

LINN S C NEWS

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JUNE 2022

NEWSLETTER EDITOR

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NEW MEMBERS: We welcome:

Mr Thomas H Bowden. Fields of interest: botany, marine zoology (sea sponges, algae), geology, natural history of South Australia

Mr Garry Jolley-Rogers. Fields of interest: zoology, phylogenetics, taxonomy, natural history, crustacean neuroanatomy.



REPORTS FROM RECIPIENTS OF RESEARCH GRANTS

It is a condition of an award from the Scientific Research Grants that the recipient reports the results to the Society within 12 months of having received their funding.

Mr Stephen Gale (University of Sydney), 2021 Betty Mayne Scientific Research Fund for Earth Sciences recipient. Project title: *The age and origin of the Botany Sands of southeast Australia*.

“I’m very pleased to let you know that I have just received the results of the dating work that the Society helped to fund last year. We put down two cores into the Botany Sands. One, at a site adjacent to Royal Randwick, gave an age of around 11,000 years; the other, from near Rose Bay, gave an age of around 47,000 years. These ages fit well with those from elsewhere across the basin and I’ve already begun compiling the dataset so I can write up the results. I apologise for the delay in contacting you about this, but covid restrictions meant, first, that development sites (amongst the few places where we can find exposures in the Basin) were either closed or allowing only restricted access and, secondly, that the dating labs stopped operating for most of the outbreak”.

Mr Jeremy Day (University of Wollongong), recipient of the 2021 Joyce W Vickery Scientific Fund. Project title: *Food web characteristics of urchin barren habitats, who is in control?*

Maintaining robust food-web interpretations in non-lethal sampling of the lobster *Sagmariasus verreauxi*. Worldwide, rock lobsters are considered important predators that control sea urchins. However, it is not known whether the abundant Australian species, the eastern rock lobster (*Sagmariasus verreauxi*), occupies a similar role. Isotope analysis can be used to investigate lobster diet based on prey assimilation of nitrogen and carbon isotopes. However, since recent work has shown that tissues taken from the leg, antennae or abdomen of lobsters can give different indications of diet, work is now needed to determine whether different body parts and tissue types have different isotopic ratios or whether all body parts provide similar estimates, and can be used interchangeably. Understanding this is necessary to prevent erroneous conclusions about lobster food webs being drawn and may offer an opportunity to use novel, non-lethal sampling approaches to investigate diets since lobster appendages might be a suitable substitute for abdomen tissue, which is lethally obtained.

Our results show that *S. verreauxi* can now be sampled non-lethally via antennae or leg removal with mathematical corrections applied.



LINNEAN SOCIETY GRANTS

The first payment of grants was made in 1980. Since then, the Society, through its funds (Joyce W Vickery Scientific Research Fund, Betty Mayne Scientific Research Fund in Earth Sciences and W Macleay Microbiology Fund) has, between 1980 and 2022, disbursed \$335,337.24 to 568 students.



BOOK NEWS

“REBELS, SCHOLARS & EXPLORERS: WOMEN IN VERTEBRATE PALEONTOLOGY”

Annalisa BERTA, Professor Emerita at San Diego State University and former President of the Society of Vertebrate Paleontology and Susan TURNER, former DAAD Professor and Emeritus member SVP co-operated over three years to create a first definitive history of Women in Vertebrate Paleontology, published in October 2020 by the Johns Hopkins University Press, with supplementary material on their website. This book aims to encourage more girls and young women to enter a STEM career by offering strategies and hopeful stories from women through the last 200 years.

Although the number of women in vertebrate paleontology (VP) has increased in recent years, they remain underrepresented and change has been slow. This book looks at the work of more than 1,200 women in VP in four time periods: 18th–19th century, including pioneers such as Mary Anning and Carrie Barbour; late 19th–early 20th century, when the search for vertebrate fossils has spread out over the world and in Australia, we find just a few; a boost by mid-20th century with the founding of Society of Vertebrate Paleontology (SVP) in 1940; and late 20th century–present, with the number increasing by 70%.

