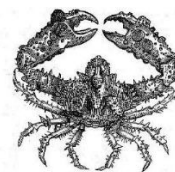
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If you're not a member, then ask why not, and consider joining. If you are a member, pass on a membership application to your students or friends. The board's work is clear, and to this end we're planning to develop a questionnaire for members to help refocus our efforts to serve the community of carcinologists and our colleagues.

Finally, you may be surprised to know that there are over 850 subscribers to CRUST-L, but only 603 subscribers to the Crustacean Society, and that there is only about a 50-60% overlap in the distributions. That's right, only about 400 CRUST-L members are members of TCS. I don't know if the society has lost subscribers to CRUST-L, but there is clearly potential for new members to be recruited there. If we want a vibrant, healthy, financially secure society, then this recruitment and the recruitment of our colleagues and students to our society should be undertaken by all of us. Membership forms are available at www.vims.edu/tcs.

Respectfully submitted,
Jeffrey Shields, TCS President-Elect



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 official 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. We're also looking for participants to help in maintaining this site, if you're interested, contact Jeff.

Report on the 2004 Forum on Open Access

The Society for Scholarly Publishing and the Association of Learned and Professional Society Publishers sponsored a day-long workshop on Open Access in Washington, D.C., November 8, 2004. BioOne our partner data aggregator supported the presence of several of its publishers including The Crustacean Society, which was represented by Jeff Shields and Chris Tudge. Open Access means essentially free and unrestricted access to journal publications. Several journals currently use open access and the National Institutes of Health (NIH) is facing legislation to make all grant-funded research available via open access. The workshop covered different models of open access, how might it affect subscriptions, what potential business models could be used, and whether data exist to measure the effects of Open Access scholastically as well as financially.

Several journals currently use an open access framework, but there are some interesting differences between journals. For example, journals in the Public Library of Science (PloS) charge authors a publishing fee of \$1500 which essentially covers the cost of publishing a paper. Other journals charge what amount to page charges on sliding scales depending on print runs. Several journals give open access after wait periods of 6 to 12 months. Yet others allow authors to pay an additional charge such that individual articles in a journal will have open access where as others won't. As you can tell there are many variants on the theme of open access. Further, several librarians said that they could and would support an Open Access model by using their subscription funds to pay for the cost to their authors!

For a guide to Open Access journals, see <http://www.doaj.org/>. Don't forget that if your library subscribes to BioOne, www.BioOne.org, then as a subscriber to TCS, you can download articles from the Journal of Crustacean Biology as well as several other journals covering natural history.

I believe the upshot to Open Access is that our society needs to plan for the day when our journal will only have electronic publication and not paper publication. That is not meant to confuse the issue of Open Access with electronic access and publication, because they are separate, even though electronic access will no doubt facilitate Open Access. However, we will need to debate dropping paper publication, and I know several of you have thought of this because I have a bet riding on at least 8 more years of print editions. No doubt, I will lose that bet. There is a cost savings to electronic-only publication and that amounts to around 40-60% of the printing costs. Given how we exchange pdf files of reprints, I don't think it will be long before we receive our subscriptions entirely through electronic means.

Respectfully submitted,
Jeffrey Shields, TCS President-Elect



Recent Meetings...

TCS 2004 Mid-Year Meeting (with the Third Brazilian Crustacean Congress)

Florianópolis, Brazil

24-28 October, 2004

TCS extends a sincere thank you to Fernando Mantelatto and others on the organizing committee for hosting a very successful annual mid-year Crustacean Society Meeting concurrently with the Third Brazilian Crustacean Congress in beautiful Florianópolis, Brazil October 24-28, 2004. There were participants from at least 18 countries, and the showing of student participation at this meeting was especially impressive! There were 374 abstracts covering research in (1) biodiversity and biogeography, (2) ecology, feeding and burrowing, (3) evolution and systematics, (4) fisheries and aquaculture (5) larval morphology, development, reproduction and growth, (6) physiology, biochemistry and genetics, and (7) structure, morphology and function. Moving memorial tributes were also presented for departed colleagues Mónica Adelina Montú, Brian Kensley, Fenner Chace, Gilberto Rodríguez, Paulo Secchin Young, and Sérgio de Almeida Rodrigues.

