Volume 43, 1 *May, 2024*

The Ecdysiast

The Newsletter of The Crustacean Society

Inside…..

Message from the President…

Dear TCS-colleagues,

In January of this year, I stepped into the role of TCS President and am excited to see what the future holds. TCS has been busy with the winter meeting (in collaboration with SICB) that was held in Seattle, Washington in January 2024 and the summer meeting in Taipei, Taiwan having just wrapped up in May/June 2024. Thank you to Past-President Benny Chan and the rest of the Organizing Committee and students for hosting a great meeting in Taipei. Those meetings were proof that the field of crustacean research covers an amazing breadth of cutting edge and foundational research by both students and established researchers.

2024 marks the first Journal of Crustacean Biology Best Student Paper Award, which was judged by a small committee of TCS members. Student-led papers submitted in 2022 were judged and Robert Laroche and Ruxiao Wang were declared the winners. A call for volunteers to judge papers submitted in 2023 will go out soon.

On the topic of JCB, publications were up in 2023 with a broad range of articles covering taxonomy, ecology, physiology, genomics, aquaculture, developmental biology, paleobiology and more. The Journal of Crustacean Biology accepts submissions for all aspects of crustacean research and offers many benefits to members, so consider JCB for your next submission. If you are interested in putting together a special issue, please contact Editor-in-Chief Pedro Castro.

Changes to the TCS executive committee and regional governors were announced via email in early 2023, but I once again want to welcome new and thank outgoing TCS officers. In the executive committee, William Santana has stepped into the role of President-Elect and Emma Palacios Theil is our newest Program Officer.

We have two new regional governors; Bee Yan Lee is our new Asia Governor and Paula Araujo is our new Latin America Governor. Regional governors are your first point of contact for bringing regional meeting announcements or other noteworthy crustacean news to the attention of TCS.

I again want to express my gratitude to Past President Benny Chan. Benny spearheaded new TCS engagement activities including TCS T-shirts and the TCS photo contest in addition to maintaining our website. I also thank departing officers and regional governors Dave Hudson, Laura López-Greco, and Tadashi Kawai for their service to TCS as Program Officer, Latin America Governor, and Asia Governor, respectively. A huge thank you to all the officers, governors, coordinators, and administrators past and present.

And finally, a thank you to all members; you are The Crustacean Society. I am continually impressed by not only your research, but also the comradery and mentorship that is on full display during conferences.

Amanda Windsor
President, The Crustacean Society

TCS Presidents, past & present at the Taiwan Summer Meeting. Left to right: Amanda Windsor, Benny Chan, Shirley Lim, Brian Tsukimura, Shane Ahyong, Jens Høeg

Thank you to our benefactors

Consider becoming a TCS Patron Member where you support the membership of at least one other member/student. The numbers are still increasing, a **thank you** to you all!

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Amir Sagi
Bernard Sainte-Marie
Carrie Schweitzer
Brian Tsukimura
Christopher Tudge
Miloš Vittori
Les Watling

The Crustacean Society Board Members, 2024

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US Food and Drug Administration, Maryland, USA
email: amwindsor@gmail.com

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Universidade Regional do Cariri , Brazil
email: willsantana@gmail.com

Past-President
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Academia Sinica, Taiwan
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Florida International University
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The Ecdysiast is published twice yearly in May and November and it is available in electronic form at http://www.thecrustaceansociety.org/ecdysiast. All the past issues are also available from the same web site. 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, meeting summaries (with photos!), new publications and any other crustacean news.

Send all material directly to the Editor:
Kareen Schnabel, kareen.schnabel@niwa.co.nz

The Crustacean Society Liaison Officers, 2024

The Chinese Crustacean Society
Liaison Officer: Jianhai Xiang
CAS Institute of Oceanology, China
email: jhxiang@qdio.ac.cn

International Association of Astacology
Liaison Officer: Kohei Murakami
Japan
email: fanmail@koheimurakami.com

The Brazilian Crustacean Society
Liaison Officer: Fernando Mantelatto
University of São Paulo, Brazil
email: flmantel@usp.br

The Carcinological Society of Japan
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The World Association of Copepodologists
Liaison Officer: Rony J. Huys
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email: r.huys@nhm.ac.uk

International Research Group on Ostracoda
Liaison Officer: Renate Matzke-Karasz
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Latin American Carcinologist Association
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email: michel@ola.icmyl.unam.mx

Colloquium Crustacea Decapoda Mediterranea Group
Liaison Officer: Enrique Macpherson
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Terrestrial Isopod Biologists Group
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Large Branchiopod Working Group
Liaison Officer: D. Christopher Rogers
GRDA Scenic Rivers & Watershed Research Laboratory
email: branchiopod@gmail.com

Amphipod Group
Liaison Officer: Anne Helene Tandberg
University Museum of Bergen, Norway
Senckenberg Museum and Society for Nature, Frankfurt, Germany
email: pansdamen@gmail.com

German Carcinologists
Group Liaison Officer: Sebastian Klaus
Goethe Universität, Frankfurt am Main, Germany
email: klaus@bio.uni-frankfurt.de

Follow The Crustacean Society on social media

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Treasurer's Report for May 2024

As of April, TCS had 306 renewed members (208 Regular members, 8 Financial hardship members, 4 Amateur members, 25 Patron members, and 61 Student or Postdoc members). Our numbers are up by 36 members overall from the same time last year (270 total members in 2023). This is good news and is encouraging to see that student numbers remain strong. It is also worth noting that the new numbers reflect the recent changes in membership structure. Specifically, the TCS Executive Committee voted to establish new categories for Non University Educator or Amateur/Avocational Members and Members in Financial Hardship, both of which pay the same price ($35) as Student or Postdoc Members. We hope that these categories allow more crustacean workers and enthusiasts to become new members or help others maintain membership. Note that financial hardship can apply to anyone, irrespective of rank/status. Please also encourage your students and colleagues to join:

https://scienceserv.com/tcs/membership/membership.php

or they can contact (mrobinson@burkinc.com) directly if there are any issues with payments.

In April, the TCS Executive Committee (President Amanda Windsor, President-Elect William Santana, Treasurer Jason Williams, Secretary Javier Luque, and Program Officer Emma Palacios Theil) approved supporting best oral and poster awards for the Sociedade Brasileira de Carcinologia at the XII CBC in Brasil this November (http://crustacea.org.br/society/events/xii-cbc/), as the TCS does for our own summer and winter meetings. Based on the recommendation of Program Officer Emma Palacios Theil, the Executive Committee approved to increase the number of Student Travel awards supported by the society to attend the meeting in Taiwan (https://tcs2024.biodiv.sinica.edu.tw/) and increase the number of TCS Fellowships in Graduate Studies for research if needed. TCS budgets for six Fellowships in Graduate Studies ($1000 each), five TCS Student Travel Awards ($500 each) and two TCS Early-Career/Post-PhD Travel Awards ($2000 each), yet this year there were no applicants for the Early-Career travel funds so additional monies remain for the other categories. We should work to get the word out on these opportunities (https://www.thecrustaceansociety.org/scholarship.php), and this includes travel to the winter (SICB meetings).

