

# Invertebrata

## Tasmania's Invertebrate Newsletter

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*Invertebrata publishes articles and short notes on all aspects of Tasmanian invertebrate biology and conservation.*

**June 1997**

**No. 7**

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*Invertebrata* is produced by the Queen Victoria Museum and Art Gallery, Launceston, Tasmania. *Invertebrata On-Line* is on the Museum home page at <http://www.qvmag.tased.edu.au>

All correspondence to the editor at PO Box 700, Burnie TAS 7320



Recent months have seen two rather strange phenomena in the spider world in Tasmania.

For most of this year, a property at Richmond in the south of Tasmania has had a massive spider infestation of a large heap of wood mulch. Although initially representing a mystery, the countless numbers of spiders were eventually identified by Dr Rob Raven of the Queensland Museum as *Ostearius melanopygius*, the midget spider, in the family Linyphiidae.

The spiders have woven dense mats of silk all over the mulch heap. Attempts by the property owner to rake the mats off are useless as they reappear the next morning. Dr Raven suggests that lack of wind may have caused the young spiders to be unable to disperse by ballooning, leaving them to continually make mats so dense that the webs become too heavy to blow away even under windy conditions.

*O. melanopygius* is widespread, mainly in cool temperate parts of the world. It has not been officially recorded in Tasmania before, although it has been found in a cave near Hamilton in Victoria. It is also found in Europe, Japan, in an ants' nest in Brazil, and on mountain tops in Hawaii and East Africa. A fascinating aspect of this spider's biology is that it occurs in such isolated populations on different continents.

A second silky phenomenon appeared beside the Tinderbox Road, also in southern Tasmania, and was spotted from a moving car. This remarkable feat of vision was possible because the roadside bank was covered in webs that had caught the late autumn dew. Without this dew the webs would have been barely visible even from a metre away.

Closer inspection revealed the bank was covered with tiers of platform-like webs, ranging from saucer-sized to the diameter of a twenty-cent coin. The bank resembled an expensive holiday resort where the rooms are layered in tiers, each room having its own uncovered balcony.

Enthusiastic digging (to the fascination of passing motorists) revealed one male spider, three females and two egg sacs. The palps on the male are extremely complex in structure. The spiders have been identified as *Corasoides*, platform spiders, but the species is still undetermined. Species in the genus *Corasoides* are found across southern Australia and Tasmania.

Each platform web consists of a flat sheet with guy-ropes extending from the sides to keep it rigid. The end nearest the bank narrows into a funnel which leads into a burrow in the ground. A labyrinth of silk threads above the platform deflects flying insects onto the sheet, where they can be seized by the spider.

During autumn and winter large numbers of platform webs can be seen, but by spring and early summer numbers are greatly reduced. The spiders mature in late spring. Eggs are laid in cocoons in the summer and remain in the females' burrows until the spiderlings emerge the following spring. Egg cocoons may be confused with pebbles or rabbit droppings due to the female's habit of covering the cocoon with a layer of dust.

We returned to the Tinderbox bank a week later. Despite similar conditions and time of day, only one or two tiny webs could be seen, and no sign of any burrows. Presumably the spiders were still in the bank. They may have destroyed their webs and sealed off the burrow entrances during a change of weather that week.

We would be interested to hear of any other sightings of unusual webs.

— Liz Turner and Jeff Cossum  
 Tasmanian Museum & Art Gallery  
 GPO Box 1164M, Hobart TAS 7001

**Whoops!**

This is issue no. 8, not no. 7. — Ed.

## Editorial

Welcome to the latest *Invertebrata* layout (version 3.0) and, say, isn't this a good time to fill in your software registration card?

But seriously, folks... My first job as new editor is to congratulate Louise McGowan, our retiring editor, on building up such a large readership. Many thanks also to Mark Gordon for putting us on the Net - we're on the Queen Victoria Museum and Art Gallery home page, <http://www.qvmag.tased.edu.au>.

My second job is to announce that *Invertebrata* has ambitions. It wants to become a clearinghouse and one-stop shop for everyone interested in Tasmanian invertebrates - marine, freshwater and terrestrial. It will remain an informal publication, but it wants to reach an even bigger audience. The mailing list is currently rather heavy with PhD's. In future, *Invertebrata* wants to warm the bug-loving hearts of a lot more amateur investigators, students, teachers and members of 'environmentally active' community groups.