At the meeting banquet, The Brazilian Crustacean Society bestowed honors on (1) Darryl Felder, in recognition of the quality and impact of his many contributions on decapod crustacean biology, ecology and systematics from the western Atlantic and Gulf of Mexico, and to recognize the important role he played in the early development of the TCS and also to other Crustacean Societies around the world, including The Brazilian Crustacean Society (SBC); (2) Geoff Boxshall, in recognition of his contribution to the knowledge of copepods for his important help during the early development of the journal of The Brazilian Crustacean Society journal, *Nauplius*; and (3) Fosca P. Pereira Leite for contributions on amphipod and decapod crustacean biology and ecology from Brazil. The award also served to express SBC's appreciation and respect for her job as ex-member of the Board of the Brazilian Crustacean Society and as member of the organizing committee during the 1st and 2nd Brazilian Crustacean Meetings (2000 and 2002).

Other meeting highlights included an outrageously fun costume party, and some ruthless tennis competitions among selected members! The hiking and tours of the island were spectacular, the food was decadently delicious, and the camaraderie was, as always, absolutely wonderful.

Submitted,

Trisha Spears, TCS President



Photos courtesy of Mary Belk



Recent Meetings...

TCS 2004 Mid-Year Meeting (with the Third Brazilian Crustacean Congress)

Best Student Oral and Poster Presentations

The Crustacean Society thanks all students who participated in the most recent Best Student Oral and Poster Presentation competition. Judging this year was particularly challenging as there were over 130 entries! TCS also thanks members and colleagues who served as judges, especially Dr. Sergio Bueno (University of São Paulo, Brazil) and Dr. Wagner Valenti (FCAV, UNESP, São Paulo State University and Aquaculture Center, Jaboticabal, Brazil), who, with TCS President Trisha Spears (Florida State University), served on the executive judging committee.

TCS congratulates the following winners: graduate student **A. Corona (University of Sydney, Australia)**, for the oral presentation, *Relationship between accumulated sediment and amphipod abundances within turfing macro-algae*; graduate student **Sérgio Rocha (University of São Paulo, Brazil)**, for his poster presentation *Relative growth of the first pereopod in Aegla strinati Türkay, 1972 (Decapoda, Aeglidae)*; graduate student **W. Santana (University of São Paulo, Brazil)** for his poster presentation *Larval development of Leurocyclus tuberculosus (H. Milne Edwards and Lucas, 1843) (Crustacea: Decapoda: Brachyura) from laboratory-cultured material*; undergraduate student **Mariana Terossi (University of São Paulo, Brazil)**, for her poster presentation *Pattern of shell occupation by the hermit crab Pagurus exilis (Anomura, Paguridae) in Caraguatatuba Region, Southern Brazil*; and undergraduate student **Karina M. Silva (PUCRS, Porto Alegre, Brazil)** for her poster presentation *Effects of a high carbohydrate or high protein diet on the intermediate metabolism of laboratory-maintained specimens of the crayfish Parastacus sp. n. (Crustacea, Decapoda, Parastacidae)*.

Winners received a certificate, a book on Crustacea, US\$50, and a one-year membership in TCS (including journal subscription).

