

STEP Matters

Number 128, March 2005

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STEP Committee

President Michelle Leishman

Committee

Tim Gastineau-Hills Ron Howlett Bruno Krockenberger Neroli Lock John Martyn Tony Morrison Ann Perry Jenny Schwarz Helen Wortham

Diary Dates

| 22 March | Talk on spiders (see next column) |
|------------|--|
| 9–16 April | Blue Gum High Forest activities (see page 4) |
| 17 April | Blue Gum High Forest walk (see page 4) |
| 24 May | Talk on weeds (see next column) |

Talk on Exotic Plant Invasion in Hawkesbury Sandstone Vegetation

| Date: | Tuesday 24 May |
|----------|----------------------|
| Time: | 7:45 pm |
| Place: | St Andrews Church |
| | Hall (Vernon Street, |
| | South Turramurra) |
| Contact: | Michelle Leishman |
| | (9489 8972) |

Dr Michelle Leishman, STEP's president and Queen Elizabeth II Research Fellow in the Department of Biological Sciences, Macquarie University, will report on recent experimental findings from her research laboratory on the factors that contribute to the success of exotic plants in urban bushland on Sydney's Hawkesbury Sandstone. She will also discuss the implications for bush regeneration.

Talk on how Spiders Deceive their Prey with Colour and Silk

| Date: | Tuesday 22 March |
|----------|----------------------|
| Time: | 7:45 pm |
| Place: | St Andrews Church |
| | Hall (Vernon Street, |
| | South Turramurra) |
| Contact: | Michelle Leishman |
| | (9489 8972) |

Marie Herberstein from Macquarie University will present a talk on how spiders deceive their prey.

The voracious nature of spiders has long fascinated naturalists, whose meticulous descriptions of spider foraging behaviour have enriched the scientific and lay communities. Interpretations of the observed foraging strategies are, however, less straight forward. Initially spiders, especially webbuilding spiders and those that do not build webs but ambush passing prey, were thought to lie in wait passively, with little or no control over the type and amount of prey they would encounter. This assumption was not unreasonable, as the webs of spiders appear as aerial nets that sieve flying insects from the air.

Recently, our understanding of variation in foraging behaviour has shifted away from the passive towards interpreting strategies as active means to increase prey capture success. For example, if an orb-web spider is somewhat food deprived, it will enlarge its web to intercept more prey. Marie and her research group have been interested in how spiders actively ensure prey will come their way.

They have focused on two groups of spiders that initially seem to have very little in common: the St Andrew's Cross spider (*Argiope keyserlingi*) which build vertically orientated orb-webs, and the splendid crab spider (*Thomisus spectabilis*) which ambushes pollinators on flowers. While these two organisms use totally different foraging tactics, field and laboratory experiments show that both lure prey using colour.

In the case of the St Andrew's Cross spider, it is the silk cross the spider decorates its web with that attracts prey to the web. These silk bands reflect light in the UV forming a contrast with its vegetation background. Insect prey have a natural affinity for UV light and approach decorated

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webs at higher rates than undecorated webs. Surprisingly, praying mantis that naturally prey on St Andrew's Cross spiders are also attracted to decorated webs and these spiders face a trade-off between building web decorations and attracting prey, but at the same time attracting predators.

Crab spiders are known for their colourful bodies and to human observers their body colour matches the flower colour. Therefore, it is reasonable to interpret these colour patterns as an attempt by the spider to camouflage against approaching prey and predators. However, our vision system is fundamentally different to insect vision.

Using a spectrophotometer they are able to show that, especially in the UV light region, these spiders form a sharp contrast to their flower substrate. Choice experiments confirmed that rather than being cryptic, honeybees, their prey, were able to perceive the spiders on the flowers. What was a surprise was that the honeybees were actually attracted to flowers occupied by spiders rather than being repelled. This may be because many flowers also use UV contrasting makers on their petals to attract pollinators.

In summary, spiders employ a variety of strategies and tactics that increase their chances of prey capture. While we do not usually think of these creatures as cunning cheaters, this aspect of their biology makes them even more attractive to study.

Funding for Lane Cove National Park

This is not a case of 'where's the money coming from' but a case of 'where's the money gone'.

Following the addition of lands to Lane Cove National Park (LCNP) during the planning of the Epping to Chatswood Rail Link in 2000, NSW State Treasury allocated monies to NPWS as an ongoing commitment, \$600 000 a year plus \$84 000 for capital works. It has become obvious to the local community that the promised money has not been spent on LCNP.