Why 'warm the hearts'? Well, in case you hadn't noticed, Tasmania (and Australia, for that matter) is a vertebrate society. Vertebratism is something like racism and sexism. Vertebrateists think that birds, mammals, reptiles, amphibians and fish (5% of our fauna) are all that's really significant in the Animal Kingdom. The fantastically diverse and abundant animals without backbones (the other 95%) are important chiefly as birdfood. Or frogfood. Or fishfood.

Vertebrateists are ignorant bigots. They're also In Charge. The 1996 *State of the Environment - Tasmania* report says that \$1,627,086 was provided by the Commonwealth in 1990-1996 for studies of endangered Tasmanian animals (Table 5, Biodiversity section; p. 4.20). Only 13% of that amount was spent on invertebrates, and 90% of the invertebrate funding went to studies of the Ptarmigan Brown, *Oreixenica ptarmica*, which as a butterfly is a sort of honorary vertebrate.

Commonwealth and State funding priorities, alas, reflect the prejudices of the general community, not the realities of fauna conservation. The public will always value a pretty parrot more highly than a mud-coloured yabby. According to the *State of the Environment* report, this translates into dollars as follows: Swift Parrot \$136,136; Scottsdale Burrowing Crayfish \$2000. The Swift Parrot got

## Invertebrate Calendar

(This is the place for notices of conferences and meetings, lectures and seminars, birthdays and anniversaries, annual mating swarms, etc. The absolutely final deadline for the December 1997 *Invertebrata* is Friday, 14 November.)

15-17 July 1997 - 3rd Brisbane Workshop on Soil Invertebrates; conference at Duchesne College, University of Queensland, St Lucia, Brisbane. Sessions on soil biological diversity and nutrient recycling, sampling soil invertebrates, soil invertebrate ecology and population dynamics, IPM for soil pests, chemical control, host plant resistance, soil invertebrate pathogens. More information from Dr John Rogers, Cooperative Research Centre for Tropical Pest Management, University of Queensland 4072; fax (07) 3365 1855, email [J.Rogers@ctpm.uq.edu.au](mailto:J.Rogers@ctpm.uq.edu.au).

10 August - Birthday of Arthur Mills Lea (1868-1932), Government Entomologist of Tasmania 1899-1910. Lea also worked as Government Entomologist in Western Australia and as entomologist at the South Australian Museum. A keen coleopterologist, Lea described and named 5432 species of beetles.

28 September - 3 October 1997 - Joint National Conferences, Australian Systematic Botany Society and Society of Australian Systematic Biologists; conference at University of Adelaide (North Terrace). Sessions on 'Software in Systematics', 'Conservation and Systematics', Biogeography of Southern Temperate Australia, 'Ecology and Systematics' and 'Molecular Systematics'. For details and registration form, contact Robyn Barker, State Herbarium of South Australia, ph (08) 8228 2348, fax (08) 8223 1809, email [rbarker@btg.lands.sa.gov.au](mailto:rbarker@btg.lands.sa.gov.au). Registration and details also available on the Net at <http://155.187.10.12/asbs/asbs-agm-1997-conf.html>.

1-3 October 1997 - ESA97: The 1997 Ecological Society of Australia Conference and Open Forum; at Convention and Performing Arts Centre, Albury. Details and registration form: ESA97, Charles Sturt University, PO Box 789, Albury NSW 2640; or contact Liz Chubb (060) 519718, fax (060) 519897, email [lchubb@csu.edu.au](mailto:lchubb@csu.edu.au). Registration and details also available on the Net at <http://life.csu.edu.au/esa/esa97.html>.

9-12 December 1997 - The Other 99%: The Conservation and Biodiversity of Invertebrates; conference at Australian Museum, Sydney. Sessions on 'Assessing the Other 99%', 'Describing the Other 99%', 'Invertebrate Conservation through Legislation and Policy' and 'The Invertebrate Agenda'. Details and registration form available from Organising Committee members: Dr Winston Ponder (02) 9320 6120, Dr Alix Bean (02) 9320 6224, Dr Gerry Cassis (02) 9320 6346, Dr Pat Hutchings (02) 9320 6243, Dr Richard Major (02) 9320 6183; address for all is Invertebrate Biodiversity Conference, Australian Museum, 6 College St, Sydney NSW 2000; fax (02) 9320 6050; email [invert@amsg.ausmus.gov.au](mailto:invert@amsg.ausmus.gov.au). All registrations must be in by 1 October.

another \$130,000 from the Endangered Species Program this year, but as of 18 June the Commonwealth had not announced 1997-98 funding for conserving a single threatened Tasmanian invertebrate.

