



Newsletter

Editorial

Volume 1

Summer 2001

Welcome all to the first edition of the Greenlink Newsletter. I have never done one of these before, so please excuse me if it's a little amateurish.

The idea of this newsletter is primarily as a way of keeping in touch with Greenlink members and supporters. I also hope to be able to spread information relevant to bush regeneration and environmental work in general.

Each edition will feature articles on weeds, native plants, fauna and other issues relevant to the area and environmental work in general. I plan to focus on areas that are in the Greenlink, so that the information is relevant to the work that some of you are doing.

There is also scope for the newsletter to spread information about broader community issues.

I'm employed as the Greenlink Project Officer for only 21 hours per week, so I can't spend too much of that time on this work.

I have read a few other newsletters from other groups, so I know that some of

you have a penchant for putting pen to paper. I'm hoping that those of you that read this and have something to say will contribute to future editions. I am quite happy to include articles that have been published elsewhere.

I am also very keen to get more people and organisations involved in Greenlink. I see it as a great opportunity to collaborate and cooperate across a range of individuals and bodies that are all working towards similar ends.

If you know of projects or initiatives that are going on in the local community, this could be the opportunity to give them broader coverage.

For more information or to contribute, call John Harkin 9970 8402, or email greenlink@telstra.easymail.com.au.

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Greenlink is funded by the Natural Heritage Trust and supported by Pittwater and Warringah Councils

The Greenlink Story

Greenlink is a Natural Heritage Trust (NHT) Bushcare funded project which aims to establish a link between areas of remnant vegetation in the Warringah / Pittwater Local Government Areas of Sydney by coordinating the on ground works of established volunteer groups and other organisations. The project has funding allocated for two years ending in October 2001.

The inspiration for Greenlink came from the Sydney Regional Organisations of Councils' *Green Web-Sydney: A Vegetation Management Plan for the Sydney Region*. This plan identifies areas of existing remnant bushland and proposes revegetation sites in the shape of corridors to increase habitat size and allow for movement and genetic exchange of flora and fauna. Greenlink also seeks to develop links and cooperative relationships with industry, schools, Councils and communities in the area. Thus publicity, education, recruitment and liaison are equally important facets of the project.

The project was hatched by the now disbanded Sydney Northern Beaches Catchment Management Committee Inc. It is now run by the Northern Beaches Community Landcare Inc (NBCL Inc). This voluntary group is working hard to continue some of the excellent work begun by its predecessor.

The 1999 – 2000 grant from NHT was \$161,600. Budget allocations allowed for expenditure on a part-time Project Officer's salary and materials related to the various project components. Typical expenditure items include earthworks, erosion control measures, tubestock, herbicide and transport expenses for Australian Trust for Conservation Volunteers.

The allocation for 2001 was for \$140,400. The first instalment of this has just arrived.

This impressive amount was based on the fact that both the Councils and the existing volunteer groups have demonstrated an ongoing commitment to the environment, and have agreed to contribute at least \$3.00 worth of "in-kind" work for every dollar of NHT money.

Bush regeneration work has continued throughout the Greenlink area, and over four thousand tubestock were planted by the various groups in 2000. Success rates of the plantings have generally been high, despite the fact that most of the sites are fairly inhospitable.

The coming year will see an increase in the area of Greenlink and an increase in the number of people and projects involved. We have started discussions with Manly Council and there seem to be some promising ideas coming from that direction. Pittwater Council is also keen to expand the project area in their municipality.

With so many dedicated people supporting the project, the benefits of Greenlink look set to continue long after the funding period has concluded.

New projects for 2002.

February 23rd is the closing date for grant applications for the 2002 round of Natural Heritage Trust funding. Greenlink has already been granted over \$300,000 (in 2000 and 2001) of this Commonwealth money through the Bushcare initiative and we hope to add to that in what will be the third year of the project.

New projects that meet the objectives of Greenlink are being designed, in conjunction with community groups and Warringah, Pittwater and Manly Councils. These projects must be planned for 2002 and have guaranteed support of another source of

funding, as well as on going maintenance programs in place.

As an example, one of the new proposed projects is the rehabilitation of the main waterfall in Allenby Reserve. The work is listed in the Allenby Plan of Management as being of high priority, and with the injection of some more money, Warringah Council may be able to proceed with this important project in 2002.