The earliest women VPs (1700s–1850) studied fish and reptiles in near equal numbers. Beginning in the 19th century and continuing to the present women began studying fossil mammals. In terms of employment, the earliest women were primarily collectors and artists but a few gained academic and research positions as well as curatorship and palaeoart commissions (if not jobs) in museums throughout the early to mid-20th century. Our geographic data show that women were mainly European until 1940, when a larger proportion came from North America coinciding with a considerable increase from the former USSR (1917–1992). Beginning in the late 19th century and continuing into mid-20th century, women begin to work in Asia, Africa and South America; since 2000 there has been an increase in women from South America and a presence in Africa.

The book is listed on the Johns Hopkins website, and also available via Amazon, etc. e.g.

<https://www.press.jhu.edu/books/title/12098/rebels-scholars-explorers>

<https://muse.jhu.edu/book/77835>

<https://jhupbooks.press.jhu.edu/rebels-scholars-explorers-supplemental-materials>

2022 LINNEAN SOCIETY OF NSW NATURAL HISTORY FIELD SYMPOSIUM



NATURAL HISTORY OF THE NORTHEASTERN SYDNEY BASIN
Wednesday November 16-Thursday November 17 (oral presentations),
Friday November 18 (field trip)

FIRST CIRCULAR

Scope

Over the past decade the Linnean Society of New South Wales has been active in organising field symposia highlighting aspects of natural history in the Port Macquarie area (2010), Royal National Park (2012), Jenolan Caves (2013), Belubula Valley (2015), Snowy Mountains (2017), the Warrumbungles (2018) and Blue Mountains National Park (2019). Focus of the 2021 field symposium will be on the Ku-ring-gai Chase National Park north of Sydney and surrounding regions in the Northeastern Sydney Basin, bounded to the north by the Hunter River, the coastline to the east, Sydney Harbour to the south, and extending west as far as the Putty Road on the boundary of Yengo National Park. Much of the area lies within the distinctive lower Triassic Hawkesbury Sandstone outcrop with its spectacular geomorphology and characteristic floral communities, contrasting with those developed on the underlying lower Triassic Narrabeen Group and upper Permian rocks in the Hunter Valley. On the Central Coast large coastal lakes provide important freshwater and brackish water habitats. Two days of scientific and general interest talks and presentations on current research into the geology and geodiversity, flora and fauna, and other aspects of the natural history of this extensive region will be followed by a day-long field trip exploring aspects of Ku-ring-gai Chase National Park.

Costs and logistics

Venue for the symposium sessions will be the Hornsby RSL Club (4 High Street, Hornsby), conveniently located within 5 minutes walk of Hornsby Railway Station, which provides a hub for Sydney suburban services with good connections to the Central Coast and Newcastle area. A variety of rooms are available at the club for conferences – currently we have booked one that holds 180 people in the expectation that this will cope well with any need for social distancing. Based on previous symposia we anticipate 100-120 persons will attend the talks.

The registration fee (details shown on the attached Registration Form) will cover the venue hire, morning and afternoon refreshments and a buffet lunch (vegan & gluten-free options available) each day at the RSL Club, and the Program/Abstracts/field guide booklet. Presentations will commence each day at 9 am (registration) with talks between 9.30 am – 4.30 pm. The field trip fee will cover transport by bus and the National Park entry fee. Those participating on the field trip are to provide their own lunch, snacks and beverages. The bus will depart from the bus zone adjacent to the western side of Hornsby Station no later than 8.30 am and return there between 5 – 5.30 pm. Participants can register for any combination of the three-day sessions. However, bus seats are limited (max. 48) for the field trip, and preference will be given to those also registered to attend the preceding day sessions. Early registration for the field trip is recommended.

Members of the Linnean Society of NSW will enjoy a modest discount on registration and field trip fees. Non-members are welcome to apply for membership of the Society to access these discounts. For details of membership categories and our low subscription rates, please refer to the website of the Linnean Society of NSW.