STEP and other community organisations have been trying to find where the money has been spent. Approaches to the NPWS and to the office of the Minister for the Environment resulted in assurances that the bulk of the money was being spent on LCNP. However, not being satisfied by these assurances, STEP obtained NPWS budget documents through the Freedom of Information legislation which showed that the expenditure on LCNP from 'Lane Cove additions' allocation for 2001/02 and 2002/03 was short of the allocation by \$486 000 on recurring items and by \$115 000 on capital works. Presumably this money is being spent elsewhere in the Sydney North Region.

STEP was concerned, as were others, about the ability of NPWS to manage the additional lands due to lack of resources. STEP supported the acquisition of these lands to ensure their long-term protection and the promise of the additional funding allayed our concerns.

It is obvious that the money has not been spent, nor is it being spent, where it was promised and the vision of better protection under a single management authority keeps receding like a mirage.

The local community feels cheated, justifiably so, and would be much more difficult to persuade to support future land transfers to NPWS. Further efforts have been made to ascertain where the money has gone, so far without success.

There is always room for different views about the best way of using scarce resources, as is currently being played out in the controversy about the LCNP Weir Precinct Masterplan, but allocated monies disappearing into unidentified directions remains a matter for concern.

Incidentally, the Weir Precinct Masterplan would allocate the \$1.55 million compensation received from the Transport Infrastructure Development Corporation broadly to improvement of commercial facilities. Local community organisations such as Friends of Lane Cove National Park and others would prefer to see the money used on conservation measures and improving management of the park's natural resources.

Observatory Park

Congratulations to Beecroft Cheltenham Civic Trust (BCCT) for its perseverance and dedication to the restoration of a patch of Blue Gum High Forest.

Observatory Park is an odd triangle of land between Pennant Hills Road and Beecroft Road, which derives its name from the former location of Sydney Observatory's telescope. The triangle appears to be there more by accident than by design, a patch which the road builders seemed to have forgotten.

Members of the BCCT, and in particular John Noble, had the vision that in spite of its long neglect it could be restored to its natural state by eliminating the weed infestation and allowing the natural seed bed to germinate. It now reportedly has over 100 native species, without any plantings.

BCCT and Hornsby Council honoured John Noble at the unveiling of a plaque at the site in December 2004, for his work from the late 1980s to the present to achieve this marvellous outcome.

Loss of a Significant Tree Elizabeth Pynor

The old *Angophora costata*, estimated to be up to 200 years old, stood in our front garden at 76 Kissing Point Road. The tree was probably used as a surveyor's boundary marker at the time of the subdivision of property previously granted to Thomas Macgregor on 5 September 1877. It was safe from timber-getters as the wood was unsuitable for furniture or building. Measured recently, the circumference of the tree at chest height was 4 500 mm.



In 1982 the tree developed bracket fungus where the trunk forked into branches. The treatment involved removing a major branch and digging out the fungus. Fungicide was then applied to the wound and a cable fitted between two major branches to brace the fork.

For the next twenty years, the tree was cared for by qualified arborists who inspected it regularly. They lopped dead branches, and applied suitable fertilizer.

Although the crown thinned out, it appeared to be healthy until 2002 when the arborist lan English found that the roots were infected with a lethal fungal growth. He reported: 'Emerging fruiting bodies (toadstools) of the Golden Honey Fungus – *Armillaria luteobulbalina*, were apparent emerging from many of the tree's structural roots, and have emerged around several other small trees nearby.



The infected Brush Box nearby was removed (including the roots) to give the old Angophora every chance of recovery. The soil around the infected area was treated with lime and potassium sulphate, and the Angophora trunk was injected with phosphoric acid. The tree initially responded well, but in 2004 the toadstools reappeared and the surface roots were grey showing death of the wood, and declining cambium tissue developed round the base of the tree.

The tree was declared hazardous as the roots could fail in a storm causing it to fall onto Kissing Point Road, posing a great risk to the public. We were very saddened after maintaining the tree for so many years, but had no choice but to remove it.

When the tree was felled the timber of the trunk appeared to be in good health, however it was necessary for the stump and surface roots to be ground and the debris taken away for destruction. The operator undertaking the grinding found much of the root system to be dead wood, demonstrating clearly that the tree had a very limited life span in the future.

We lived under the old Angophora for 44 years. We miss its gentle shade and the enjoyment provided by its solid beautifully coloured trunk. The community has lost a lovely link with the early days of Kissing Point Road.

My daughter Helen, who is an artist, is planning a sculpture installation using wood from the tree. In this way the tree will live on in another form.

B2/B3 Road Corridor

Ku-ring-gai Council has adopted the Draft Local Environment Plan No 201 in relation to the abandoned B2/B3 road corridor and has submitted it to the Department of Infrastructure, Planning and Natural Resources for gazettal. In doing so it deleted from the plan:

- 1. Part of precinct 10(a), the area south of Canoon Road
- 2. Part of precinct 10(b), the area adjacent to the horse paddock and south of it leading to the Auluba Reserve
- 3. Parts of 34 Chisholm Street and 6 Paroo Place
- The areas bounded by Eurong Street, The Broadway, Kerella Street and Muttama Street

Council has called for a report to identify options for these areas.

