

PNHA NEWS

Pittwater Natural Heritage Association - thinking locally, acting locally

Native Bees—Your Help Is Needed

Your help needed to record native bee nests!

Land clearing and urban development lead to the loss of hundreds of stingless bee nests each year. You can help protect these bees by using a new online database recently developed by Megan Halcroft of the University of Western Sydney.

Do you know the location of any stingless bee nests in your local bushland? If you have a GPS unit, you can record these nests on this new database. By combining the local knowledge of enthusiasts Australia wide, this database will build up a picture of the distribution of our native bee species right across the Australian continent!

This information will be used to help protect and conserve stingless bee nests by:

- informing local authorities of endangered nests located in land clearing areas; and
- allowing conservationists to monitor the growth and decline of our nest populations.

The precise locations of individual nests will ONLY be visible to the person who entered the information and to authorised personnel from Megan's Bees Business Tracker website. So people wishing to poach nests will not be able to use the website to find individual nests.

Please support this new venture and help us learn about the distribution and abundance of our precious stingless bee species right across Australia.

To check out Megan Halcroft's new Bees Business Tracker website, please visit:

<http://tracker1.beesbusiness.com.au>

If you have any problems registering on this website, please send an email to Megan and she will help you sort it out:

megan@beesbusiness.com.au

Check the Aussie Bee website in coming months for updates:

<http://www.aussiebee.com.au/seminars.html> You can subscribe for email updates about Aussie Bee news and activities.

Australian Native Bee Research Centre, PO Box 74, North Richmond, NSW 2754.



Top: *Trigona carbonaria* brood comb
Above Middle: *T. carbonaria* foragers
Above: Blue banded bee (*Amegilla* species)
Left: Teddy Bear bee (*Amegilla* species)
Photos by Megan Halcroft



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Find out more about native bees:
"Flowering Plants and their Pollinators"
Monday 25th July 2011 at 10 am
Australian Plants Society
Ku-ring-gai Wildflower Garden, St Ives
Contact: Wendy Grimm
(02) 9144 5600
Fee for seminar: \$5 per person.

Activities Reports:

Insect & Invertebrates Night at Katandra

Drizzly cool weather kept some guests away, but those who turned up had the usual treat of interesting observations and anecdotes about invertebrates and other creatures from Martyn Robinson at Katandra Bushland Sanctuary.

Pittwater YHA Bush Regeneration Weekend

Another hostel-full of bush regenerators and some weekend visitors made great progress on the Asparagus Fern on national park land near the hostel, removing about 65 bags, or 800kg of crowns and berries. Guests enjoyed a talk about birds from bird-watcher Kerry Smith, a talk about local Aboriginal use of the area by Ian Jacobs, bushwalks, kayaking, great food and company.

Thanks to Michael & Sarah at the hostel, also our sponsors, HNCMA and DATS Environmental Services.

Saturday June 18th

Asparagus Fern Out Day, Barrenjoey Headland

We'll attack Asparagus Fern on Barrenjoey Dunes near the headland. Morning tea and gourmet lunch provided.

When/where: 8.30am, meet at far end of Governor Phillip park car-park, ends with lunch at 1.00 pm.

Wear: enclosed shoes, long sleeves and trousers.

Bring: strong gloves, a drink, hat. Tools provided.

RSVP for catering: 9918 9170, or pnhainfo@gmail.com

Sponsors: DATS Environmental Services, HNCMA, NPWS, Pittwater Council

Cost: Free

Sunday June 26th

Breakfast with the Birds & Bird Survey at Warriewood Wetlands. 8 – 10.30am

We'll see flowering Swamp Mahoganies attract honeyeaters and several kinds of Lorikeets. Sydney Freshwater Wetlands are a rare habitat in Sydney. One of Sydney's best bird watching spots.

Meet: Katoa Close, off Garden St, Warriewood

Bring: Binoculars if possible. We can lend some.

Cost: Tea/coffee and cake \$2.00

To Book: 9918 9170, 0417 287 320.

Email: pnhainfo@gmail.com (or 0439 409 202 on the day for a weather check.)



Bush regenerator's morning tea at Pittwater YHA. Photo Michael Doherty



Hawkesbury-Nepean
Catchment Management Authority

**Draft Native Fauna
Plan of Management**

PNHA attended the March public meeting to discuss this excellent Pittwater Council plan. Our submission praised the plan and commented on some management issues such as community education, use of nest boxes, roadkill hotspots and fauna crossings, broadscale insecticide use and the proposed Ingleside land release area.