SICB 2005 Annual Meeting

San Diego, California

January 4-8, 2005

Best Student Oral and Poster Presentations

The Crustacean Society (TCS) is pleased to announce the winners of the Best Student Paper and Poster Competition held during the SICB Annual Meeting, co-sponsored by TCS. There were 28 competitors and the quality of entries was exceptionally high. The Best Graduate Student Oral Presentation Award was presented to **Danielle Liubicich (University of California, Berkeley)** for her talk entitled "The role of Hox genes in crustacean appendage diversity" (with co-authors J. M. Serano and N. H. Patel). There was a tie for the Best Graduate Student Poster, with awards going to **Kristin Hardy (University of North Carolina, Wilmington)** for her poster entitled "Effects of fiber size on post-contractile phosphagen resynthesis in crustacean muscle" (with co-author S. T. Kinsey) and to **Anna Wynn (University of North Carolina, Wilmington)** for her poster entitled "Four differentially expressed *Callinectes sapidus* (blue crab) cuticular transcripts containing the Rebers-Riddiford consensus sequence (with co-author T. H. Shafer. The Best Undergraduate Student Poster Award was presented to **Vincent Gonzalez (University of San Diego)** for his poster entitled, "Polymorphic microsatellite loci for threatened anostracan and related species" (with co-authors N. Pepino, S. Valero, A. Bohonak and M. Simovich) and to **Travis R. Lilley (Colorado State University)** for the poster entitled "Variable expression of myofibrillar protein isoforms in juvenile lobster claw muscles" (with co-authors S. Medler and D. L. Mykles). Graduate awards consist of a certificate, US\$50, and a one-year membership in The Crustacean Society, including subscription to *The Journal of Crustacean Biology*. Undergraduate awards consist of a certificate and US\$50. TCS thanks those members who served as judges and all student participants.





Recent Meetings...

Workshop on Australian Tropical Amphipod Biodiversity at Lizard Island, Great Barrier Reef – or how to find 155 new species in two weeks!

It was hello to old and new friends as fourteen amphipod specialists gathered in Cairns, north Queensland on 20th February 2005 ready for the Australian Tropical Amphipod Biodiversity workshop. There was much excitement and jet lag as people arrived from the northern hemisphere winter to the heat of a tropical Australian summer. The next day we were to fly to Lizard Island Research Station on the Great Barrier Reef to commence our study of the amphipods of the Australian tropics.

The workshop was the idea of Dr Jim Lowry, and Jim spent about 2 years planning and seeking funding for this event. The workshop was funded by the Australian Department of Environment and Heritage and The Australian Museum Society. Jim and Penny organised the workshop and were thrilled that there was such enthusiasm from our colleagues to participate. There has been little work on tropical amphipods in Australia and the aim of the workshop was to provide a comprehensive baseline taxonomic study for the tropical amphipod fauna of Australia by documenting the diversity and distribution of the amphipod fauna of Lizard Island and adjacent waters.

The workshop participants were Dr Jim Lowry, Dr Penny Berents, Roger Springthorpe, Lauren Hughes and Michelle Yerman (Australian Museum, Sydney), Dr Oliver Coleman (Zoological Museum, Berlin, Germany), Dr Jean Just (Museum of Tropical Queensland, Townsville), Dr Rachael King (Marine Resources Research Institute, South Carolina, USA), Kris Klebba (NSU Oceanographic Center, Florida, USA), Dr Traudl Krapp-Schickel (Zoological Museum, Bonn, Germany), Sarah LeCroy, (Gulf Coast Research Laboratory, Mississippi, USA), Prof Alan Myers (National University of Ireland), Dr Cris Serejo (Museo Nacional, Universidade Federal do Rio de Janeiro, Brazil), Dr Ichiro Takeuchi (Ehime University, Japan) ably assisted by Lisa Atkins of Sydney and Dr Chet Rakocinski (Gulf Coast Research Laboratory, Mississippi, USA).

Lizard Island Research Station, a facility of the Australian Museum, is situated on the Great Barrier Reef about 250km north of Cairns. The Research Station provides easy access to a range of reef habitats including lagoon and outer barrier reefs.

In the two weeks of the workshop we sampled a range of habitats using snorkel, scuba, airlift, baited traps, kick nets, light traps and artificial substrates. Samples were given unique numbers so that the species assemblages from each habitat can be tracked later. Samples were sorted and identified to family or species level. Each species or family was allocated an Australian Museum registration number and recorded in spreadsheets to be imported into the Australian Museum EMu database. Roger Springthorpe was kept very busy photographing live amphipods to provide a record of live colours before preservation.

At the end of two weeks we had collected, sorted and identified 226 samples and recorded 176 taxa of which 155 are new species! We were astounded that in a well studied part of the Great Barrier Reef we found more than 80% of the fauna to be new species. This reminds us of our poor state of knowledge of invertebrates and an intensive study of most invertebrate groups would probably yield similar results. Each workshop participant has agreed to describe the species of their speciality and the specimens will now be sent to everybody on loan. We plan to spend the next 12 months describing the amphipods. We will then publish a book, which will be a monograph and handbook to the amphipods of the Great Barrier Reef with descriptions of new species, illustrations of every species and identification keys.





