



STEP Inc. Newsletter

Community Based Environmental Conservation Since 1978. No. 77 Feb 1996

COMING EVENTS

CLEAN-UP DAY 3RD MARCH 1996. STEP will be manning a site at the corner of Kissing Point Road and Vernon St, South Turramurra, from 8.30 am onwards - (see the enclosed flyer). Remember gloves, sturdy shoes, hat and sunscreen.

"OLD VOLCANOES AROUND SYDNEY - A talk by Dr Lin Sutherland, Wednesday 27 March, 8 pm, St. Andrews Hall, Cnr. Vernon & Chisholm Sts., Sth. Turramurra. (see the enclosed flyer).

AUTUMN BUSHWALK SUNDAY 28 APRIL 1996, 2 PM. Continuing the volcano theme of Dr Lin Sutherland's March 27 talk, our Autumn Bushwalk will this year be to Brown's Field. It will be guided by John Martyn and Andrew Jennings. John will point out and describe the volcanic rocks that underlie the Brown's Field area, while Andrew will be our guide to the rainforest flora. Be at the entrance to the oval on Campbell Drive near Cooper Crescent by 2 pm. The walk is short and easy, but a little muddy and slippery at creeks

MEMBERSHIP SURVEY RESULTS

In November the Committee sent a survey questionnaire to all members, asking their views on the most important issues in the Kuring-gai environment, and about STEP's aims and functions. Sixty-one households replied, and their replies will provide guidance to the STEP committee for the future. This is a preliminary summary of members' votes. Many useful suggestions or general comments were also received, which the Committee will consider and address during the rest of the year.

Environmental issues

The five environmental issues that scored the most votes, in the sense of being ranked in the list of top five concerns, were:-

Road construction activities or threats in our local bushland: 50 people ranked this issue either 1,2,3,4 or 5. Also, it had by far the highest number (27) of votes which placed it first amongst members' concerns, reflecting opposition to any further destruction of bushland for roads.

Weed invasion of local bushland: 47.

Water pollution of local creeks: 42

The threat to local fauna by feral animals: 37

Promotion of public transport alternatives: 27 votes.

The scores for other issues were:
Development threat in the Mona Vale Corridor: 22

Inappropriate fire management methods: 21

Dual occupancy and other forms of residential development: 14

Unightly communications cabling, mobile phone towers, etc: 12

Other (various issues nominated by respondents): 1 or 2 votes each.

STEP'S activities

Bushwalks: A large majority (46) thought the present number of walks was right (More 11; Fewer 1).

Talks: 39 thought the present number of talks was right. (More 11; fewer 1)

Discussions, symposia or field days on local conservation issues, 28 said Yes, 11 No, and 13 were undecided.

Bush regeneration: On the question whether STEP should be directly involved, 26 said Yes, 21 No, 10 Undecided. This is a contentious matter, which will require careful consideration.

Clean-up Day: 37 knew STEP was involved in Clean-up Day, 20 did not realise it was. Surely a subject for a future Newsletter.

Social: 24 voted for a purely social gathering, 14 against, 19 undecided. A mixed message.

Publications: This was a matter on which suggestions, not votes, were sought. Many suggestions were received, and need to be evaluated.

Publicity: On the question as to the adequacy of STEP's publicity, 16 voted Yes, 25 No, 14 Undecided.

Newsletter: 58 thought the Newsletter both informative and interesting; one Undecided, and one thought it informative but not interesting. We hope to remedy that.

Area of influence: 13 thought STEP should involve itself in a wider geographical area, but 27 voted No, and 13 were undecided.

Lobbying: On the question whether STEP was active enough in lobbying, 32 said Yes, 9 No, 19 Undecided.

Other Committees: On the question whether STEP was adequately represented on other committees, 20 said Yes, 2 No, 33 undecided. The function of these other committees obviously needs to be aired and STEP's participation explained.

Additional Comments or Suggestions: There were many valuable suggestions, and there was some praise for the organisation. Many thanks again for your responses. The Committee has now been set the task of acting on these responses. We will publish more details in future Newsletters.