Let's be positive. The mammal-cuddlers and the bird nuts have their publications; this is ours. The dumb question is sometimes asked, 'What would the world be like if all the little species disappeared?' *Invertebrata* readers know the answer. And if the big species vanish, *Invertebrata* will host a merry wake for all the lost fleas, ticks and other parasitic invertebrates.



A first edition of T.H. Savory's 'The Arachnida' (1935; London: Edward Arnold & Co.; 218 pp.), very good condition. What offer? (Contact the editor.)

## How to...

### collect, preserve and package land snails

**Collecting** Land snails are best found in their hiding places in dark, damp situations, such as under logs or rocks, or in leaf litter. With the help of a torch you can find them crawling about at night, but this is a far less reliable method. Collect specimens into containers with well-fitting lids. If you need to keep the snails for long periods before processing, put DEAD leaves or dampened tissues or paper towelling in the container. DON'T use live, green vegetation as this is still alive and respiring. Try to put only one species of snail in each container as some species are carnivorous and will eat other snails. (See the references below to learn which snails are carnivorous.)

**Labelling** All specimens must be labelled at the time of collecting. One method is to use a field numbering system, in which you simply number the containers and write down the relevant habitat notes and collecting data in a notebook. A drawback of this method is that the loss of a notebook can render a whole collection useless for research purposes. Write the field number and the date in dark (soft) pencil on a piece of tough paper and put this label INTO THE CONTAINER with the specimen. Labels stuck on the outside of containers can fall off, and ink writing can dissolve off the label if the label is transferred to alcohol.

For permanent labelling, the information which should go with each lot of specimens is:

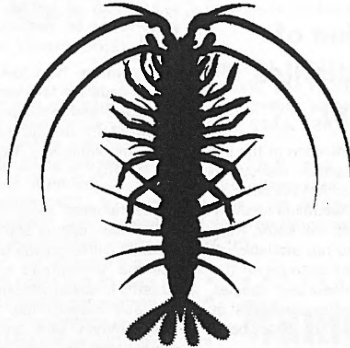
- name of collector
- date of collection
- locality and map grid reference, or details of the exact place the specimen was found
- habitat in which the specimen was living
- other interesting information (e.g., 'snail was eating earthworm').

Without the first three items on this list the specimens will be of little or no use for research purposes. Locality information is particularly important; it should be possible for someone else to go back to the collecting site from your description of the place.

**Preserving and fixing** Dead shells are of some use but live-collected speci-

## What is it?

'What is it?' will be a regular feature. Contributions are welcome but should be line illustrations, not photos.



The *Invertebrata* logo represents *Anaspides tasmaniae*, the famous Tasmanian mountain shrimp. It is sometimes called a 'living fossil' because syncarid crustaceans like *Anaspides* are very similar in body structure to fossils found in Triassic rocks some 180 million years old. *A. tasmaniae* is widespread and common in cold highland waters in western Tasmania and on the Central Plateau. The silhouette above is approximately life-size.

More information:

Fulton, W. and Horwitz, P. (1987) Syncarid crustaceans. In W. Fulton and A.M.M. Richardson, eds., *The Freshwater Fauna of the World Heritage Area, Tasmania*. Hobart: Inland Fisheries Commission.

mens, with the animal properly preserved, are far more useful.

Dead shells can be washed in warm tap water, air-dried and put in a clean, dry container with a label. Live specimens should be relaxed and fixed. Place the live snails in a clean container with two or three small crystals of menthol (you can get small quantities of menthol crystals from a chemist). Fill the container with cold tap water to the very top, cap the container to exclude air and leave overnight. Make sure that no more than a third of the space in the container is taken up by specimens. Next day, pour off the water and fill the container with 75% alcohol. The snails should have relaxed and become extended in the menthol-saturated water, and should remain extended when fixed in the alcohol.