Upcoming Meetings...

FINAL ANNOUNCEMENT!

Sixth International Crustacean Congress (ICC6)
University of Glasgow, Scotland, UK. July 18th – 22nd 2005

The Sixth International Crustacean Congress will take place at the University of Glasgow, Scotland UK from July 18th – 22nd 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, and over 250 abstracts for oral and poster presentations have so far been received.

As a co-sponsor of ICC6, The Crustacean Society will host a “Silver Jubilee” to celebrate its 25th anniversary. This will be a notable event during which there will be a recounting of TCS history by a founding member and a presentation of the society’s award for Excellence in Research. TCS will also sponsor the invited keynote speaker, Dr. Ronald A. Jenner, in the special session on ‘Arthropod Phylogeny’, and will conduct an award competition for the Best Student Oral Presentations and the Best Student Posters.

SCIENTIFIC PROGRAMME

The Meeting will comprise daily Plenary Lectures, Poster Sessions and Symposia:

Plenary Lectures

Professor Michael Akam *Crustacean Evolution: an Evo-Devo Perspective*
Professor Klaus Anger *Contributions of larval biology to crustacean research*
Professor Donald Lightner *Major Diseases of Farmed Shrimp in the Western Hemisphere*
Professor Hans Otto Pörtner *Title to be announced*
Professor Koen Martens *Biogeography and Phylogeography of non-marine Ostracoda*

Symposia

The Phylogeny of Crustacea:

An integrative approach to crustacean phylogeny which will combine new and old data generated from different disciplines, especially comparative morphology, molecular studies, developmental biology and palaeontology. This symposium will include a special session on **Arthropod Phylogeny**, co-sponsored by TCS.

The Biogeography of Anchialine Cave Faunas:

Synthesis of the distribution patterns of anchialine cave crustaceans and insights into their evolutionary history at a collective level, using a phylogeographic approach

continued...



The Fourth Crustacean Larval Conference:

Five sub-themes covering behaviour, ecology, physiology, taxonomy and evolution and systematics.

The Ecophysiology of Crustaceans:

Topics to be covered include developmental approaches to crustacean ecophysiology, the invasion of land and ecophysiological adaptations to pelagic lifestyles

Effects of human exploitation on decapod mating systems:

Studies of the biology, behavior and genetics of a wide variety of exploited species from shrimps, prawns, crabs and lobsters will explore the impacts of fishing on crustacean mating systems and suggest approaches for managing their effects

Diseases of Commercial Significance:

This symposium will consider the commercial implications of disease in a range of wild and cultured crustacean hosts and discuss how the hosts' environment may play a role in progression from the infection to the disease state

Invasive Crustacea:

Invasive species are a serious impediment to conservation and a major cause of loss of biodiversity. With the increasing interest in this issue it is timely to revisit this world-wide problem.

Biology of the Anomura II:

This symposium follows on from the successful event of the same name at the ICC5, and will cover key topics in anomuran biology, including their systematics, phylogeny, biogeography, reproduction, ecology and behaviour

General sessions will also be arranged on:

- Behaviour
- Ecology and Biogeography
- Fisheries and Aquaculture

FURTHER INFORMATION , REGISTRATION & ABSTRACT SUBMISSION

For further information about the venue and arrangements, visit the ICC6 website. There you can also download a Registration Form, and submit Abstracts via a webform (late abstracts may be accepted after April 6th for certain sessions, depending on availability). Registration will remain open up until June 6th.

ICC6 Website: <http://www.gla.ac.uk/icc6/>

ICC6 Email enquiries: icc6@bio.gla.ac.uk

Glasgow Tourist Board Website: <http://visitors.seeglasgow.com/>

Submitted by: Douglas Neil (Chair of ICC6 Organising Committee)





Upcoming Meetings...

The 9th International Conference on Copepoda (ICOC)

11th to 15th July 2005

Yasmin Hammamet, Tunisia.