FLORA NOTES

by John Martyn

Although the Field Guide is well and truly finished, the observation and collation of flora goes on. The fires have kicked things along and previously unrecorded species are gradually emerging, as the following examples show:

Polymeria calycina (Swamp Bindweed)

Near the waterfall crossing on the STEP Track. *Viminaria juncea* (Native Broom) has become very abundant at this site.

Muehlenbeckia gracillima (Slender Lignum)

Between Howson Avenue and the oval. Warning to bushcare people- it closely resembles the weed *Acetosa sagittata* (Potato Vine or Turkey Rhubarb) and may be more widespread than at this one locality.

The publication of the Field Guide has encouraged others to report plants, most notable being the epiphytic orchid *Bulbophyllum*

exiguum and the fern *Arthropteris tenella* in thornleigh, from Alan Sykes, and the Boronia-like *Philotheca salsolifolia* from a gentleman in West Pymble.



OLD VOLCANOES AROUND SYDNEY: WILL THEY ERUPT AGAIN?

Dr. Sutherland's talk on this topic is not intended to be a disaster movie, but he does occasionally speculate about such events, in his scientific pursuits, as is shown by the following excerpt from one of his publications:

".....a small eruption in the Blue Mountains, west of Sydney. After earth tremors along the Kurradjong Fault, a cinder cone erupts, igniting bushfires, showering Sydney with volcanic ash carried by easterly winds, and disabling Richmond Airbase. Lava streams from the cone flow into the Grose River and encroach on Richmond, Windsor and Penrith townships, which are evacuated. After eruption, thick lava dams the drainage forming a large lake extending deep into the Blue Mountains. Debate arises among authorities and residents, whether to restore the original landscape, by massive excavation of the lava, or use the lake as a water supply, or develop it for sport and tourism." His talk will provide some of the background to the above scenario, and will no doubt explain the local examples of past volcanism, at Brown's Field and Hornsby Valley.

ECOLOGY AT THE CUTTING EDGE: NCC Conference, 29-30 Nov 1995. Report by John Martyn

This excellent conference covered such a wide field that it is difficult to summarise in a few paragraphs. It ranged over three applications of computers in ecology, conservation and land management.

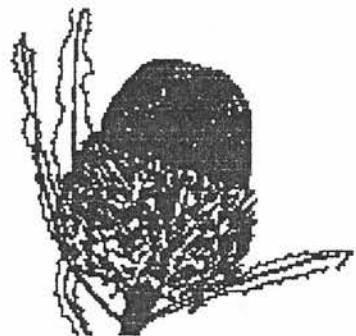
1. Geographic information systems (GIS), which are graphical databases enabling information to be stored and retrieved according to location- multilayered electronic maps, in other words.

2. The Internet as a means of accessing and disseminating information.

3. CD-ROM as a medium for storing and disseminating information, often in spectacular multimedia format with sound and animation.

There were 27 separate talks by local and interstate speakers, including STEP committee member Andrew Skidmore, one of several who gave us the inside story on digital mapping. Each group of talks was followed by lively discussion sessions. The following is a selection of the fascinating gee-whizz facts, and items of relevance to local conservation.

GIS databases are gradually becoming adopted by management authorities throughout Australia. This is assisted by peak mapping bodies such as DLWC of NSW having gone digital. The NCC have a policy of persuading all councils and fire authorities to adopt such systems.



Warringah Shire already uses *Mapinfo* software for fire control planning, with steepness and aspects of slope information being available as a vital tool. L. McCluskey of Bankstown Council explained how a networked computer-based land information system in a council environment can break down barriers and help avoid conflicts between planning and conservation departments by allowing everyone to have access to the same information.

Wildlife corridors. John Wickens and his co-author from the Research Group of the Conservation Council of the SE Region and Canberra demonstrated how "amateurs" can beat government departments in the electronic database game. Using *Mapinfo* they have compiled and made public a file of all the abandoned toxic sheep dip sites in the ACT, information that is officially withheld from the public. By adapting a wealth of diversely sourced GIS information on forests they were also able to demonstrate some major flaws in forest management wherein critical wildlife corridors, such as the one linking Jervis Bay to the inland forests, are destined to be severed by logging.