In terms of other book keeping items, the TCS Executive Committee voted to approve standard yearly increases in APC (5% increase) and online subscription price (4%) for the Journal of Crustacean Biology (JCB) in 2025. In very good news, Kyle Burns (OUP publisher for JCB) reported that TCS profit share for JCB was $40,769 in 2023, representing an increase of 25% from 2022! He indicated "Income from subscriptions was about the same from 2022 to 2023, but income from Open Access licenses increased significantly. JCB had quite a few articles publish under an Open Access licenses via a Read & Publish deal. This is a great trajectory for JCB." Thanks to Editor-in-Chief Dr. Pedro Castro and the JCB Associate Editors for all their hard work! Finally, the TCS Executive Committee voted to approve the reappointment of Karlotta Kürzel as TCS Social Media Coordinator for which she will receive a $1000 honorarium.

TCS investments with Schwab now total over US$805K. In the upcoming months I will be working with BAI and the TCS Executive Committee on the proposed 2025 budget.

Respectfully submitted,
Jason Williams
TCS Treasurer

The Crustacean Society
Journal of Crustacean Biology

Journal of Crustacean Biology Editorial Report for Volume 43 (2023)

Highlights:

- No change in the number of submissions over 2022 but marked increase in the number of articles published
- Increase in the number of submissions accepted, decrease in rejections
- Continued drop in the Impact Factor from 1.43 in 2020 to 1.29 in 2021 to 1.1 in 2022

	2019	2020	2021	2022	2023
Submissions	113 (– 18.7%)	129 (+ 12.4%)	118 (– 8.5%)	104 (–11.8%)	**104**
Accepted	74 (74.0%)	83 (69.7%)	73 (71.6%}	49 (54.0%)	**72 (75.8%)**
Rejected	26 (26.0%)	36 (30.3%)	29 (28.4%)	41 (46.0%)	**23 (24.2%)**
In peer-review by 31 December	13	9	16	14	**9**

Number of articles by subject

	2018	2019	2020	2021	2022	2023
Phylogeny & Taxonomy	18	16	16	20	17	**18**
Ecology	15	15	20	17	17	**12**
Special Sections (symposia, etc.)	9	11	15	–	6	**11**
Behavior	5	5	4	4	6	**9**
Research Notes	7	8	4	10	3	**9**
Genetics & Genomics	7	3	3	5	5	**7**
Aquaculture	3	–	2	3	-	**6**
Physiology	8	4	12	4	6	**3**
Paleobiology	3	8	3	1	3	**2**
Thematic Reviews	–	2	2	2	2	**2**
Developmental Biology (embryology)	1	2	6	–	1	**1**
Reproductive Biology	9	7	6	5	5	**1**
Functional Morphology	3	3	2	6	-	**-**
Historical Memorials	1	–	–	1	-	**-**
Fisheries (exclusive of aquaculture)	–	–	1	–	-	**-**
Techniques & Methods	4	3	1	–	-	**-**
Commentary/Response	–	2	–	–	-	**-**
Conservation	1	–	–	–	-	**-**
TOTAL	**94**	**89**	**97**	**78**	**71**	**81**

Authors (all authors per article) from the top ten nations

	2016	2017	2018	2019	2020	2021	2022	2023
United States	87	79	85	97	112	76	97	72
Mexico	2	11	31	15	19	23	12	36
China	28	42	36	7	20	22	40	27
Japan	19	30	18	19	36	20	10	22
Australia	16	14	34	12	2	13	2	20
Brazil	22	15	20	20	17	15	13	14
Malaysia	1	4	0	6	1	1	0	13
Canada	7	13	6	12	4	4	6	12
Taiwan	8	11	7	3	10	10	0	11
India	0	11	11	2	11	9	5	7

JCB's Editorial Board welcomes two new members:
Barry W.M. van Bakel, Oertijdmuseum, Boxtel, The Netherlands
Ricardo Calado, Universidade de Aveiro, Campus Universitário de Santiago, Aveiro, Portugal

Respectfully submitted,

Peter (Pedro) Castro
Editor-in-Chief, *Journal of Crustacean Biology*

Take a look at the latest JCB issue, with the cover by Pedro Rendón-Barraza, winner of the Laboratory category of the 2023 TCS Photo Competition.

Consider publishing in the JCB, remember that page charges (for the first 12 pages of the typeset article) are waived for TCS members.

The Social Media Corner

Dear Members,

I am delighted to bring you some exciting updates regarding our social media presence. Our online crustacean community has experienced significant growth, and we are incredibly grateful for your fantastic support and engagement. Here is an overview of the recent developments:

📈 **Growth:**

Since our previous newsletter, our audience has experienced significant expansion, welcoming over 527 new followers across all our social media platforms. Our Facebook page currently leads the way with 947 devoted crustacean enthusiasts, closely trailed by X (formerly known as Twitter) with over 590 followers. Furthermore, our Instagram presence has shown consistent growth, now reaching 590 followers.

🌟 **Top-Performing Post:**

We're thrilled to share that one of our most impactful posts received over 12,519 impressions on X! This post spotlighted the Auckland War Memorial Museum in New Zealand, which was searching for a curator specialized in marine invertebrate biodiversity. This post was shared over 88 times and also prompted high direct engagement, with over 181 individuals clicking on the provided link to learn more about the position.