See <http://www.univ-lille1.fr/wimereux/copepoda2005/>
for more details

XI COLACMAR

Viña del Mar (Chile),

16 - 20 May 2005

see www.colacmar.cl for details

TCS "Winter" and SICB 2006 Annual Meeting

January 4-8, 2006

Orlando, Florida

In Orlando, TCS will co-sponsor a symposium entitled "Genomic and proteomic approaches in crustacean biology" organized by Don Mykles and David Towle. Other symposia of interest will include "Integrating function over marine life cycles", "Metamorphosis: a multi-kingdom approach", and "Ecophysiology and conservation: the contributions of energetics."

As in the past, TCS will sponsor a Best Graduate Student Oral Presentation competition and a Best Student Poster Presentation competition at the graduate and undergraduate level. TCS will also have a booth in the display hall where members may obtain information on upcoming meetings, membership forms, and purchase TCS T-shirts and hats. TCS will also co-sponsor an evening social with SICB's Division of Invertebrate Zoology.

Registration and additional meeting information can be obtained at the SICB website, www.sicb.org.

TCS 2006 Mid-Year Meeting

Juneau, Alaska

Date still to be announced!

Tom Shirley, with assistance from Brad Stevens, has graciously agreed to organize the 2006 mid-year meeting, to be held in Juneau, Alaska. This promises to be intellectually diverse and stimulating meeting, as Alaska has a rich research tradition in carcinology, and especially crab biology. TCS members can anticipate meeting new colleagues from various universities and agencies based in Alaska, such as the Alaska Department of Fish and Game, National Oceanic and Atmospheric Agency Fisheries, the Biological Resource Division of the United States Geological Survey.

Please watch CRUSTL-L and the TCS website for additional meeting information, which will be forthcoming.

TCS Mid-Year Meeting, 2007

Universidad Católica del Norte in Coquimbo,
Chile

Plan ahead! TCS is very happy to announce that our Mid-Year Meeting in 2007 will be held in June at the Universidad Católica del Norte in Coquimbo, Chile. English will be the official language of the conference for both oral and poster presentations. One conference day will be set aside for collecting trips and classrooms with microscopes will be available. English-speaking student guides will also be available for additional sampling trips during the post-conference weekend.

The Coquimbo-La Serena region (pop. ~ 3000,000) is one of the most famous tourist areas in Chile, located 470 km to the north of Santiago, on a beautiful sheltered bay of the Pacific Ocean. Its warm weather, fresh air, and beautiful landscapes make this region one of the best places in Chile to live. La Serena is on the Elqui River, with active commercial and agricultural centers in a region of orchards and vineyards. La Serena was founded in 1543, a city of Old World charm and noted for its churches, fine buildings, and gardens. Coquimbo is 10 km from La Serena, a lively and fascinating harbor city with diverse and fresh seafood. Universidad Católica del Norte is located on the southwestern shore of Coquimbo peninsula at the historic La Herradura Bay, where both Sir Francis Drake and the crew of the Beagle once anchored.

continued...



The conference will be held at a four-star hotel, the hotel Centro Turístico La Serena, Caja Compensación Los Andes, Chile, only 200 meters from the beach (cost will range from US\$50 for a single room to US\$70 for a double). The hotel is located close to the Avenida del Mar, the scenic coastal road along the beautiful beaches between La Serena and Coquimbo. It is a perfect place for all those who wish to combine business with pleasure! The center of La Serena can be reached in 5 minutes by car, and in 15-20 minutes by walking. Other hotels are available within 5-minute walking distance from the conference hotel. **To encourage student attendees, a student-host program will be arranged where participating students can stay with local students at no cost (just bring a sleeping bag!).**

The airport is a 10-minute drive to the conference hotel. Following air travel to Santiago, Chile, there are several daily connections to La Florida Airport in La Serena. Bus service is also available.

For further information, please contact Dr. Exequiel Gonzalez: egonzale@ucn.cl

Organizing Committee: Dr. Exequiel R. González (Chair), Dr. Martin Thiel, Dr. Enzo Acuña, Mr. Enrique Dupré, Dr. Pilar Haye, Dr. Armando Mujica.

Scientific Committee: Dr. Klaus Anger, Dr. Akira Asakura, Dr. Ray Bauer, Dr. Georgina Bond Buckup, Dr. John Christy, Dr. Michel Hendrickx, Dr. Gary Poore, Dr. Les Watling, Dr. Gary Wellborn.