**Packaging and shipping** Live specimens should never be packed with GREEN vegetation as this will kill the snails in a closed container within a few days. Put live specimens in a container with DEAD leaves or moist paper towelling. Leave plenty of room for the snails: they should take up no more than 5% of the volume of the container. Secure the lid very firmly. It's a good idea to have labels both inside and outside the containers, as snails may eat labels if left a long time.

Preserved specimens can be sent in a small container with the liquid alcohol replaced by tissue dampened with alcohol, but the container must be securely sealed to prevent the alcohol from evaporating away.

For secure shipment through the post, put the containers inside a bigger container, then put this bigger container in a box and surround it with packing material.

Live or preserved snails, properly labelled and packed as described, can be sent for identification to the author c/- Queen Victoria Museum and Art Gallery, Wellington Street, Launceston TAS 7250.

— Dr Brian J. Smith  
Research Associate, QVMAG

More information:

Kershaw, R.C. (1991) *Snails and Slug Pests of Tasmania*. Launceston: Queen Victoria Museum and Art Gallery; 67 pp.

Smith, B.J. and Kershaw, R.C. (1981) *Tasmanian Land and Freshwater Molluscs. Fauna of Tasmania Handbook No. 5*. Hobart: Fauna of Tasmania Committee, University of Tasmania; 148 pp.

## Towards Nationally Consistent Identification of Larval Caddisflies (Trichoptera)

*The problem* Identification of the immature stages of aquatic insects to known species is often not possible, as anyone working with Australian freshwater macroinvertebrates will know. Keys to caddisfly larvae are not available for many families, in part because of the large number of undescribed species and in part because larval stages of described species have not always been associated with adults.

Working voucher collections are often established by individual organisations to assist with identification. Each of

these voucher collections has its own coding system for unnamed taxa, making it impossible to equate identifications based on different voucher collections.

*The solution* Keys to Australian larvae of the caddisfly families Conoesucidae, Calocidae and Helicophidae are being prepared by the author with funding from the Monitoring River Health Initiative (MRHI).

These families occur in eastern Australia, New Zealand and southern South America (Helicophidae only). Conoesucidae are widespread and common in streams in eastern Australia. The Calocidae and Helicophidae are apparently less common, with several larval taxa represented by very few specimens. Some calocids and helicophids occupy unusual habitats such as small seeps and even terrestrial leaf litter, in Tasmania at least.

Similar work on other aquatic taxa is being done by John Dean and Ros St Clair at the Victorian EPA, David Cartwright at Melbourne Water (Werribee) and Phil Suter at LaTrobe University (Albury-Wodonga).

The MRHI project in Tasmania involves:

Examination of collections of larval Trichoptera and definition of genus- and species-level taxa.

Development of illustrated keys to families, genera and species. A standardised coding system will be used for unnamed taxa.

Examination of the major working voucher collections to ensure that the same taxon in different collections is recognised by its correct name or unique code.

Establishment of a national voucher collection at the Museum of Victoria.

Development of a character state database for input to computer-based keys.

Preparation of a database of collection data for the specimens examined.

The work is due to be finished in August 1997. Keys will be published and presented at a taxonomy workshop in February 1998 at the Murray-Darling Freshwater Research Centre, Albury.

— Dr J.E. Jackson

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## Girault's Gems

*Alexandre Arsène Girault (1884-1941) was an American-born entomologist who spent much of his working life in Queensland. He published a large number of 'straight' papers on Australian chalcidoid Hymenoptera. Below is a list of some papers which Girault published privately, perhaps because they were turned down by respectable journals! Delight in his imaginative titles...*