Cancellation policy: 50% refund will apply to cancellations notified up to and including September 30. No refunds will be given for cancellations notified after that date. Should it be necessary for the Society to cancel the symposium due to COVID-19 restrictions (or any other unforeseen events), we will return all monies paid by participants, less any administration costs imposed by the venue or bus company.

Proposed itinerary for field trip

The field trip commences at Hornsby Railway Station (bus zone on west side, Station Street off Peats Ferry Rd) at 8.30 am on Friday November 18, and proceeds via Mona Vale Road, McCarrs Creek Road and West Head Rd to West Head in Ku-ring-gai Chase National Park. First stop will be at West Head lookout to view Pittwater, the entrance to Broken Bay, and the Palm Beach-Barrenjoey Headland tombolo. There will be a brief diversion to the interpretation centre near West Head. The second main stop will be at the head of the Elvina Track for a short walk to inspect a spectacular exposure of prismatic sandstone, aboriginal carvings, and a heathland plant community. We plan to arrive around 12.30 pm at the Ku-ring-gai Wildflower Garden, off Mona Vale Rd at North St Ives, for a picnic lunch (own arrangements) and a short bush walk. We then proceed through North Turrumurra along Bobbin Head Road to Bobbin Head. From the carpark we will walk along the Mangrove Boardwalk to examine that plant community and the associated brackish water biota on the rising tide. If possible the final stop of the day will be Hornsby Quarry Park just west of Hornsby where a superb cross-section through a diatrema of Jurassic age had been exposed by quarrying. Redevelopment of the old quarry site has been underway for more than a year but it is uncertain at this stage whether access (on foot) into the quarry void or to a suitable lookout will be possible, due to safety concerns. If access is not possible, then an

Aboriginal rock carving site at Mt Ku-ring-gai will be visited instead. Return to Hornsby Station by 5.30 pm. Transport will be by 48-seat luxury coach with seat belts (all passengers seated).



View from West Head (first stop on the field excursion) across Pittwater to Palm Beach, a tombolo (sandy isthmus) tying the island forming Barrenjoey Headland to the Northern Beaches Peninsula.



Sandstone pavement adjacent to Elvina Track in Ku-ring-gai Chase National Park, displaying cross sections of prismatic columns (second stop on the field excursion).

Call for presentations

The Linnean Society of NSW invites anyone involved in research (be it formal scientific studies or citizen science) into, or an active interest in, any aspects of the natural history of the Northeastern Sydney Basin, to present their results at the Symposium. Focus will be principally on the geology, botany and zoology of the region's national parks, conservation areas and other reserves, inlets (e.g. Broken Bay), Central Coast lakes, and sea cliff features in the area bounded by the coastline to the east, Sydney Harbour to the south, the Hunter River to the north, stretching beyond the western limit of Hornsby Shire (including Marramarra NP and Berowra Valley NP) with Yengo NP and the Putty Road as the western boundary. Aspects of planning and management related to environmental matters will also be covered. Considerable interest in the symposium has already been expressed by the Friends of Ku-ring-gai Environment (FOKE) and a themed session of talks on the outstanding natural heritage of Hornsby and Ku-ring-gai local government areas is scheduled.

Each day will comprise 20-24 talks of 15-20 minutes duration on various scientific subjects relating to geology/ geomorphology, botany, zoology, anthropology and conservation science of the

northeastern Sydney Basin. Invited keynote speakers will introduce these and other topics in 30 minute talks. Powerpoint facilities are available. Submissions from researchers, citizen scientists and students interested in presenting should be advised as soon as possible. In general, a maximum of one presentation per registered speaker is permitted, although additional talks may be considered if time permits. Decision to accept a presentation will be at the discretion of the convenors of the Symposium.