The Lobster Conference in Charlottetown, Prince Edward Island September 2007

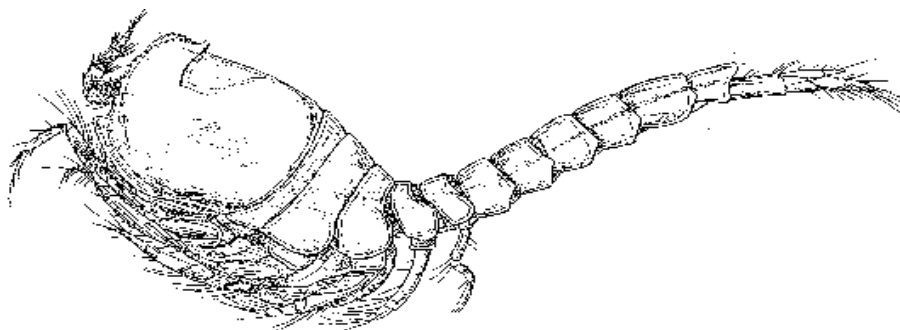
Mark your calendars! The 8th International Conference and Workshop on Lobster Biology and Management will be co-hosted by the Prince Edward Island Department of Agriculture, Fisheries, Aquaculture & Forestry and the Atlantic Veterinary College, Lobster Science Centre. It will be held in Charlottetown, Prince Edward Island, in September 2007. See the TCS website for more details.



Call for Symposia for the 2007 Winter TCS Meeting (with SICB) in Phoenix, Arizona

Plans are underway for the Society of Integrative and Comparative Biology (SICB) Meeting in Phoenix, January 3-7, 2007. The Crustacean Society has long been a co-sponsor of this meeting, and we encourage TCS members to submit ideas for symposia they might be interested in organizing to Brian Tsukimura by June 15th, 2005. Please note, however, that at least one member of the symposium organizing committee must be a Full member of SICB. If your idea is selected, then TCS and SICB will work with you to organize your symposium. TCS may also be able to provide partial funding for speaker travel and/or a symposium social.

Symposia are the heart of SICB meetings and the society's journal, *"Integrative and Comparative Biology"* (formerly called *American Zoologist*). SICB will also help get your symposium papers published together as a peer-reviewed volume. The deadline for receipt of symposium proposals to SICB headquarters is August 15, 2003, so please start developing your ideas and talking with your colleagues and submit your idea to Brian by June 15th.





Recent Research...



Collecting oniscideans in Wisconsin State Natural Areas

The Wisconsin Academy of Sciences, Arts, and Letters recently funded a survey of southeastern Wisconsin State Natural Areas (SNAs) for the presence of nonindigenous leaf litter invertebrates, through an award made to Joan Jass of the Milwaukee Public Museum (MPM) under its Lois Almon Small Grants Program. The survey project included 78 sites in 21 counties, and sampled during the 30 May - 21 November 2003 and 23 April - 02 October 2004 field seasons.

At each SNA, a meter-by-meter quadrat of the habitat's floor was selected for sampling. The leaf litter and the top 1-2 cm of loose soil were transferred to an adjacent ground cloth and searched for the target groups, chief among these being the oniscideans. Any targeted specimens found were preserved for the MPM Invertebrate Zoology collections, and all other material was returned to the quadrat from which it had been taken.

Prior research had identified 10 terrestrial isopods with an assumed history as nonindigenous species in Wisconsin. The hypothesis of this study was that such species were likely to occur in SNAs as well, even though these specially protected habitats are the most pristine that remain and are thus expected to harbor indigenous rather than exotic species. Six oniscideans (N=377) were collected from the 2003-4 survey quadrats: *Armadillidium vulgare*, *Cylisticus convexus*, *Hyloniscus riparius*, *Oniscus asellus*, *Trachelipus rathkii*, and *Trichoniscus pusillus*, *T. rathkii* being by far the most common. Preliminary analysis of the findings suggests that larger SNAs, in terms of number of acres, harbor fewer target species per quadrat than smaller ones. These samples probably underestimated the presence of oniscideans in the SNAs because of the unusual number of months of both drought and flooding during these years. All results were databased in an Excel file and a summary report was submitted to the Academy in December 2004.