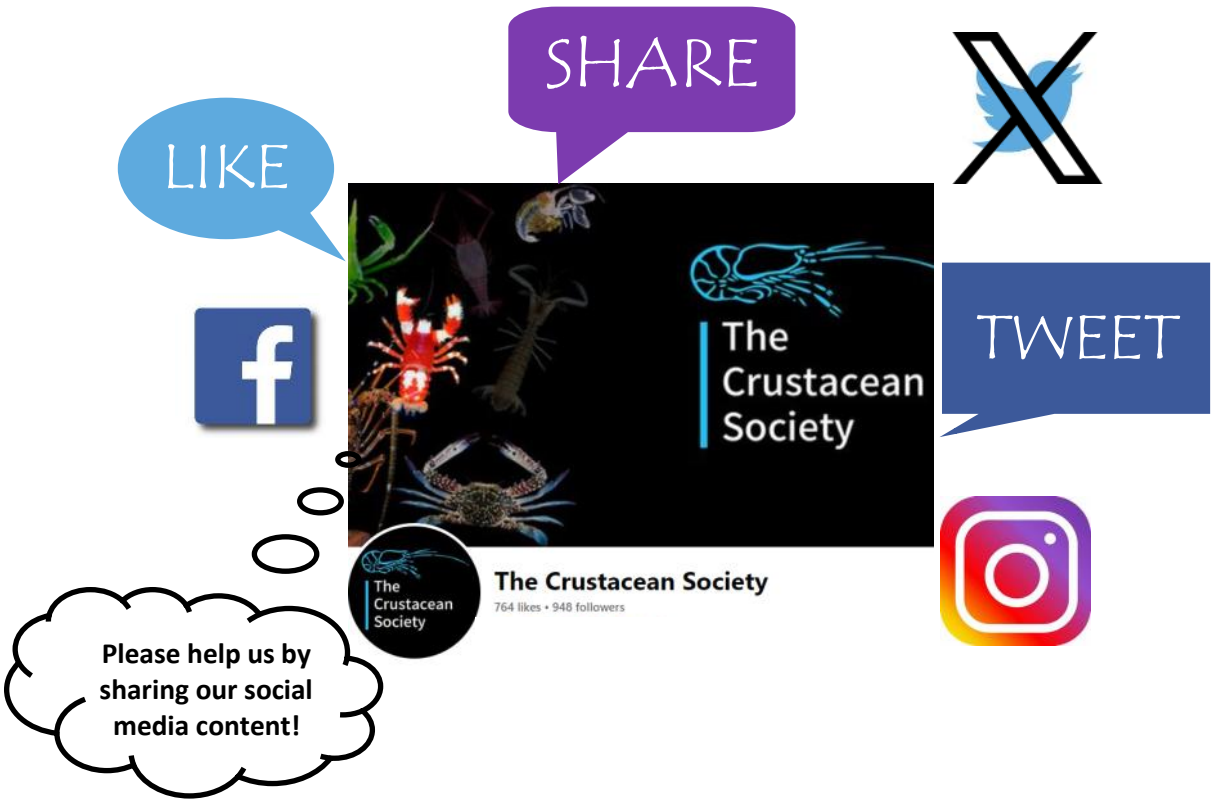
📷 **Your Crustacean Moments:**

As always, we value your input as members and crustacean enthusiasts! If you have any crustacean-related events you would like us to promote or if you would like us to showcase one of your crustacean pictures on our social media channels, please reach out via email to thecrustaceansociety@gmail.com.

Please do not forget to like, share, and follow us if you have not already (@TheCrustaceanSociety on Facebook @CrustaceanSoci on Twitter @thecrustaceansociety on Instagram)!

Warm Regards,

— **Karlotta Kürzel**, TCS Social Media Coordinator



TCS student awards

The Crustacean Society (TCS) is pleased to be able to support a higher number of students than usual. Funds were available to award seven travel awards (US$500) to attend the TCS meeting this May in Taiwan and eight fellowships in graduate studies (US$1000). Students from eight different countries and eleven universities benefit from it.

TCS Student Travel Award (500 US$)

Student	Sponsor	University
Shoki Shiraki	Keiichi Kakui	Hokkaido University
Shai Avraham Shaked	Amir Sagi	Ben-Gurion University of the Negev
Jonathan Molcho	Amir Sagi	Ben-Gurion University of the Negev
Gitanjali Bhoi	Shesdev Patro	Berhampur University
Natalia Arbuzova	A.A. Miroliubov	St. Petersburg University
Anastasia Lianguzova	A.A. Miroliubov	St. Petersburg University
Nadeshinie Parasram	William Santana	University of the West Indies

TCS Fellowships in Graduate Studies (1000 US$)

Student	Sponsor	
Madison Wagner	Paul A. Moore	Bowling Green State University
Jacqueline Kossey	Paul A. Moore	Bowling Green State University
Morgan Jarrett	Mark J. Butler	Florida International University
Victoria Vandersommen	Sarah A. Gerken	University of Alaska Anchorage
Kamila Głuchowska	Magdalena Błażewicz	University of Lodz
Michael Montgomery	Peter S. Alagona	University of California Santa Barbara
Siena McKim	Kevin Kocot	University of California Santa Barbara
Martha Daniel	Martin How	University of Bristol

TCS Summer Meeting 2024 Best Student Paper and Poster Awards

Thank you to the fantastic student contributions at the TCS mid-summer meeting in Taiwan and the host of judges. Please consider volunteering to judge student presentations in the future, as many hands make light work. We congratulate this year's student winners.

Best Oral Presentation:
Kinglsey Jin-ho Wong (Academia Sinica, Taiwan): "Molecular phylogeny and host-usage of Indo-Pacific Coral-symbiotic cryptochirid crabs (Decapoda: Brachyura: Cryptochiridae). "

1st Runner-Up Oral Presentation:
Zhi-Wan Tan (National University of Singapore): "Resolving the convoluted history and taxonomy of "*Hainanpotamon*" from Indochina, China, and Japan."

2nd Runner-Up Oral Presentation:
Shai Avraham Shaked (Ben-Gurion University of the Negev, Israel): "Novel structural protein family sheds light on them Mineralization of crayfish exoskeleton."

Best Popularity Oral Presentation:

Hossain Amzad Mohammad (Central Queensland University, Australia): "Multiapproach insight into the reproduction and moulting biology of female *Scylla serrata*."

1st Runner-Up Popularity Oral Presentation:

Diana Kortchemny (NTU & Academia Sinica, Taiwan): "Breaking the assumption in sexual biology models in barnacles – movement, growth and sex change of dwarf males of the androdioecious turtle barnacle *Chelonibia testudinaria* ."

2nd Runner-Up Popularity Oral Presentation:

Terance Ho Him Wong (The Chinese University of Hong Kong): "Genetic and hormonal regulation of agonistic behaviors of *Stenopus* shrimps."

Best Student Poster Award:

Kun-Chin Hung (Tunghai University, Taiwan): "The larval dispersal simulations of fiddler crab *Xeruca formosensis* in the west coast of Taiwan."

1st Runner-Up Poster Award:

Yu-Chia Chang (National Cheng Kung University, Taiwan): "The mechanism of *Lv*CAD involved in WSSV replication through activation of pyrimidine *de novo* synthesis in *Litopeneaus vannamei.*"

2nd Runner-Up Poster Award:

Kuang Yu Tseng (Tunghai University, Taiwan): "Predicting the crab composition of west coast of Taiwan by machine learning model."

Each award consists of a certificate, US $100 cash, and a one-year membership in The Crustacean Society, including subscription to The Journal of Crustacean Biology.

JCB Student Paper Award

We are also pleased to announce the winners of the inaugural JCB student paper award. Thank you to the committee of TCS members for judging student-led papers submitted to JCB in 2022. Congratulations to:

Robert Laroche (University of Houston) "Habitat characteristics of artificial oyster reefs influence female oystershell mud crab *Panopeus simpsoni* Rathbun, 1930 (Decapoda: Brachyura: Panopeidae)" *Journal of Crustacean Biology*, vol. 42, ruac033. https://doi.org/10.1093/jcbiol/ruac033

Ru-Xiao Wang (Nanjing Normal University) "Two new species of freshwater crabs of the genera *Huananpotamon* Dai & Ng, 1994 and *Minpotamon* Dai & Türkay, 1997 (Decapoda: Brachyura: Potamidae) from eastern China" *Journal of Crustacean Biology,* vol. 42, ruac029 https://doi.org/10.1093/jcbiol/ruac029.