Warringah has an extensive bush regeneration program in place in this reserve and the Friends of Allenby have been extremely active in the last year, completing over

1,200 hours of bush regeneration work. Such dedication deserves recognition: Greenlink may be able to help with this.

So if you have ideas, or know of a groups that is trying to get a project off the ground but lacks money and a support base, let us know.

There is great potential to get some innovative and environmentally useful projects happening with this funding, but time is running out.

NBCL Inc second meeting.

Thanks to all those who attended the NBCL Inc.'s second meeting on January 17th.

It was great to see people willing to commit themselves and their time to this new group. The sub-committees are now taking shape, and all things being equal, will be an efficient and effective way of guiding the course and managing

the business of the group.

Obviously there is still a lot of work to be done to develop ideas and concepts. As several people have noted, taking the place of the CMC, even in a limited way, really is a big task, especially as we have no financial resources to call upon.

We have strong support from many individuals with a diverse range of skills and interests. With time and determination, this puts NBCL Inc in a good position to make a real difference to the community and to the environment.

Summer slowing down, some are speeding up

Most of the Greenlink groups have had breaks over the summer holiday period. Unfortunately the weeds don't schedule in such rest periods, so hopefully everyone is refreshed, relaxed and ready for another year's toil.

The annual annual weed blitz is now on, as weeds such as Bidens and Fleabane go berko. It's im-

portant to try to catch these weeds and get rid of them before they flower and seed; once this has happened, there is not much point pulling them out.

Annual weeds have an amazing ability to grow extremely fast and set flower and seed within a few weeks or months of germinating. Asteraceae weeds, such as Flea-

bane, produce tens of thousands of seeds per plant, and the seeds have a high survival rate.

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Summer slowing down, some are speeding up (cont'd)

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Although many of the annual weeds are not big bushland invaders, they tend to dominate in clear open areas, stealing resources such as sunlight, nutrients and moisture from the natives. This stunts growth and prevents germination of desirable species.

A good example of this is at the Reefcare site where Burr Medic (amongst other things) went crazy early in spring. The group recog-

nised this as a problem, stopped pulling out the bitou bush and concentrated on getting the annuals before they went to seed.

They didn't get them all of course, but hopefully the seed bank will be smaller next year, and the ever increasing *Themeda* will prevent much of it from germinating.

The real point here is that it is important to know your enemy so

that you can adapt your battle strategy to combat it more effectively.

Increase the size of your brain #1

A great opportunity exists for Greenlink members to get some bush regeneration training in the field.

John Harkin (Project Officer of Greenlink) and Jim Casimir (Bushland Officer Warringah Council) who both teach bush regeneration at TAFE have put together a schedule of four sessions due to commence in March. The plan is to spend a bit of time looking at particular aspects of the bush and then have a couple of hours of bush regeneration.

The schedule is as follows:

Sun 4/3/01 Jamieson Park
Occupational Health and Safety

Sun 1/4/01 Anzac Reserve-
Fauna / habitat issues

Sat 12/5/01 Dee Why Lagoon-
Management issues eg stormwater

Sat 9/6/01 To be decided

The sessions will be 3 hours long, starting at 9.00 am. Tools will be supplied, but participants will need to bring gloves and morning tea.

All Warringah Friends of the Bush are welcome, as are people from other municipalities. ***Bookings are essential (9970 8402 John or 9942 2439 Jim).***

Increase the size of your brain #2

The Nature Conservation Council (NCC) is planning a conference focussed on urban bushland issues on June 20th.

They are seeking expressions of interest from people who think they would like to attend. Call the NCC on 9279 2466 and let them know if you are interested.

Fighting fire with fire

Most people hear of biological controls when they go horribly wrong. Cane toads are probably the most notorious example.

Released in and around the sugar growing regions of north Queensland in 1936 to control the devastating sugar cane beetle, the 102 original imports from Hawaii have now become the most common vertebrate across much of Queensland. Such is their impact on the environment that there have been calls to build a frog proof fence to stop them getting into Kakadu (the next stop on their tour of Australia).

The war on weeds has also employed a range of biological controls, some successful, others not so. Two that are working, and have proved useful in the Greenlink project, are the controls for bitou bush.