STEP has previously submitted that points 1, 2 and 3 above contain valuable sandstone ridgetop vegetation and evidence of use by many animal species as a connection to the Field of Mars area, which in turn connects to Fox Valley. Reference to our *Map* of Walking Tracks of the Lane Cove Valley illustrates the point clearly.

Item 4 deserves a careful approach since it contains valuable bushland and very steep terrain. STEP has previously suggested that a buffer zone linked to precinct 9 (which the draft LEP No 201 proposes to zone open space (bushland)) should also be zoned open space (bushland) and special stormwater controls be imposed.

STEP's submission to Council in October 2003 can be viewed on our website.

BGHF Activities and NTA's Diamond Jubilee

This year marks the diamond jubilee of the National Trust of Australia (NSW), which was founded by Annie Forsyth Wyatt OBE.

Annie Wyatt (1886–1961), a resident of Gordon, was a conservationist, writer, historian and founder of the Tree Lovers' Civic League as well as the National Trust of Australia (NSW). Annie's son, Ivor (1915– 2004) was a long-time resident of St Ives, and he too had a long and dedicated association with the National Trust, as well as the Nature Conservation Council of NSW, the St Ives Progress Association and the St Ives Village Green Committee.

The Blue Gum High Forest in St lves is closely linked with Annie Wyatt because in the 1930s Annie was instrumental in raising funds to purchase a portion of the forest adjoining the Dalrymple-Hay Nature Reserve. Today this forms part of the largest and best-preserved remnant of Blue Gum High Forest (18 hectares) left in the world. However the future of this tall forest is still not secure. The community remains committed to Annie Wyatt's vision for the conservation of this Blue Gum High Forest for future generations.

You are invited to attend any of the following Blue Gum High Forest events which have been organised in association with the diamond jubilee celebrations.

Planting of a Blue Gum

The Hon Barry O'Keefe AM, QC, President of the National Trust of Australia (NSW) and Cr Adrienne Ryan, Mayor of Ku-ring-gai, will plant a Sydney Blue Gum in honour of Annie Wyatt.

| Date: | Saturday 9 April |
|--------|---------------------|
| Time: | 9 to 9.30 am |
| Place: | Annie Wyatt Garden, |
| | corner of St Johns |
| | Avenue and Henry |
| | Street, Gordon |

Heritage Tour

Join a bus tour that celebrates the places and events in Gordon and St lves that were important to Annie and Ivor Wyatt. The tour includes a walk through the Dalrymple-Hay Nature Reserve.

| Sat 9 and Sun 10 April |
|-------------------------|
| 10 am, 12 noon and 2 pm |
| Eryldene, 17 McIntosh |
| Street, Gordon |
| Free |
| Neroli Lock (9489 5794) |
| |

Forum on Annie and Ivor Forsyth

A range of speakers will talk about Annie's achievements and the challenges she faced as founder of the National Trust of Australia (NSW). Speakers will also talk about the enormous contribution Ivor made to the National Trust (NSW), Nature Conservation Council of NSW and the St Ives Progress Association.

| Date: | Saturday 16 April |
|----------|-----------------------------|
| Time: | 10 am to 12 noon |
| Place: | Annie Wyatt Room, |
| | National Trust Centre, |
| | Observatory Hill |
| Cost: | \$10 (includes light lunch) |
| Contact: | Tony Martire (9488 9233) |

Walk through the Blue Gum High Forest

STEP Inc and the Blue Gum High Forest Group have organised a walk through the magnificent Blue Gum High Forest which Annie Wyatt campaigned to save in the 1930s. This forest is the largest remnant of Blue Gum High Forest left in the world and it is once again threatened by development on an adjoining bushland property. A public campaign has begun to raise funds to purchase this private property and so finish the work that Annie began 70 years ago.

| Date: | Sunday 17 April |
|----------|-------------------------|
| Time: | 2 to 4 pm |
| Place: | Rosedale Road |
| | entrance, Dalrymple- |
| | Hay Nature Reserve, |
| | near Vista Street |
| Contact: | Neroli Lock (9489 5794) |

Professor Ian Lowe New ACF President

This is an edited version of the Australian Conservation Foundation's announcement in *Newsline*

According to Professor Ian Lowe:

Environmental protection is not just a job for governments and industry ... it is a job for each and every one of us.

For the last 25 years lan Lowe has helped people to understand what science is saying about the environment. This rock solid scientific foundation and community credibility makes him an excellent choice as president of the Australian Conservation Foundation.