The winners receive a voucher for books from Oxford University Press.

We will call for volunteers to consider 2023 student papers in JCB shortly, please consider joining the judging panel.

A reminder that The Crustacean Society provides a wide range of grants and scholarships for students and postdoctoral researchers. The various options are presented below. Please make sure to apply before the deadlines. If you have any questions please contact the TCS Program Officer.

TCS Fellowships and Awards

TCS annually awards up to six US$1,000 Fellowships in Graduate Studies in any research concerned with the biology of crustaceans. The fellowship is to support the research objectives and career goals of the graduate student. This award requires a letter of support from their faculty sponsor/mentor. Both the student and their faculty sponsor/mentor must be a TCS member at the time of application. Further details and requirements are in the application and can be downloaded here.

DEADLINE FOR APPLICATION: 31 March annually.

TCS Early-career, post-Ph.D. Travel Awards

TCS annually awards up to three (3) US$1,500 travel awards for early-career researchers with a Ph.D. awarded within five years of the application deadline. Extension of up to eight years post-Ph.D. will be considered at the discretion of the Program Officer for applicants having taken a career break for family reasons. The grants shall cover travel to present, preferably in an oral session, results of their research in any field of study involving crustaceans at a TCS meeting (mid-year or SCIB meeting). Preference will be given to applications that will result in a manuscript suitable for publication in Journal of Crustacean Biology. Find online application here.

DEADLINE FOR APPLICATION: 15 March and 15 September annually.

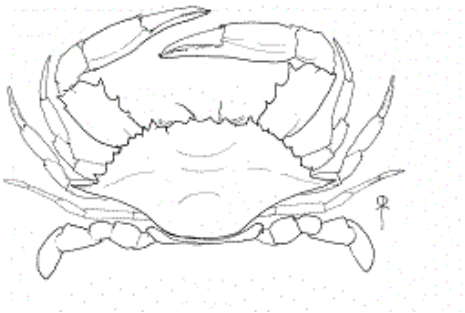
TCS Student Travel Awards

The TCS Student Travel Awards are granted twice a year to support student attendance at TCS meetings (TCS mid-year/ICC and SICB). Applicants must be enrolled in an undergraduate or graduate degree program, be the presenter of an oral or poster presentation at the TCS/ICC/SICB meeting they attend, and demonstrate financial need for TCS support of travel to the meeting. Both the student and their faculty sponsor/mentor must be a TCS member at the time of the application. The application can be downloaded here.

DEADLINE FOR APPLICATION: 15 March and 15 September annually. Find online application here.

For additional information, please contact:
Dr. Emma Palacios Theil, Program Officer
emma.palaciostheil@biol.uni.lodz.pl
http://thecrustaceansociety.org/scholarship.php

CRUST-L@VIMS.EDU, the Discussion List for Crustacea



CRUST-L@VIMS.EDU is the email listserver for those interested in Crustacea. CRUST-L is an unmoderated open list, but you have to be a member to post messages to it. It has around 850 members! You can subscribe or unsubscribe to the list by following the links below. Use CRUST-L@VIMS.EDU to post messages to CRUST-L. The sympa software includes several features such as searchable archives, and a digest mode for intermittent mailings. If you have trouble with your subscription or settings, send a help request to jeff@vims.edu.

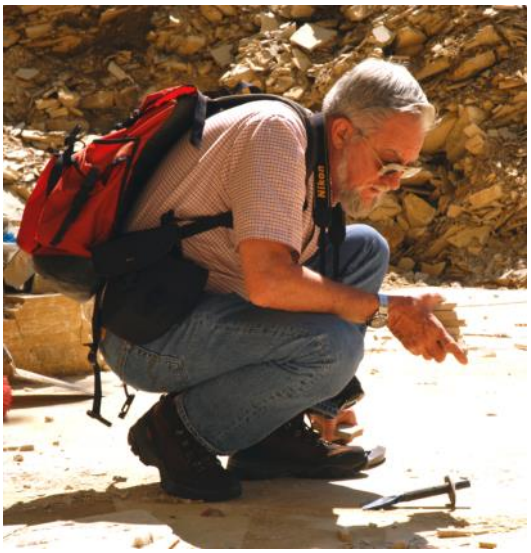
How to subscribe to list: https://lists.vims.edu/wws/help/user#subscribe
How to unsubscribe from list:https://lists.vims.edu/wws/help/user#unsubscribe

In Memorian

We remember our colleagues who we lost recently, with gratitude for their contributions to crustacean research and to our community.

Rodney Feldmann
(1939 – 2024)

On Wednesday, May 1, 2024, Rodney Feldmann, scientist, mentor, husband, and father, died peacefully at home at the age of 84.



Rod was born on November 19, 1939, in Steele, ND, and was raised in Bismarck, ND, by Lois De'Ette and Herman (Red) Dupree. He received his B.S., M.S., and Ph.D. in Geology from the University of North Dakota under the mentorship of F. D. (Bud) Holland, Jr.

He went on to teach courses, manage a robust research program, and mentor students in the Department of Geology [Earth Sciences] at Kent State University since he was hired as a Temporary Instructor in 1965. He was president of the Paleontological Society and the Paleontological Research Institution, co-editor of the Journal of Paleontology, and he published over 450 scientific papers between 1962 and 2024 on fossils, primarily on decapod crustaceans (lobsters, crabs, and shrimps). He is a global expert on fossil lobsters and crabs, and his work has placed him in the top 2% of scientists in the world.

Rod loved traveling, reading crime novels, driving his classic 1937 gangster-style Packard 6, conducting geological field work, and working with students on research and teaching. He was an outstanding mentor and role model for students and colleagues, and his research continues to influence scientists worldwide. He edited the popular book Fossils of Ohio. His philosophy, "If you love what you do, you'll never work a day in your life," never wavered; he spent his last days occupied by his life's work: writing sections of the revision of the Decapoda volume of the Treatise on Invertebrate Paleontology.

He is survived by his wife Carrie E. Schweitzer of Kent, OH, his daughter Aissa Feldmann of Durham, NC, his brothers Frank George [Helen] DuPree of Billings, MT, and Don [Mary Grace] DuPree of Atlanta, GA. No memorial service will be held; in lieu of flowers, donations can be made in Rod's name to the Rodney M. Feldmann Memorial Scholarship Fund c/o the Department of Earth Sciences, Kent State University* or to the Portage Park District Foundation, Streetsboro, OH.