The bitou seed fly and tip moth have been released in the last five years as part of an ongoing attempt to control this “Weed of National Significance” that is choking 70,000 hectares of south east Australia. The seed fly destroys the seed as it is being formed, so while it doesn’t kill the plant, it does slow its spread. The moth, on the other hand, devours the growing tips of the plant, which retards flowering. Studies indicate that the seed fly (in its larval stage)

may destroy up to 60% of the approximately 48,000 seeds per annum that a mature bitou plant produces. The evidence of this was quite clear down at Long Reef at the end of last year, as there were fewer flowers than one usually expects, and many of the flowers failed to produce seeds. You could see the silk and droppings of grubs and closer inspection revealed the busy little critters munching away – just like their fruit fly relatives do to your tomatoes.

The great thing about such controls is that they give people involved in the control of these weeds a little breathing space. Without them, in the case of a weed like bitou, for every hectare attacked with loppers and Roundup, there is probably another one or two (or maybe more) that have just been invaded. So they can make the difference between a seemingly hopeless case, and one in which there is a chance that with a clearly thought out plan of attack, weed control is possible.

References:
Feral Future Tim Low 2000.
www.csiro.au

Pesticide Use

Roundup is the most common pesticide used in the bush regeneration game. Years ago, the company responsible for its manufacture made all sorts of claims about how safe it was, both for operators and the environment, which were subsequently found to be slightly short of the whole truth.

The threat of legal problems and consumer revolt forced them to come up with Roundup Biactive; the so-called “frog safe” version. Again, all sorts of claims have been made about the safety of this product, especially that it breaks down quickly into harmless elements, unlike scary products like DDT and Deildrin (termite poison) that stay in the environment and potentially enter the food chain.

It should be remembered firstly, that no pesticide is entirely safe for the operator. Precautions must be taken: PVC gloves are an absolute minimum, especially when using the full strength product (as in cut

and paint for woody weeds). Rubber washing up gloves are not adequate, and disposables are a joke, as the product penetrates latex (which sort of makes sense, as latex is just sap after all). Leather gloves soak up the product and then give you a controlled dose each time you put them on. This may not be good for you.

Secondly, don’t allow claims of environmental safety lull you into thinking that it’s okay to slosh the stuff around. All tests to substantiate safety claims are done by the manufacturers in laboratory conditions in the Northern Hemisphere. So when they say it breaks down quickly, they are saying that in loamy alkaline soils with high organic and moisture content, it breaks down quickly.

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Pesticide Use (Continued)

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The soil we poke around in is generally sandy, highly acidic and has low organic and moisture content, that is, the exact opposite.

Tests in Australia show that these conditions do not allow Roundup to break down nearly so quickly. As it persists in the soil it can affect root development of desirable plants and lead to stunted plant growth and short life expectancies. Seedlings planted into soil sprayed with Roundup have been shown in experiments to have lower survival rates and slower growth rates than the controls.

Recent studies have focussed on

the potential effects of the poison on soil organisms (worms, fungi etc) but no conclusions have been reached yet.

It's very interesting to see how common the use of Roundup has become, based on these claims of environmental safety. Next time you are out and about, have a look along the edges of nature strips and grassed median strips, around signs and trees, along fence lines and anywhere else there is grass that needs to be controlled. Chances are that you will see brown strips where the sprayer has been.

Don't let this fool you into thinking that it is safe to use in bushland with the same gay abandon.

Roundup is necessary, and much weed control could not be done without it. But it is a poison and should be treated as such, especially when used at full strength.

Incidentally, there are other brands of the same poison. Roundup is one trade name for the product whose active constituent is Glyphosate. Some of the other brands are cheaper and may have manufacturers who are not at the forefront of the charge to force farmers in developing countries to grow genetically modified crops.

References:

www.greenpeaceusa.org

www.enviroweb.org

Weed feature

Weeds are very interesting plants. All too often we don't give them the respect they deserve, and this seems to be why we continue to get more and more weed problems in Australia as time goes by.

The estimated 2,700 species of weeds in Australia cost us an estimated \$3 billion per year. That figure does not include the hidden costs of declining biodiversity and impaired ecosystem function resulting from weed invasion. It is estimated that weeds now make up some 16% of wild plant species in Australia: the figure is around 50% in New Zealand.

The estimated 2,700 species of weeds in Australia cost us an estimated \$3 billion per year.