Remnant bushland David Goldney and his team from Charles Sturt University highlighted some alarming facts on remnant bushland in the tablelands, that has emerged from their study of 2500 square kilometres around Molong, NSW. Through their digital map database they have estimated that around 40% of bushland patches are unsustainable under present farm management practice, leading to an estimated loss

of about 30 million trees over time in just this relatively small area.

Streamwatch: Cheltenham High School, through Streamwatch, has been on the ball in jumping on the M2 consortium over pollution of Devlins Creek. Streamwatch participants are networking their information through their school computers and modems.

Platypus: C. Roden of Wollongong City Council revealed that platypus migrate their way down the Illawarra escarpment streams well into the rural/urban area of West Dapto. A. Stafford, also of Wollongong Council, described how local volunteer teams had mapped, by the use of such technology, the vegetation of 2000 hectares of remnant bushland.

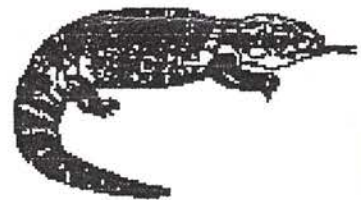
Biodiversity monitoring: Liz Horler of the Queensland Dept of Environment and Heritage spoke with infectious enthusiasm about SE Queensland's system of community biodiversity monitoring and the serendipitous discoveries of birds and mammals that have been made through it.

Fungi: It is estimated that Australia has of the order of 200,000 species of fungi, 95% of which are unknown to science. Since many fungi are essential to the survival and growth of plant species, this is an enormous and critical gap in our knowledge, particularly in bushcare and restoration. Sophisticated database systems will be essential in the accumulation of information in these areas.

The above is a small selection of what is being achieved and the knowledge that is emerging via the use of digital information and communication systems. There are numerous problems, such as compatibility between different software packages, slow access times on the Internet, and cost of data access (in contrast to the

freedom of information in countries such as Sweden and the US).

Electronic data use in conservation and land management will certainly increase and spread, and is to be welcomed, provided sufficient time is spent actually gathering the data, rather than in front of a PC screen. The NCC are to be congratulated on yet another outstanding conference. As a regular attendee of conferences in my own professional field, I can only contrast the enthusiastic and compelling presentations of this one with a lot of the boring stuff I usually have to sit through.



SOME NON-ELECTION NEWS

Federal election policies have been getting plenty of airing, so we have concentrated on some other recent news-

OVERHEAD CABLING:

The Commonwealth Government announced it would compel Telstra and Optus in future to lay cables underground in areas where telephone cables are buried in ducts, and would empower councils to insist on underground cabling. The new policy unfortunately comes too late for areas, such as much of Ku-ring-gai, where overhead cabling has already been installed.

ST IVES TREE LOPPING SITE

The National Parks & Wildlife Service has refused to incorporate the former tree lopping site near St Ives Showground into Garigal National Park, because of the high level of management and maintenance costs to contain pollutants from the landfill, and the low conservation value of the site.

INTERNET Just an extra word on the Ecology at the Cutting Edge Conference reported by John Martyn. The Commonwealth Department of the Environment gave a talk on its Environmental Resources Information Network ("ERIN") site on the world-wide web (<http://www.erin.html>). The ERIN site is impressive (and much-needed) proof that on occasions the Internet can indeed provide free, but very valuable information on topics of real importance. We'll try to mention some other environmental web sites in future issues.

BUSHCARE Because of the complexity of regulations that must now be complied with, bushcare is now organised and controlled by Council. To become involved in bushcare, you should contact one of the Council's Bushcare Coordinators, Robyn Lamond or Rosanna Luca, on 498 0818. They have a number of groups active under their supervision, and can form new ones, if there is local interest.

Some survey responses favoured STEP involvement in bushcare. This is not precluded by the above, but at this stage the Committee has not considered how this may be done, or whether it is feasible.

SENDER
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FUTURE TALKS

COMPUTER MAPPING: an illustrated talk by Dr. Andrew Skidmore, a member of the STEP Committee. Wednesday 15 May, 1996.

ALBATROSSES: an illustrated talk by T. Murray, probably Wednesday 17 July, 1996.

BUSH REGENERATION PHOTO EVENING: intended for September, 1996.

PESTICIDES: to be arranged for later in the year.

There will, of course, be Spring and Summer bushwalks as well.