– Carrie E. Schweitzer

* how to make a donation: go to https://www.kent.edu/philanthropy/kent-state-university-online-giving, select 'Custom Designation' and designate to 'Rodney Feldmann, Department of Earth Sciences'

Scott Santos
(1972 – 2024)

A leader in the field, Scott made important contributions to our understanding of invertebrate population genetics, phylogeography and phylogenomics, especially in regards to the crustaceans and microbial communities associated with anchialine ecosystems, a passion rooted in his upbringing (Click here to learn more about Scott's research.). He was an exceptional and computationally rigorous scientist/geneticist/ecologist who also made numerous contributions to many areas of biology and was a pioneer in zooxanthellae diversity, dispersal, and ecology research. Hailing from Hawaii, Scott held a distinguished tenure at the University of Auburn from 2004

to 2021, culminating in his role as Chair of the Department of Biological Sciences from 2018 to 2021. He also served as a program officer at the National Science Foundation before accepting the esteemed position of Empire Innovation Professor at the University at Buffalo in 2021. Over his distinguished career, Scott published over 100 scientific papers, mentored numerous students and faculty, received many grants, awards and fellowships, gave dozens of guest lecturers, served on numerous NSF panels, and had over 8,000 professional citations.

— David Weese

John Campbell McNamara (1953–2023)

John Campbell McNamara, New Zealander with a Brazilian heart, and a global leading authority in crustaceans, passed away on December 8th in Ribeirão Preto, state of São Paulo, Brazil, succumbing to the return of a lymphoma, when 70 years old. He was still full of plans and very active in research, teaching, and university administration. Throughout his career, he focused primarily on researching osmoregulatory physiology and molecular endocrinology of color change in shrimps and crabs, with a strong and insightful eye for ultrastructure and its physiological outcomes. He was also wholeheartedly dedicated to teaching comparative animal physiology to biology undergraduates.

As a naturalist, he demonstrated a deep reverence for animal health and well-being, with a special passion for birds and plants with the curiosity and spontaneity of a child. He was very fond of Macrobrachium shrimps, Uca fiddlers, and anomuran squat lobsters Aegla, which he studied with genuine love and fascination. As an author, he meticulously crafted every word in his texts, also showing special delight in the dance of curves, angles, rises and falls of physiological responses within his graphics. As a mentor, he nurtured critical thinking, precise and concise wording and writing logic, emphasizing the importance of sound scientific practice in an environment of creativity and provocative freedom of thought. As a friend, he was known for his rare sincerity and razor-sharp, intelligent sense of humor, which he often displayed during gatherings over wine with notes of cigar and leather, ‘mineira’ country meals, or field trips to beaches and waterfalls.

The complexity but authentic consistency of his behavior and personality both captivated and sometimes distanced those unwilling to truly overcome it - a conscious, natural mechanism of social filtering. He was not a scientist of many collaborations, nor was he a frequent attendee of scientific meetings, but he was very dedicated to the science partnerships he treasured. During the pandemics, there were frequent video calls to talk about manuscripts or follow his beloved America's Cup in the middle of the night, live from New Zealand. Calls from his marvelous home built surrounded by native trees which he planted himself, years ago, and populated by numerous birds and monkeys and other animals which he would mention or we would hear from his window.

In reflecting upon the life of our Dear John, we find that his academic journey commenced as a scholarship recipient in the Bachelor of Science program at the University of Canterbury, New Zealand, in 1973. Under the tutelage of distinguished figures in zoology and physiology such as Dr. Hugh Taylor, John's fascination with environmental physiology flourished. His Master's thesis delved into the area of pigment migration in the chromophores of a marine shrimp, a document he carried tucked in a backpack slung over his shoulder during a ship journey from Panama to Brazil in 1977, to explore Brazilian biodiversity and pursue a doctoral

degree on crustacean chromatophores. John earned his PhD in Biological Oceanography in 1981, under Professor Plínio Moreira supervision, being hired as an assistant professor at the Department of Biology of the Faculty of Philosophy, Sciences and Letters of Ribeirão Preto (FFCLRP) at the University of São Paulo (USP) in 1989, where he became full professor in 2006. Over the years, he played multiple roles at FFCLRP, including teaching at undergraduate and graduate levels, administrative activities and institutional representation, from modernizing and expanding computer networks to serving as chair of the Biology Department and as vice-director for the FFCLRP/USP.

As a prominent academic leader, he made significant contributions to crustacean science and institutional services, leaving a lasting legacy in the academic community. Among John's most cited articles, the molecular bases of gene expression and kinetics of the Na+/K+-ATPase stand out, as well as the structure-function relationship of ion transport in gills and antennal glands, and the evolution of osmoregulation mapped onto phylogenies. Highlighted are Freire, Onken and McNamara (2008), with 431 citations, and McNamara and Faria (2012), with 238 citations. With nearly 140 publications, 98% focusing on the physiology of Crustacea, John showcased leadership with a 62% first or last authorship rate. His h -index of 33 and 3192 citations (Web of Science, Apr/2024) partially underscore his lasting impact.

John expressed a desire to return to New Zealand after retirement to implement the knowledge gleaned from crustaceans and Brazilian university politics into park management strategies. He departed still ablaze with dreams, leaving us all brokenhearted.

— Samuel C. Faria and Carolina A. Freire (Brazil)

Caption: This photo was taken in Guaratuba Bay, state of Paraná, Brazil, in September of 2009. At the moment, John was looking for Uca maracoani*, a fiddler crab species and his favorite one due to its purple coloration. (photo: Prof. Carl L Thurman).*

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Roger J. Lincoln
(1942 – 2023)

Roger Lincoln was born in 1942 and was brought up with his two brothers on a farm in rural Norfolk, UK. All three brothers went on to become distinguished professional zoologists. Roger completed his PhD at the University of East Anglia, Norwich – An experimental investigation into the effects of hydrostatic pressure on the vertical migration of planktonic crustaceans – and in 1969, joined the Crustacea section in the Department of Zoology at the Natural History Museum in London.

The Crustacea section was large at that time and Roger specialised in the Peracarid Crustaceans – especially amphipods and isopods. He published over 30 papers on marine amphipods, including the whale lice (Cyamidae), on marine and terrestrial isopods, and on other crustaceans. Roger's major work was his 1979 monograph *British Marine Amphipoda: Gammaridea*. The 658 pages of this landmark volume published by the museum provided morphological and distribution information on the entire British marine gammaridean fauna plus identification keys to nearly 300 species belonging to 36 families. This hugely important work is still the primary source for reliable and validated data on the UK marine amphipod fauna. Despite numerous attempts to recruit him, Roger maintained his independence from the two rival camps in global amphipod

systematics at the time (Ed Bousfield v. Jerry Barnard) and always claimed that he could see strengths and weaknesses in the arguments proposed by both camps.