Call for Specimens

We (Trisha Spears and Christopher Rogers) are implementing a morphological and molecular based revision of the widespread North American fairy shrimp *Streptocephalus sealii* (Branchiopoda: Anostraca). To this end, we are asking that colleagues send us *any* fairy shrimp that they can collect from temporary ponds that occur locally in their area. Even if the specimens you find are not *S. sealii*, we will identify them and we may in fact discover new species and extend species ranges. Ideally, we would like a minimum of 10 specimens per pond, but we will of course accept fewer if necessary (and more, if possible!). Clam shrimp and tadpole shrimp frequently co-occur with fairy shrimp, and we would appreciate your collecting these as well. Large branchiopods such as these can easily be captured with a dip net. We know it is asking a lot, but it would also help to include *some* basic ecological data on the pond if possible: date, location (GPS coordinates, if possible), approximate pond size, associated fauna (rough id only), relative density of fairy shrimp (rare vs. abundant), etc. Live specimens should be preserved in 95-100% ethanol and shipped to:

D. Christopher Rogers
Invertebrate Ecologist/Taxonomist
EcoAnalysts, Inc.
166 Buckeye St.
Woodland, CA 95695 USA

crogers@ecoanalysts.com
Phone/Fax: (530) 406-1178

For reimbursement of shipping costs, please contact Trisha Spears (spears@bio.fsu.edu).

Many, many thanks! Your assistance will be gratefully acknowledged and will serve to advance our knowledge, not only of this enigmatic species complex, but of large branchiopod distribution as well. This habitat is becoming increasingly threatened!

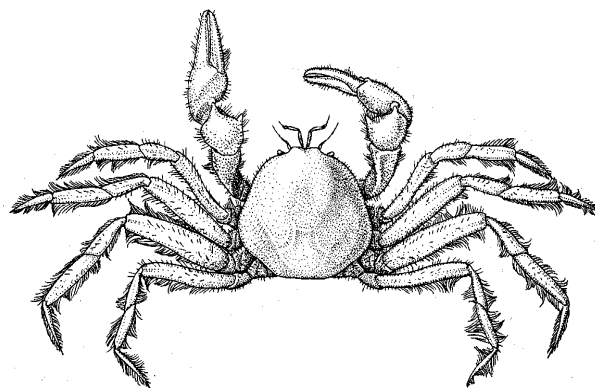


Call for nominations: TCS Program Officer

The Society is in need of a Program Officer to facilitate the arrangement of our activities. The person would serve for a minimum of two years and the position would involve liaison with potential hosts for meetings, workshops, symposia and related activities. The Program Officer is a voting member of the Society as well as a member of Board of Directors. We are looking for a USA representative primarily because many of the Society's functions (and most of its members) are located here. However, members from other countries will also be considered.

Note that the position doesn't mean organizing the meetings yourself, it means finding people to host and organize annual mid-year meetings. The SICB meetings are preplanned but additional symposia planning would be needed for that. Coordination of effort on SICB symposia would be expected with our new SICB liaison, Dr. Brian Tsukimura. Generally, the position requires two tasks. (1) Trying to beg, plead or coerce others into running the summer meetings, which can sometimes be hard to find willing participants; and (2) enlisting others to set up symposia, and this isn't too difficult. However, the first duty of the officer would be to find a site for an American meeting in 2006, albeit we are now working on a fantastic site for that meeting.

If interested, please read our bylaws before contacting Jeff Shields: jeff@vims.edu. <http://www.vims.edu/tcs/bylaws.htm>. The position often leads to other leadership roles in the Society and is an excellent opportunity to meet other crustaceologists as well as leaders in other fields. Write-in nominations on the election ballot are also encouraged.



New Book

Zooplankton of the Atlantic and Gulf Coasts: A Guide to Their Identification and Ecology

William S. Johnson and Dennis M. Allen,
With Illustrations by Marni Fyelling

The first comprehensive guide to zooplankton of the Atlantic and Gulf coasts.