The plan has a set of appendices of great interest about fauna in our area and of value to students.

Its effectiveness in good management we feel largely depends on community education.



Red-browed finch.
Photo: Neil Fifer

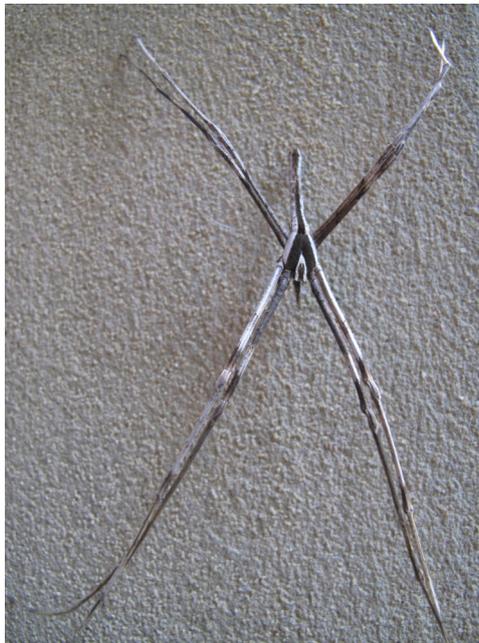
Life of a Retarius (Net-casting) Spider—Part 2

(Part 1 in PNHA News Issue 54)

The young male *Deinopis sub-rufa* spider, at nearly 5 months old in June, was not yet half-grown. He was still living amongst my indoor pot-plants, occasionally changing his supporting scaffold to an adjoining plant. His behaviour and changes in colour, size and occasionally, home-site, appeared similar to other *Deinopis* spiders then living in the garden.

After his eighth moult (in early December), at almost 11 months old, he had the bulbous palps which the mature male *Deinopis* uses for sperm induction when mating, and the first sign of the adult male's dark line down the back. Though he still had more growing to do, his body was now approximately 20mm long and his throw-net, now 16mm wide unexpanded, took 20 minutes to make. When 9 days old and only 5mm long, he made his 5mm-wide throw-nets in just under 3 minutes. His ninth and final moult occurred in January, 6 days less than a year after he had emerged from the egg-case. He was now fully mature, so he would no longer make a throw-net, or eat, but would soon set off to wander about in search of females. His last catch, made and wrapped 9 days before the moult, hung untouched where he'd left it on the scaffold.

He emerged from this final moult a very long and lanky fellow: body length 22mm, forelegs 65mm long, overall length from tip of foreleg to tip of hindleg : 101mm!. He was now a lighter, more greyish colour than his previous clear rusty-tan, and had the mature male's typical light and dark lines along the body, and broken pattern on the legs. This, together with the spider's habit of resting still, suspended with legs held out in four pairs, makes it look like two crossed twigs, so it blends



beautifully with the background, vitally important in this stage of the male's life, as he leaves home to go wandering.

Before he does, the final engineering construction of the male *Deinopis* is the sperm-web, a delicate little Y-shaped web of silk lines with a patch of white silk in the centre. Upon this the spider deposits a droplet of sperm which he then siphons into his bulbous palps, ready to transfer to the female spider.

On the third morning after his final moult I found he had made this web during the night on the topmost frond of his plant and was resting beside it, one forefoot in contact with it. So two evenings later (on the eve of his first birthday), while he was still in that position, I carried the potplant - "Dino", sperm-web and all - up the path to a place in the garden where I had recently found some suitable lady *Deinopis*.

Next day I saw him looking fit and independent among the leaves near the females, and 2 days later he was at the top of the lines of one of them, so I judged my matchmaking to be successful.

Having seen how perfectly he had done everything a *Deinopis* was meant to do through his life so far, I had no doubt he would mate successfully and avoid being the female's next meal by:

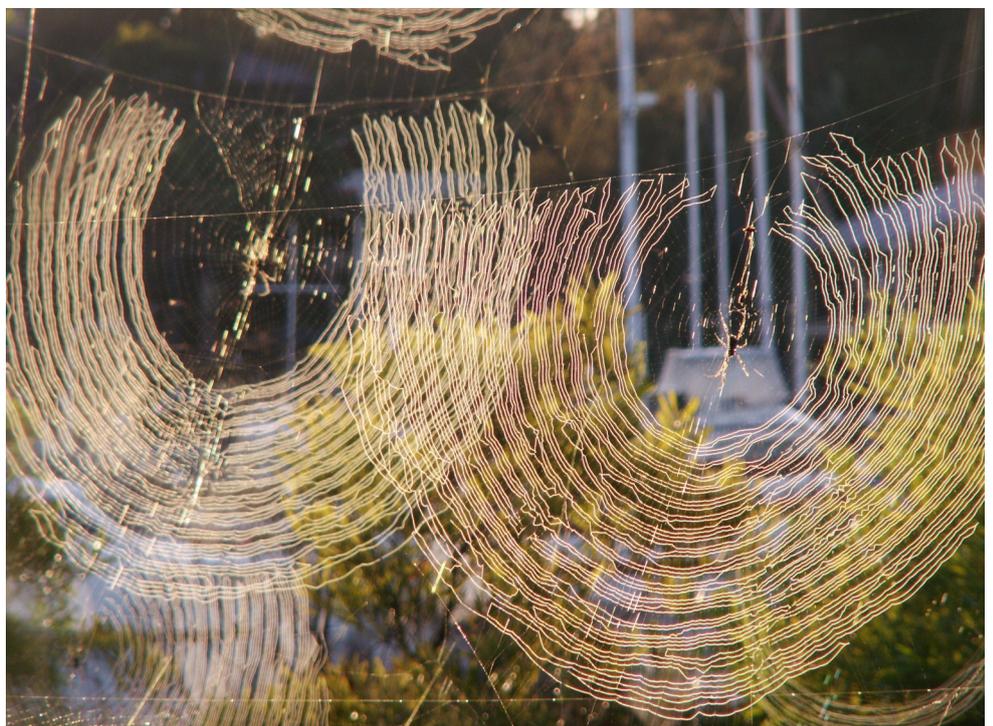
- wafting enticing pheromones toward her by rubbing his forelegs together, from a safe distance, linked to her lines by a strand of silk;
- plucking the right message with cautious forefoot upon the silken strand, then, if all is well:

(Continued on page 4)

Above: Male *Deinopis sub-rufa*. Photo Marita Macrae
Below: Photo Michael Doherty

Q: What is this?

A: Golden Orb Spider Webs



Cane Toads

Pittwater Council is urging residents to be vigilant for cane toads in their gardens. There had been a couple of recent sightings in Pittwater.

If you think you have spotted a cane toad or managed to catch it, please contact Pittwater Council as soon as possible. It's important to log sightings of cane toads and destroy them to prevent their spread.

In the past five years cane toads have been found in Newport, North Narrabeen and Mona Vale. It is believed that the animals were transported into Pittwater unwittingly under cars or trailers. All the toads were destroyed.

Cane toads compete with native animals for food, prey on smaller animals and are toxic to larger reptiles such as goannas and snakes. They can also pose a risk to household pets including dogs.

Council's bushland management officer Lavinia Schofield says that sometimes cane toads can be confused with native frogs.

"They are generally larger than native frogs and have a rough warty skin, with

enlarged glands behind the eardrums," she said.

"They also have a very distinctive call."

"The best way is to trap them under a bucket, then place a weight on top and call the Council," said Ms Schofield.

"But make sure if you are handling them that you use rubber gloves," she added.

For more information on identifying cane toads and how to dispose of them humanely visit www.pittwater.nsw.gov.au/canetoad

Lavinia Schofield, Pittwater Council
Ph: 9970 1365

Below: Striped Marsh Frog
Bottom: Cane Toad



Retarius Spider Cont.

(Continued from page 3)

- tickling her into a trance with his toes, before:
- transferring the sperm from his palps to the epigynum (like a little pocket) on her abdomen, then:
- escaping safely to perhaps find another female.

And some time after that, his life would be over. But the females would live on, to lay their many eggs in the beautifully-made egg-cases, so handing on the long genetic heritage of all the precision, delicacy and skill that is the way of the Retarius.

References:

- Australian Spiders in Colour, Ramon Mascord. Reed Books 1989
- Australian Spiders, John Child. Periwinkle Books 1977
- Notes on the Construction of the Net and Sperm-web of a Cribellate Spider **Dinopis sub-rufus** (Koch) (Araneida: Dinopidae), Densy Clyne. Aust. Zoologist Vol XIV (2), August, 1967
- Wildlife of Australia, Densy Clyne. New Holland Publishers 1999

Websites

www.findaspider.org.au and www.australianmuseum.net.au have photos and more information. Visit http://homepage.mac.com/gregalchin/rm/pdfs/netcaster_1.pdf and click on "Meet the toolmaking genius of the animal world" for excellent and detailed information and illustrations. See also www.nimpitja>collections>deinopis-net-casting-spider for more information and Also video of spider making net on www.youtube.com/watch?v=BUELYcGDCC4 with commentary by David Attenborough

Kristine Martin

Dead African Olives near Avalon Golf Course

Ugliness, like beauty, is in the eye of the beholder. These noxious weeds have been frilled and treated with glyphosate, left standing to possibly provide a barrier against golf balls. Tubestock of local native plants is now growing along the road edge, and will eventually replace the olives. The work is funded by Pittwater Environmental Foundation (PEF), from donations and grant funds from Hawkesbury Nepean CMA. It is managed by Pittwater Council.