In the 1980s Roger spent a year on sabbatical in New Zealand working with Des Hurley at the then New Zealand Oceanographic Institute in Wellington. He focussed on the taxonomy of deep-sea asellote isopods, particularly the families Dendrotionidae, Haploniscidae and Munnopsidae, and described numerous new taxa. Roger found some enigmatic little parasites on the legs of his deep-sea asellotes and, based on this and other material, Roger and Geoff Boxshall established the Tantulocarida as a new class of Crustacea, all of which are ectoparasitic on other crustaceans. Other papers on this bizarre group followed, including major studies elucidating the double (sexual and asexual) life cycle of tantulocaridans.

Roger, together with colleagues Geoff and Paul Clark, compiled the *Dictionary of Ecology, Evolution and Systematics*, published by Cambridge University Press. Roger had the vision to set the scope and scale of this work and he masterminded our negotiations with prospective publishers. The first edition came in at just under 300 pages but CUP requested a revised and enlarged second edition, which comprised over 360 pp and was published in 1998. CUP also commissioned *The Cambridge Illustrated Dictionary of Natural History* targeted at 18 year-old high school students, which Roger and Geoff compiled and published in 1987.

Roger became Head of Crustacea section in the early 1970s and was promoted to Deputy Keeper of Zoology in 1985. His practical, problem-solving approach was hugely appreciated by fellow members of staff. Roger was almost 2 metres tall but never looked down on his colleagues, he was always approachable, he listened, and made light of the mass of tasks that needed to be done. He had all the details of departmental management and finances at his fingertips but it was his vision that was pivotal in the establishment of the museum's first molecular laboratory, with a workable funding model behind it. Another major highlight of Roger's legacy was his mastery of the role of scientific liaison with the architects developing the plans for the Darwin Centre (DC1), a building for scientific research that is also designed to allow enhanced public access to the alcohol-preserved collections and enhanced visibility of our research work. His supreme common sense and his direct personal experience with building projects helped to temper the excesses of the architects as well as the flights of fancy of senior management. He was proud that the new building provided much better conditions for the alcohol-based collection.

Roger retired at the end of October 2002 and in his retirement was an accomplished photographer of natural history and heritage in and around Winchester, where he lived. He died on 16th October 2023 after a long period of ill-health.

— Paul F. Clark & Geoffrey A. Boxshall
The Natural History Museum, London

Roger Lincoln meets HRH Queen Elizabeth II at the opening of the Darwin Centre (DC1), Natural History Museum, London

Upcoming TCS meetings

Sociedade Brasileira de Carcinologia (Brazilian Crustacean Society) XII Congreso Brasileiro sobre Crustáceos
4–7 November 2024 — Uberlândia, Brazil. Event website: https://eventos.ufu.br/xii-cbc

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Cladocera XII
Ecology, Evolution and Genomics
6–12 October, Verbania, Italy: cladocera2024.org

To find out more, visit
https://cladocera2024.org/focus/

15–16 November 2024: TCS Asia Regional Meeting
Gwacheon National Science Museum, Gwacheon-si, Gyeonggi-do, Korea
Organizers: Jibom Jung and Tadashi Kawai

3–7 January 2025: TCS winter meeting / SICB annual meeting, Atlanta, GA, USA

//tcs2025 Sciencesconf.org

ICC11 — 11th International Crustacean Congress 2027
Proposed venue: Hokkaido University, Sapporo, Japan
Date: TBD

Keep an eye on announcements!

Fifteenth International Congress on Invertebrate Reproduction and Development (ICIRD-2025), June 2 – 6, 2025, Washington, DC

ICIRD 2025 renews our stimulating and critically important scientific conferences on reproduction and development of invertebrates and calls for submission of proposals for symposia for this 5-day conference and scientific networking event to be held at American University in Washington DC USA. Held approximately triennially since 1975, except during the COVID-19 pandemic, this Congress has covered topics ranging from basic cellular, molecular, anatomical, and ecological mechanisms of reproduction and development to applied science topics on aquaculture, disease vectors, climate change, biodiversity, and esthetics. American University and Washington DC will be excellent venues for promoting both formal and informal exchanges of scientific and cultural significance.

American University (AU) is a private, coeducational campus, chartered by an act of Congress in 1893, with more than 100 academic programs and 14,000 students (https://www.american.edu/). Designated as a national arboretum, AU's carbon neutral campus is conveniently located only a short distance from some of the area's most historic sites, such as DuPont Circle, the National Mall, the White House, and the Smithsonian Museums. AU is accessible by Metro (subway) and train from all three major airports located in the metropolitan area: Reagan National Airport, near downtown Washington, D.C., Dulles International Airport in Virginia, and Baltimore/Washington International Airport in Maryland.

- The early June date for this congress means that the weather should be sunny and warm and will show off the beautiful campus and greater Washington, DC, at their best.
- This is the first call for interest and a save the date notice. A dedicated website and registration instructions will be forthcoming.
- The organizing committee is also calling for ideas for symposia for this meeting.

For more information and to suggest symposia, contact the chair of the organizing committee, Christopher Tudge at, ctudge@american.edu

Reminiscing of past meetings

A glimpse into The Crustacean Society Summer Meeting 2024, in Taipei, Taiwan

by Clarence Toh, Danial Mazlan, Jared Tan, Nanyang Technological University, Singapore

As a group of teachers who attended the event with fresh eyes, we would like to share about our experience being amongst fellow crustacean biologists and newly made friends. We are a group of three secondary school teachers from Singapore who teach Biology to students ranging from the ages of 13 to 16. During our undergraduate studies, we had the privilege of working on the feeding ecology of fiddler crabs. We are extremely grateful for having the opportunity to participate in this eye-opening event and for the welcoming community of carcinologists who have embraced us in our short time there.

Where?

The Crustacean Society Summer Meeting 2024 was the very first time the meeting was held in Taiwan, hosted at Academia Sinica, Taiwan's national academic institution. The centre itself is surrounded by nature, situated beside a beautiful forest at the back of the facility, symbolic of how Taiwan intentionally integrates nature and modern society. The welcoming ceremony encompassed music, drums and dance brought on by the organising committee and local arts troupes. Some of us also had the opportunity to join the troupe on stage towards the end of their performance, donning local indigenous headwear and engaging in some hearty footwork. Every morning, we were blessed to hear the chirpy calls of various species of birds on our way to the conference venue from the campus accommodation, truly a daily reminder of how closely intertwined nature is with the Taiwanese society!

When?

A peaceful and idyllic week at the venue, from 27th May to 31st May. A significant reason for why the week went smoothly and peacefully was the amazing hospitality of the organising committee, going the extra mile to secure delicious, yet healthy bento meals for us at lunch as well as the team of helpers who took care of any of our queries and graciously assisted us in the transitions between each presentation. The facilities on-site were also immaculate, with the campus accommodation being spotlessly clean and comfortable, and also in close proximity to our conference venue and numerous food options (as foodies, thank you organising committee for the food map!). The kindness and generosity shown by the organising committee made us made the conference a very enjoyable experience and a little hard to leave after it was over.

Who?