Abstracts

Please use the template included in this Circular and adhere to the instructions provided. Abstracts (including illustrations) are limited to a single page and will be included in the Program/Abstracts/Field Guide booklet distributed to registrants. **Abstracts are due by September 15, 2022.**

Publication of papers presented at the symposium

Papers presented at the symposium are invited to be submitted (though this is not mandatory) for publication in the *Proceedings of the Linnean Society of New South Wales*, subject to editorial standards and peer review. This journal, first published in 1874, is available online and is open access, and has no page charges (even for colour figures). A detailed set of Author Guidelines is available on the Linnean Society of NSW website. **Deadline for submission of manuscripts will be April 30, 2023** with publication likely in mid to late 2023. Accepted papers are published as soon as they are edited and proofed.

Contacts for further information

Linnean Society of NSW office: secretary@linneansocietynsw.org.au

[or Mike Augee \(symposium secretary & Editor\): fossil@well-com.net.au](mailto:fossil@well-com.net.au)



Cross section through diatreme of Jurassic age exposed in wall of the disused Hornsby quarry, currently being redeveloped by Hornsby Council as the centrepiece of the new Hornsby Park.

REGISTRATION FORM

Name (please print):

E-Mail:

Phone number:

Affiliation or address:

Fee category (please circle): Full member of the Linnean Society of NSW /
Student member / Retired member / Non-member

Up to August 31, 2022**

After August 31, 2022

Fee Category	Scientific Session Nov 16	Scientific Session Nov 17	Field trip Nov 18		Scientific Session Nov 16	Scientific Session Nov 17	TOTAL
Students	\$55.00	\$55.00	\$25.00		\$60.00	\$60.00	
Retired, & Associate Members	\$65.00	\$65.00	\$35.00		\$75.00	\$75.00	
Full Members	\$75.00	\$75.00	\$40.00		\$85.00	\$85.00	
Non-members	\$110.00	\$110.00	\$55.00		\$120.00	\$120.00	

**registration fees must be received by this date to obtain Early Bird discount.

Please send completed registration form to

- i) secretary@linneansocietynsw.org.au as attachment (indicate date & method of payment), or mail to
- ii) Linnean Society of New South Wales, PO Box 291, MANLY NSW 1655.

Payments to be made by:

- 1) Bank transfer: St George Bank. Account name "Linnean Society of NSW"
BSB 112-879, Account 466447867. **Please label payment 'NESB_yoursurname'**
- 2) Cheque made out to The Linnean Society of NSW, posted to the above address

Note that the Society does not have credit card facilities.

Participants must make their own travel and accommodation arrangements. **Please notify any special dietary requirements (e.g. vegetarian, gluten-free).**

Participants must provide their own lunch (& snacks & drinks) for the field trip on Friday, November 18.

ABSTRACT TEMPLATE**Title text in bold Times New Roman 14 pt left justified***Oscar Seniorauthor^{1,2}, Lucinda Coauthor¹ and John J. Juniorauthor³*¹ Affiliation 1² Affiliation 2³ Affiliation 3

Abstract text here (abstract is limited to one A4 page including any figures or photographs as JPEGs). Use 12pt Times New Roman font throughout for authors, affiliations and abstract text. Multiple line spacing at 1.15. Underline name of presenting author. Check spelling prior to submission.

Submit abstract to secretary@linneansocietynsw.org.au no later than **September 15, 2022**. At least one of the authors must be registered to attend the symposium. Decision to accept any abstract is entirely at the discretion of the convenors of the Symposium.



LINNEAN SOCIETY OF NEW SOUTH WALES

NEED A TAX BREAK?

Donations to our scientific research funds are fully tax deductible

The Joyce W Vickery Scientific Research Fund

Is open to anyone engaged in research in natural history. Over eighty projects have been supported in the last five years

The Betty Mayne Scientific Research Fund

Supports projects in geology and other earth sciences. Sixteen awards have been made in the last five years.

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BSB: 112879

ACCOUNT NUMBER: 466447867

If you pay through a bank, it is essential that you e-mail the Society at secretary@linneansocietynsw.org.au and tell us about your payment, otherwise we will receive the money and not know who paid it.

SEND RECEIPT TO:(Your email address)

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