- 1921 New animals of Australia and the old men of the earth.
- 1922 The true remedy for head lice. Dedication of a new animal to the quality of majesty and so forth.
- 1923 Loves wooded and won in Australia.  
Microscopitis, womanitis and new Hexapoda.
- 1924 Lese majeste, new Insecta and robbery.
- 1925 Indications (in new insects) of ruling power and law in nature.  
An essay on when a fly is lovable, the ceremony of baptizing some and unlovely hate.  
Some gem-like or marvellous inhabitants of the woodlands heretofore unknown and by most never seen or dreamt of.  
New Queensland Insecta captured without any reference to use.
- 1926 Characteristics of new Australian insects. (Refused publication on pretext).
- 1927 New Australian animals so far overlooked by outsiders.
- 1928 A prodigious [sic] discourse on wild animals.  
Some new hexapods stolen from authority.  
Some Insecta and a new all highness. (Notes compiled in fear and sorrow.)  
Notice of a curious professor and of native wasps and wood lice.
- 1929 Description of a case of lunacy in *Homo* and of new six-legged articulates.
- 1933 Some beauties inhabitant not of commercial boudoirs but of nature's bosom, notably new insects.
- 1934 New Capsidae and Hymenoptera, with note on an unmentionable.
- 1936 Terror-errors; and novitates of Pterygota (or earth realities not state bound.)
- 1937 New naturals, unorthodoxies and non-pollutions, viz. new hexapods.

— Trevor Semmens

Department of Primary Industry and Fisheries  
St Johns Avenue  
New Town TAS 7008

## Max/min box

### "Gigantic Onychophoran Discovered in the Caribbean"

"A recently discovered and still undescribed Costa Rican species from Cartago Province in the Caribbean of Costa Rica measures 20 cm in length, equal to the fossil *Xenusion*. It was collected by Costa Rican herpetologist Alejandro Solórzano..."

— *Onychophora* Newsletter No. 6  
(March 1997), p. 4.

That's one for the Guinness Book! The biggest Tasmanian velvet worm, *Tasmanipatus barretti*, lives near Scamander and stretches to 7.5 cm when walking. — Ed.

## Notices & reviews

Hawking, J.H. and Smith, F.J. (1997) *Colour Guide to Invertebrates of Australian Inland Waters. Identification Guide No. 8*. Albury: Cooperative Research Centre for Freshwater Ecology; 213 pp.

Covers Porifera to Insecta, to generic level where possible. Includes morphological features, habitat, distribution and references, with a glossary and references to identification keys. Glossy colour pages, handbook size (21 x 11 cm). Price \$23 including postage. Limited print run, so order quickly from the publisher (Cooperative Research Centre for Freshwater Ecology, Murray-Darling Freshwater Research Centre, PO Box 921, Albury NSW 2640) or directly from senior author John Hawking (hawkingj@mdfrc.canberra.edu.au)  
— Jean Jackson

Proceedings of the Conference *Invertebrate Biodiversity and Conservation*, Melbourne, 27 November – 1 December 1995; edited by A.L. Yen and T.R. New. Published as *Memoirs of the Museum of Victoria* 56(2), 28 February 1997.

The first conference in this series, *Towards Biodiversity and Conservation*, was held in July 1993 at the Queensland Museum in Brisbane; proceedings were published as *Memoirs of the Queensland Museum* 36(1) in June 1994. Both proceedings are essential reading for those interested in invertebrate conservation. The Melbourne volume is a hefty 675 pages and contains 57 papers on biodiversity assessment methods, 'indicator' taxa, effects of disturbance, government conservation initiatives and many other topics. My favourites in this volume are Denis Rodgers' beautifully clear statistical analysis of collembolan/plant associations and Colin Bower's extraordinary 'field testing' of orchid and wasp sys-

tematics by means of quantitative observations of flower visits. The two conference volumes are available from the respective museums.

— Bob Mesibov

Edgar, G.J. (1997) *Australian Marine Life: The Plants and Animals of Temperate Waters*. Kew: Reed Books; 544p. \$69.95.

Horne, P.A. and Crawford, D.J. (1996) *Backyard Insects*. Melbourne: The Miegunyah Press at Melbourne University Press; 232 p. \$24.95.

## Wanted!

Notices and short reviews of new books and other publications relevant to Tasmanian invertebrate biology and conservation

## Weird Geology

Where was Australia in the Paleozoic, before all the world's land masses combined as Pangea?

Conventional reconstructions show Australia (as part of Gondwana) migrating from just north of the Equator in the Cambrian to ca. 70° south by the end of the Permian Period. The 'leading edge' of our portion of Gondwana was Australia's east coast. A recent paper (Dobson 1996) suggests that during this time the 'leading edge' collided with the east coast of North America, pushing up the mountain range now known as the Appalachians.

This unorthodox view is supported by a particularly good fit between the pre-Cretaceous rocks of eastern North America and southeastern Australia, with Australia turned 'north to south'. In this posi-

tion, Tasmania lies opposite eastern Canada. (Did Tasmanian Premier Tony Rundle know this when he suggested this autumn that Tasmania should model its economy after that of the Canadian province of New Brunswick?)