Over 140 carcinologists shared our research over 14 research areas, through oral and poster presentations in the International Conference Hall and conference room of the venue. These sharing sessions were not only informative but were also inspiring, spurring numerous discussions, sparking new lines of inquiry and potential. Friendships old and new within our community were strengthened over our daily meals, ending with the grand banquet at the iconic Grand Hotel in Tai-

pei. The ambience for the evening was vibrant and relaxed. Accompanied by great music by a talented saxophonist and violinist, this provided a wonderful opportunity to unwind after a week of intensive academic activities. This social aspect of the conference was invaluable to us as young researchers, as it fostered a sense of community among attendees and paved the way for future collaborations.

What did we sea?

Crustaceans are truly resilient creatures, requiring much more tenacity and passion from the researchers that study them. We were graced with six keynote speakers from the various fields of crustacean biology and started our proceedings with an account from Prof. Peter Ng, who told us of a tale of two seas and shared interesting insights and perspectives of crustaceans under the sea. We also learned about deep sea hydrothermal vent crustaceans from Dr Hiromi Watanabe and the fascinating reproductive systems of barnacles from Prof. Jens Høeg's keynote presentation. Prof. Ka-Hou Chu and Prof. Shane Ahyong also grounded us in current research and brought us up to speed with the phylogeny of decapod crustaceans. Our eyes were also blessed with the beautiful pictures taken by Prof. Tin-Yam Chan, who shared with us about the diversity of shrimps and lobsters in Taiwan. Their presentations were truly inspiring and informative, and set a positive and enthusiastic tone for the rest of the presentations, a shell-shockingly conducive environment for learning and collaboration.

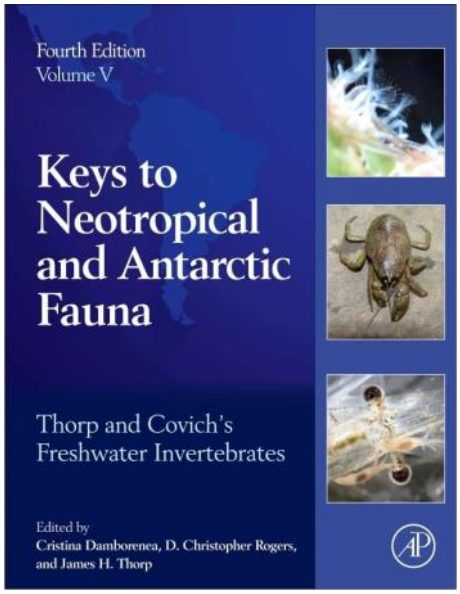
We also had the opportunity to browse the Amazing Taiwan Biodiversity Exhibition, which showcased an array of well-preserved specimens of Taiwan's diverse flora and fauna. A short visit there was sufficient to highlight the rich biodiversity of the region, which is home to several endemic species, and to encourage further research into Taiwan's rich biodiversity. It also underscored the importance of local conservation efforts and the importance of science education and communication. We also were brought on a tour of the National Palace Museum, which offered a fascinating glimpse into the history of Taiwan through its well-preserved artifacts. Learning about Taiwan's history and cultural heritage added a unique dimension to the conference, broadening our understanding of the local context in which our scientific discussions were taking place.

Concluding statements

Overall, the conference was a well-organized and intellectually stimulating event. The combination of high-quality scientific presentations, interactive sessions, cultural tours, and social events created a holistic experience that was both educational and enjoyable. We left the conference with a wealth of new knowledge, fresh ideas for our own research, and a renewed enthusiasm for the field of crustacean studies. Thank you once again to the organising committee for providing the platform for all of us to share our research and for creating a home away from home at Academia Sinica during the conference. We certainly hope to be back for future editions of TCS Summer Meeting!

Hot off the press & Online resources

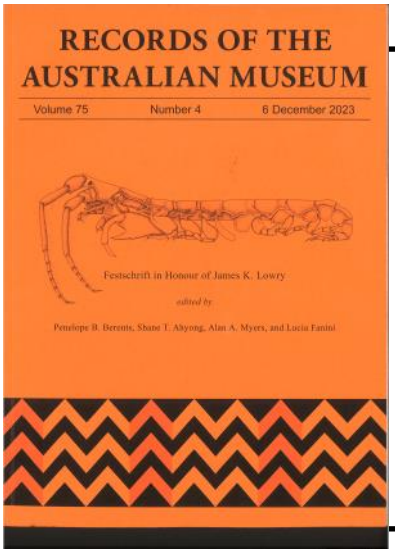
Thorp and Covich's Freshwater Invertebrates: Volume 5: Keys to Neotropical and Antarctic Fauna (Thorp and Covich's Freshwater Invertebrates, 4th Edition)



by Cristina Damborenea, D. Christopher Rogers, James H. Thorp (eds)
1046 pp. Available in hard cover and eBook, e.g. on Amazon.

This volume 5 covers inland water invertebrates of the world and, like the previous volumes, is designed for multiple uses and levels of expertise by professionals in universities, government agencies, private companies, and graduate and undergraduate students.

- Includes zoogeographic coverage of the entire Neotropics, from central Mexico and the Caribbean Islands, to the tip of South America
- Provides identification keys for aquatic invertebrates to genus or species level for many groups, with keys progressing from higher to lower taxonomic levels
- Contains terminology and morphology, materials preparation and preservation, and references



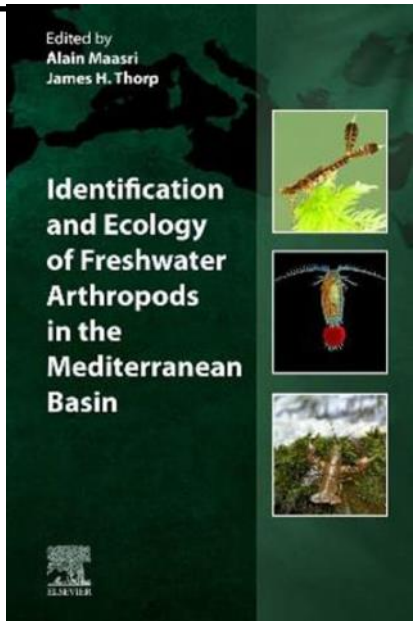
Festschrift in Honour of James K. Lowry

Penelope B. Berents; Shane T. Ahyong; Alan A. Myers; Lucia Fanini (eds). Records of the Australian Museum 75(4): 299–622

Festschrift in Honour of James K. Lowry (1942–2021)—a collection of works by colleagues and students. Dr Jim Lowry was based at the Australian Museum in Sydney from 1976. He became influential in the field of amphipod research throughout the world.

Download the complete work from the Australian Museum website here.