Ian brings an enormous scientific knowledge and strong links to the international scientific community.

Never before in history has science been so important to the environmental movement, especially with global threats such as climate change. In fact Ian has been talking about climate change for more than 15 years – long before it became fashionable dinner table conversation.

Ian is passionate about climate change and he believes it is the biggest environmental challenge facing the world at the moment.

> All our efforts to solve other environmental problems will be undermined if we don't deal with climate change.

On the home-front lan is excited by the opportunity Australia now has to be a world leader in environmental change matters.

Ian is all about turning talk into action. He believes now more than ever Australians are hungry for a new vision. 'The ecological deficit we are running our country on can't go on for much longer' he says.

We wish Ian every success in bringing this vision to the Australian community and its politicians.

Politics and Old Growth Forests

From Australian Conservation Foundation's *Newsline*

There is nothing going on right now that quite compares with what is happening in Tasmania's old growth forests, including the Tarkine and the Styx Valley.

We are losing 20 000 hectares a year, being clear felled. And this will continue unless the Federal Government improves on its preelection Tasmanian Forest Policy. These areas are clear felled, then burned, then sprayed with pesticides, herbicides and poisoned with 1080, and in some cases then replaced with nonnative plantations.

It is hard to believe that this practice is allowed to go on in this day and age, but it is and it is set to continue in the so-called interests of the industry and the local community.

Ed: To change this is obviously a mammoth task since the politicians don't want to listen. The Australian Conservation Foundation is currently promoting the report *Protecting Forests – Growing Jobs* that was prepared by the Australian Conservation Foundation and the Wilderness Society.

It shows how the needs of the Tasmanian environment as well as those of the forest workers can be met, while protecting 240 000 hectares of pristine old growth forest in areas such as the Tarkine and the Styx Valley. It also recommends Government investment of \$250 million to restructure the Tasmanian forest industry.

The Federal Government has funded the sugar industry to the tune of \$400 million and fishing on the Great Barrier Reef seems to have an unlimited budget, while only \$40 million has been allocated to the forest industry. Australian Conservation Foundation's aim is to build a strong commitment from all political parties:

- to protect high conservation value old growth forests
- to phase out clear felling
- to end clearing of native vegetation for plantations
- to expand the buyback of ecologically significant private old growth forests
- to amend legislation so that electricity generated from native forests is not classified as renewable energy under the Mandatory Renewable Energy Target
- to support phasing out 1080 poison usage on wildlife in native forests
- to restore funding to maintain world heritage areas
- Ed: In the current political climate this will be a tough ask, even harder after 1 July when the Senate changes.

| | Unit cost | Number | Cost (\$) |
|---|-----------|------------|-----------|
| Membership (only complete if 03–04 shown on address label overleaf) | | | |
| Single (per financial year) | \$16 | | |
| Family (per financial year) | \$20 | | |
| Life | \$200 | | |
| Field Guide to the Bushland of the Upper Lane Cove Valley | \$30 | | |
| Maps of Walking Tracks | | | |
| Lane Cove Valley | | | |
| STEP member | \$15 | | |
| Non-member | \$20 | | |
| Middle Harbour Valley. Sheets 1 and 2 Bungaroo and Roseville Bridge | | | |
| STEP member | \$15 | | |
| Non-member | \$20 | | |
| Middle Harbour Valley. Sheets 3 and 4 Northbridge and North Harbour | | | |
| STEP member | \$15 | | |
| Non-member | \$20 | | |
| Donation (donations of \$2 or more tax deductible) | | | |
| E-mail address | | Total cost | |

Order Form and Membership Renewal

Use the form at the bottom of the previous page:

- to order one of our new maps
- to renew your membership (please note that you only do this if the year span 03– 04 is shown on the bottom of the address label below)

Please complete the form, indicate any changes needed to the address label, and mail the completed form and payment (by cheque made payable to STEP Inc) to:

The Treasurer Step Inc PO Box 697 Turramurra, NSW 2074

Contact Helen Wortham if you have any problems (9144 2703, secretary@step.org.au).

Bushfire in a Changing Environment: New Directions in Management

In 2004 the Nature Conservation Council held a conference to focus on the lessons to be learnt from the past several years of large and intense bushfires, to identify new directions in research and emerging issues as well as practical initiatives in management.

The conference looked at the following themes:

- fire in the Australian environment
- urban/rural planning
- community education
- risk management
- Aboriginal fire management
- scientific research

The proceedings have now been published and are essential reading for anyone who wishes to stay in touch with the latest ecologically sustainable bushfire management directions.

Copies (\$40 hard copy, or \$20 CD ROM) can be obtained from:

Nature Conservation Council NSW L5/362 Kent Sreet Sydney, NSW 2000



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