Dobson's paper inspired me to re-read some references about centipedes. Nowadays the centipede order Craterostigmomorpha is represented by one (or possibly two) species living in Tasmania and the South Island of New Zealand. However, a beautifully preserved centipede fossil (organic remains, not mineralised) from the mid-Devonian in New York State is remarkably similar to modern *Craterostigma tasmanianus*, and was first thought to be a craterostigmomorph. After further study, the American expert Dr William Shear erected a new order, Devonobiomorpha, for this fossil species, *Devonobius delta* (Shear and Bonamo 1988). Dr Hendrik Borucki, a German

zoologist, has disagreed and prefers to see *Devonobius* as a craterostigmomorph (Borucki 1996). Shear (pers. comm.) has meanwhile examined more *Devonobius* fossils and is confident that Devonobiomorpha and Craterostigmomorpha are distinct taxa.

What's clear is that something resembling the ancestor of our *Craterostigma* was living in eastern North America about 380 million years ago. If the new geological theory finds additional support, we can start wondering whether *Devonobius* walked to Australia/New Zealand during the postulated mid- to late Paleozoic collision. Or maybe *Devonobius* was an Australian gift to the Yanks?

— Bob Mesibov

References:

Borucki, H. (1996) Evolution und phylogenetisches System der Chilopoda (Mandibulata, Tracheata). *Verh. naturwiss. Ver. Hamburg* 35: 95-226.

Dobson, J.E. (1996) A palaeogeographic link between Australia and eastern North America: a New England connection? *J. Biogeography* 23: 609-617.

Shear, W.A. and Bonamo, P.M. (1988) Devonobiomorpha, a new order of centipedes (Chilopoda) from the Middle Devonian of Gilboa, New York State, USA, and the phylogeny of centipedes orders. *Am. Mus. Novitates* 2927: 1-30.

### From 'certain maxims of archy'

[archy was a roach whose soul was that of a reincarnated poet. — Ed.]

boss the other day  
i heard an  
ant conversing  
with a flea  
small talk i said  
disgustedly  
and went away from there

i do not see why men  
should be so proud  
insects have the more  
ancient lineage  
according to the scientists  
insects were insects  
when man was only  
a burbling whatisit

— don marquis  
'archy and mehitabel' (1931)



## Around the traps

### Queen Victoria Museum and Art Gallery

Tammy Scarborough has now been confirmed as the permanent replacement as Research Officer in Zoology. If Tammy has been experiencing feelings of *déjà vu* it is probably because she worked as an assistant to Dr Bob Green at this museum from 1984 to 1989. A significant proportion of vertebrate specimens in the collections bear Tammy's name as the preparator and carry her distinctively neat handwriting. Feeling thwarted by her lack of a formal qualification in Zoology Tammy resigned from the Museum at the end of 1989 in order to study zoology full time at the University of Tasmania, Hobart. Upon completing the course Tammy remained in Hobart for a while and worked at the Tasmanian Museum and Art Gallery on short term contract work and as a volunteer. Shortly before Louise McGowan resigned Tammy, with apparent great skill in anticipating events, moved back to Launceston and was thus well positioned to take over from Louise. Tammy now works full days on Tuesdays, Wednesdays and Fridays... welcome back Tammy.

Two new Plomley Foundation projects are now underway. Rob Walsh's new project is based on an old Plomley Foundation project. Rob is being supported in his efforts to clear his shelves of invertebrate specimens, mostly insects, accumulated during his micro-crustacean work in north-east wetlands over the past 4 years. The material is being identified as far as is possible and being prepared for lodging in the QVMAG collections. Helen Hocking has commenced site selection for her project looking at aquatic invertebrates of high-altitude streams in the north-east. Helen is currently concentrating on 'undisturbed' sites to gain some basic understanding of the biogeographic context and to establish a 'benchmark' description of this component of the fauna. Once this is done we will be in a position to answer questions about impacts of specific activities in the catchments upon the aquatic invertebrate fauna.