Identification and Ecology of Freshwater Arthropods in the Mediterranean Basin

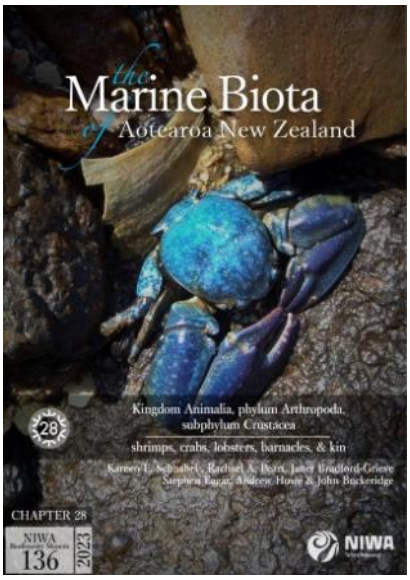


By Alain Maasri & James H. Thorp (eds.)
662 pp. Available in hard cover and eBook, follow link

This book overs the entire Mediterranean basin, including parts of Europe, Asia, Africa and the Mediterranean islands, but excluding other biogeographic locations with Mediterranean climates located outside the region. The book provides an extensive description of the taxonomy and ecology of aquatic arthropods encountered in lentic and lotic habitats, as well as in less studied underground and estuarine habitats. It offers expanded taxonomic identification keys to major groups of arthropods with a description of their ecology and distribution. Keys for insects include aquatic larval stages and water-dwelling adults of Coleoptera and Heteroptera.

NIWA Biodiversity Memoir 136 - The Marine Biota of Aotearoa New Zealand

Kelly, M.; Mills, S.; Terezow, M., Sim-Smith, C.; Nelson, W. (Eds)
494 pp. All chapters and supplementary spreadsheets available free online here.



Aotearoa New Zealand's marine biodiversity checklist has been updated, representing an increase of 3,630 known living species since the turn of the century. The Marine Biota of Aotearoa New Zealand represents our current knowledge of biodiversity, including sponges, corals, hydroids, worms, molluscs, crustaceans, sea stars, fish, birds, mammals, reptiles and algae. The total number of known living species in this update is 18,494, a 24 per cent increase since the last update.

Chapter 28 includes an update for New Zealand Crustacea by Schnabel et al. who present a list for 3321 extant species. The chapter can be downloaded from here.

Matching private vessels with marine research

If you're a marine scientist or researcher with a project in the Mediterranean and in need of a vessel, get in touch with Yachts For Science via email or visit their website for more details on how to get involved. The goal of Yachts for Science is to bring together yacht owners and crew with marine scientists, researchers and content creators and provide access to the oceans. **Learn more >>**

Webinar series for young scholars: cutting-edge research on marine science and engineering

27 June 2024

Cutting-edge Research on Marine Science and Engineering (Series II: Marine Biodiversity: Adaptation, Evolution and Conservation), taking place online on 27 June 2024 (Thursday) from 9:00am to 6:00pm (GMT+8). This Webinar series is organised by a Hong Kong University of Science and Technology team led by professor Pei-Yuan Qian, a prestigious marine biologist. Currently, the series has secured one keynote talk and seven invited talks. Abstract submission is welcome. **Learn more and register >>**

Explore our ocean — FathomNet

FathomNet is an open-source image database that can be used to train, test, and validate state-of-the-art artificial intelligence algorithms to help us understand our ocean and its inhabitants.
Learn more and explore >>

Deep-sea biology programmes in the UN Ocean Decade

If you attended the TCS Summer meeting, you would have seen Prof. Watanabe present two deep-sea projects: The Challenger 150 global scale programme of field work that is needed to deliver the Ocean Decade objectives. Over the course of the Ocean Decade we will map affiliated research in all ocean basins and track progress in achieving global biological sampling coverage.
Explore the Global Reach Map >>

Digital DEPTH, the Ocean Decade Programme, focuses on 4 types of deep-sea habitats: seamounts, mid-ocean ridges, continental slopes and abyssal plains, which are vulnerable to human activities and global changes, and aims at improving our ability to observe, simulate, and map these deep-sea typical habitats, thereby promoting a balance between deep-sea conservation and sustainable development.

Learn more and get involved >>

Call for contributions for New Frontiers in Crustacean Biology book

Tadashi Kawai and Jibom Jung (Editors) are planning to dedicate the upcoming volume to the great Korean carcinologist Professor Won Kim of Seoul National University in honor of his retirement anniversary.

Frontiers in Crustacean Biology 26, Crustacean Issues
Ingo S. Wehrtmann (series Editor)
Tentative title: Global Warming and Its Impact on Crustacean Biology

If you are interested in the new book, contact editors (Tadashi Kawai or Jibom Jung) now

Research Papers

Please continue to share your recently published research papers (other than in JCB) that have relevance to crustacean research. If possible, include a link where the paper can be downloaded.

— Kareen Schnabel (Editor *The Ecdysiast*)

Aneesh, P.T., Helna, A.K. & Kumar, A.B. (2024) A new species of branchial fish parasitic deep-sea isopod, *Brucethoa* Aneesh, Hadfield, Smit & Kumar, 2020 (Isopoda: Cymothoidae) from the Indian Ocean, with the transfer of two *Elthusa* Schioedte & Meinert, 1884 species. *Systematic Parasitology* 101: 26. https://doi.org/10.1007/s11230-024-10149-0

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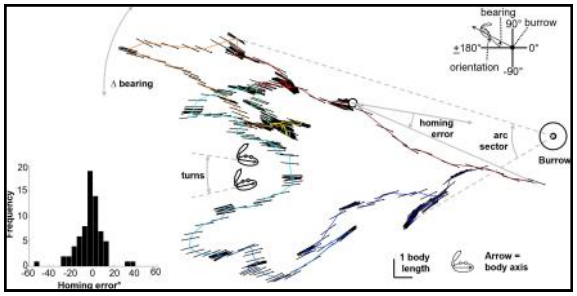
ICC10 STUDENT PRIZE WINNER!



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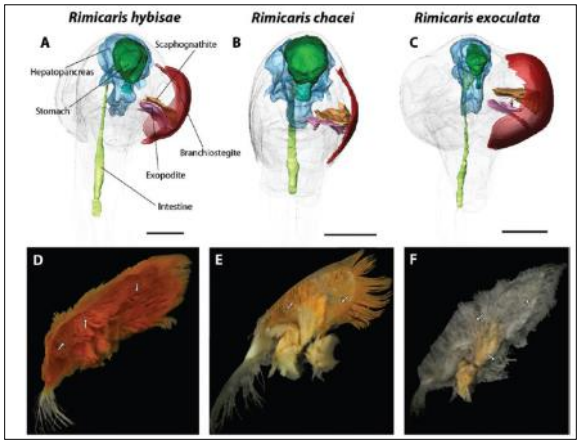

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On a lighter note...

Listen about crustaceans in a podcast, e.g. the ICC10 special episode hosted by the Deep-Sea Podcast team

Or the fabulous Alie Ward and her Ologies podcast, e.g. his two-part series about Carcinology with Adam Wall.

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