Designed specifically for classroom and laboratory use, this book is indispensable for teachers and students of Atlantic and Gulf Coast marine biology, professional biologists, and amateur naturalists with an interest in zooplankton.

Key Features

- * High-quality line drawings that indicate the distinguishing features of hundreds of taxa
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ISBN 0-8018-8019-X hardcover \$64.00 (regularly \$80.00)



**Dorothy M. Skinner
(1930-2005)**



Dorothy Skinner died on February 12, 2005 from complications of Parkinson's disease. We have not only lost a prominent member of our community, but also an influential mentor and advocate for women in science. Her declining health over the last decade prevented her from pursuing these passions more vigorously.

Dorothy was tenacious and fiercely competitive, attributes that manifested early. She was born in Newton, Massachusetts, as the youngest of three girls. She graduated from Watertown High School, where she was Best Girl Athlete. At Tufts University she was elected to Phi Beta Kappa in her junior year and was on the women's basketball team. After earning her B.A. (Biology and Chemistry) in 1952, she was Assistant Dean of Admissions at Tufts for two years. The Dean being unwell, at age 23 Dorothy was given the chief responsibility for admitting two classes to the School of Arts and Sciences. Of this experience she said: "I learned to be perceptive, to listen, to try to guide others in making important career decisions."

It was as a Ph.D. student at Harvard University (1954-1958) that she began her interest in crustaceans. She was the last of John Welsh's "Three Dots", who he advised as graduate students in the 1950's. The others were Dorothy F. Travis and Dorothy E. Bliss. After postdoctoral positions in the biochemistry departments at Harvard, Yale, and Brandeis, she joined the faculty at New York University School of Medicine in 1962. In 1966, she and her husband, John Cook, took positions as senior research scientists in the Biology Division of Oak Ridge National Laboratory, where they worked in their respective fields until retirement more than 30 years later.

At Oak Ridge, she introduced molecular approaches to the investigation of numerous crustacean species. As an authority on satellite DNA structure and function, she was a pioneer in the field of genomics and was quick to utilize the tools of molecular biology. Her keen intellect and powers of observation led to important discoveries in molting biology. She was the first to describe induction of molting by multiple leg removal (autotomy) and inhibition of molting by autotomy of regenerating limbs. She rediscovered the phenomenon of premolt atrophy of claw muscle and recognized its significance in facilitating withdrawal from the exoskeleton at ecdysis.

Dorothy authored nearly 90 publications, including articles in *Nature*, *Science*, *Cell*, and *PNAS*. A lasting legacy is her chapter on molting and regeneration in *The Biology of Crustacea* published 20 years ago. It remains the most complete and thorough review of the field to this day. Her many contributions were recognized with a symposium at the 1998 annual meeting of the Society for Integrative and Comparative Biology in Boston (*American Zoologist*, volume 39, number 3). In 1994 The Crustacean Society honored Dorothy with an Award for Excellence in Research for a "lifetime of investigative achievements and for mentoring new trainees in the field." Other honors were a Scholar-Athlete Award from Tufts (1993) and the Distinguished Service Award from the Tufts Alumni Association (1994).

Her other professional activities included serving on the editorial boards of *The Biological Bulletin*, *Gene*, *Growth*, and *Physiological Zoology* and review panels for the National Science Foundation and the National Institutes of Health. She also was an officer in several scientific societies, including North American Governor of The Crustacean Society. Several summers she taught at the Marine Biological Laboratory in Woods Hole, Massachusetts. Throughout her life she devoted much effort to promoting the equal treatment of women in science and was elected to the governing council of the Association for Women in Science.

She and her husband developed an interest in 20th century art and filled their home with a substantial collection of paintings, prints, and sculptures. After retirement, she and John moved to Falmouth, Massachusetts in 1999. Condolences can be addressed to: Dr. John Cook, 24 Gray Lane, Falmouth, MA 02540-1613.

- Don Mykles, Colorado State University

A scholarship fund is being established in memory of Dorothy Skinner. It will provide travel support for women graduate students and postdocs to present their research at the SICB meetings. If you are interested in contributing, please contact Don Mykles (Donald.Mykles@ColoState.edu).