Rob Blakemore is still employed at QVMAG to work with Tim Kingston on the taxonomy of Tasmanian earthworms. The work is by its very nature necessarily painstaking and therefore progress has been frustratingly slow. However the horizon is brightening perceptibly now that Rob has picked out the most appropriate taxonomic pathway through the morass of specimens and associated diversity of form. In fact it is not so much within the form itself, but rather in the number of re-combinations of familiar forms of characters, that the diversity lies. It is quite obvious that when God was designing Tasmanian earthworms he used a bank of on/off switches in a random manner and threw dice for the number of repeats of organs such as spermathecae, prostates, gizzards and external genital markings!! With the amount of material available from such a vast number of sites throughout Tasmania, completion of the work will convert earthworms from being one of the most poorly known and biogeographically least under-

stood Tasmanian invertebrate groups to being one of the best described. However, to what degree the taxonomic descriptions and species distributions will translate to biogeographic understanding of the fauna is still very much an open question. By a fortunate coincidence, Adrian Pinder is working on Tasmanian aquatic oligochaetes from his base in Perth and so the Oligochaeta as a whole are being given a thorough and timely going-over. If only we could find someone to do the same for leeches then the entire non-marine component of the Annelida of Tasmania would become as well known as any is anywhere outside (the 'impooverished' version of the fauna of) Europe and North America.

— Dr Tim Kingston  
Curator of Zoology  
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### Tasmanian Museum and Art Gallery

Roger Buttermore, Curator of Invertebrate Zoology, reports that illustrator Mike Tobias is being employed for six months to draw our magnificently coloured leeches and other bloodsuckers, possibly for a TMAG publication.

### Department of Primary Industry and Fisheries

Trevor Semmens reports that databasing of the huge insect collection at the New Town Laboratories is proceeding slowly but well. Also going into the database are published records, such as those from back issues of the former DPIF publication *Insect Pest Occurrences*.

### Forestry Tasmania

Dick Bashford reports that the Forestry Tasmania insect collection has been valued on a per-specimen basis. New acquisitions include specimens of two new species in the lucanid beetle genus *Hoplogonus*. Like *H. simsoni*, which is listed as 'vulnerable' under the Tasmanian *Threatened Species Act 1995*, *H. bornemisszai* and *H. vanderschoori* have restricted distributions in State forest in the Northeast and are being informally protected by Forestry Tasmania. Dr Rob Taylor reports that the corporation is encouraging investigators to carry out studies, including ecological surveys, in the 'Warra' long-term revegetation research area in the Southern Forests. A trial logging is about to begin with pre- and post-logging sampling using pitfall and Malaise traps.

## Wanted!

Regular reports of people news and invertebrate goings-on from the University of Tasmania (all campuses and relevant departments and centres), Parks and Wildlife Service, Inland Fisheries Commission, CSIRO Marine Labs and any other agencies or institutions studying invertebrates in Tasmania. News for the December *Invertebrata* can be e-mailed to the editor (by 14 November):

mesibov@southcom.com.au

## Historical footnote

The first major publication in Tasmanian botany was Robert Brown's *Prodromus Florae Novae Hollandiae et Insulae Van Diemen* (1810). Brown arrived in Tasmania in 1803 and collected, by his own estimate, some 700 species of Tasmanian plants while he was here.

It's a little-known fact that Brown was also supposed to collect insects. The young Scot had been invited by Sir Joseph Banks to serve as naturalist on HMS *Investigator*, commanded by Matthew Flinders, on a scientific expedition to 'New Holland'. Brown was told to concentrate on botany, entomology and ornithology during his stay in Australia. Somehow or other the insects got neglected. Writing to Banks from Port Jackson in 1802, Brown apologised as follows:

*In zoology I have done but little...the collecting, preserving and description of plants preventing me from paying half the attention to the animal kingdom which its great importance deserves...(quoted in Edwards 1981, p. 146).*

During his nine-month stay in Tasmania, Brown lived and worked on the *Lady Nelson* at Port Dalrymple and joined the settlements at Risdon Cove and Sullivan's Cove on the Derwent. He climbed Mt Wellington ten times and catalogued 540 plant species from the mountain. But no insects...

— Bob Mesibov

### Reference:

Edwards, P. (1981) Botany of the Flinders voyage. In Carr, D.J. and Carr, S.G.M. (eds.), *People and Plants in Australia*, pp. 139–166. Sydney: Academic Press.