Many of us find green weeds uglier than dead ones. However some loud voices in the community have prevailed upon the Council to go to the expense of cutting down some of the dead olives, on aesthetic grounds. There is no general clamour to remove the remaining live olives now spreading seed through landscape.

This area is a major seed source for this easily overlooked weedy shrub.

For identification and control check the Pittwater Council web site. See:

[www.pittwater.nsw.gov.au/
environment/noxious_weeds/shrubs/
african_olive](http://www.pittwater.nsw.gov.au/environment/noxious_weeds/shrubs/african_olive)

You can contribute to the project with a donation to PEF.

www.pittwaterenvironmentalfoundation.org.au, or phone: 9997 3459



African Olive in fruit

Rabbits in Pittwater

Though rabbit control continues using various methods, the task seems to be endless and expensive. PNHA approached the Council for a meeting to discuss more strategic approaches to the problem.

PNHA committee members met with General Manager Mark Ferguson, Mayor Harvey Rose and Council staff recently. We were seeking to discuss a possible Notice of Motion something along the lines:

- That Pittwater Council recognises the need for a strong policy across NSW to deal with the issue of rabbits as pests, and lobby the State Government accordingly
- That Pittwater Council commence an education campaign against the sale and ownership of rabbits as pets, publishing the ongoing costs of dealing with feral rabbits in the area and the associated damage to native plants from rabbits
- That Pittwater Council investigate ways in which
 - i. current pet rabbits may be sterilised, aborted or euthanased at a discounted cost by local vets
 - ii. pet shops can be encouraged or forced not to sell rabbits.
 - iii. other states or local government areas deal with such pests
- That Pittwater Council take this issue to SHOROC for a coordinated approach to eradicate rabbits on the northern beaches
- That Pittwater Council raise the issue of rabbits at the NSW Local Government Association conference in October 2011.

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After a productive discussion it was agreed a notice of motion would go to Council some time in May, recommending the rabbit problem be raised at SHOROC and the NSW Local Government Association.

And action is happening !

Pittwater Council voted at a recent meeting to set up a working group including relevant experts and state government representatives to develop solutions to the feral rabbit problem in Pittwater.

The resolution came as a result of a notice of motion by Cr Jacqui Townsend calling for the Council to lobby the Local Government Association for a statewide approach to the issue.

Cr Townsend singled out kindy farms and pet shops for allowing young rabbits to be kept on school premises or 'baby-sat' in residents homes. "This can contribute to impulse buying by families," Cr Townsend said.

The Council resolved to call for mandatory de-sexing of rabbits before being sold to the public and controls on the numbers sold.

Mayor Harvey Rose said the vote to set up a working group would mean that all the issues concerning rabbits would be examined. "The group will be formed from residents, relevant state government authorities, animal experts and Council representatives," he said.

"This is a community-wide problem that needs a cooperative approach," he said. "Lobbying relevant authorities for changes in the way rabbits are sold is one possible solution, community education is another."

Mayor Rose said the working group would be formed by the middle of this year.

(Pittwater Council media release attached. See last page).



Top: Wild rabbits in Pittwater
Above: Pindone bait poisoning in Pittwater
Images from Pittwater Council website
www.pittwater.nsw.gov.au



Membership Application

I would like to join Pittwater Natural Heritage Association. I agree with the PNHA's aims: raising awareness of and preserving our unique Pittwater natural environment

Name:..... Signed:.....

Address:.....P/Code

Email:..... Ph:..... Date:.....

I would like a **paper copy** OR **emailed** newsletter (circle your choice).

Membership fee: \$20 or \$10 pensioner/student.

Post cheque payable to **Pittwater Natural Heritage Association** to PNHA, PO Box 187, Avalon Beach NSW 2107.

Contact Details: Tel/Fax 02 9918 3368 Email: pnhainfo@gmail.com www.pnha.org.au