Weed of the Season:

Name:

Ludwigia peruviana or water-primrose.

Origin:

South America

Habit:

Perennial deciduous shrub up to 3m. It looks a bit like Lantana.

Habitat:

Wet areas: creeklines (almost all creeks in Warringah), wetlands (Dee Why wetlands, Warriewood wetlands). It can grow in fresh water up to about 1.5m deep.

Flowers:

November – April. Bright yellow primrose type flowers.

Weed feature (continued)

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History in Australia:

This weed is an extremely serious problem in coastal areas of Sydney. It was first grown in the Botanic Gardens in 1907 and was recognised as a potential weed in the Botany wetlands in 1971. It completely chokes infested waterways, crowding out all other vegetation and changing habitat potential, so that the animals living in the affected areas may be forced to look for other shelter or food sources.

In 1994 there was none of it in Warringah, now it is in almost every fresh waterway.

Reproduction

Part of the reason that it is so successful is its reproductive ability. Each seed capsule contains over 3,000 seeds, so there may be up to 500,000 seeds produced per square metre each year.

The seeds can last for around four years in the soil before germination. Broken branches will also resprout, so if a plant is damaged in a flood, broken pieces may be taken downstream where they may strike. Also, it grows very quickly and starts producing seeds within two years of germination.

This reproductive strength gives *Ludwigia* a huge advantage over its native competitors.

Control

Control is difficult. Spraying Roundup is often not possible, as the plants are usually in the water. Any spraying in or near waterways needs to be licensed.

At Burnt Bridge Creek, it was found that slashing the plants down to about 60cm and then spraying the regrowth with Roundup was effective. Simply spraying is not effective, nor is cutting and painting.

The plants can often be pulled out by hand or mattocked, but when they are big, the roots can be extremely long and tend to snap. Unless most of the root is removed, they will resprout. This means that it is important to try to get them when they are young.

Shading seems to be an effective way of controlling this weed. The Thursday Gardeners have been planting native vegetation very densely along South Creek

adjacent to Cromer Golf Course in an attempt to create conditions that prevent germination of new plants. They have found that each year, as the shade plants increasingly establish themselves, there are fewer and fewer *Ludwigia* plants germinating.

This work has taken them approximately nine years. Unfortunately, no work is being done on the east side of the creek, so the infestation on that side is continuing to dominate the vegetation community.

If you want to check out a *Ludwigia* infestation that gives an idea of how serious the problem is, go to the Dee Why wetlands, immediately behind the Time and Tide Hotel. About 50% of the wetlands is totally infested and the adjacent good bush is under pretty serious pressure. OzGREEN and the Friends of Dee Why Wetlands have managed to hold back the tide, but need help to have any long-term effect.

Council and Greenlink are spending money on this area in 2001 in an attempt to keep the good bush safe, but the main infestation is something that needs to be attacked very carefully. Simply killing it or excavating it, as has been suggested, would probably cause more problems than it would solve.

The best way to control *Ludwigia* is to not let it get a grip in the first place. If this is not an option, constant removal of seedlings for approximately four years should exhaust the seeds stored in the soil, but only if there is no new input. This is difficult to ensure, as the seeds are transported by water (downstream), mud (on boots, tyres, excavators) and fur and feathers. We eagerly await development of a biological control.

In short: It's a mongrel.

References:

Weed Notes TAFE NSW 2000

Feral Future Tim Low 2000

Dee Why Lagoon Boosts Channel Nine Ratings

Well maybe not, but they did run a story on the news in the third week of January, which by all accounts was worth seeing.

The reason for the appearance was a recent article in the Manly Daily that sparked off a bit of interest, as it made claims that the National Parks and Wildlife Service were about to somehow take the lagoon away. Of course, this is not quite true, and any interest that NPWS may have is probably justified, as the area is a listed-Wildlife Refuge.

Wildlife Refuge status is a voluntary agreement between a Council or other landholder and NPWS.

It doesn't force anyone to do anything and can be revoked by either party.

The interesting thing that sparked all of this off was the Preliminary listing (under the *Threatened Species Conservation Act 1995*) of a couple of vegetation communities which exist in the refuge. The communities are "Sydney Coastal Estuary Swamp Forest Complex" and "Sydney Freshwater Wetlands". Together, these communities make up a large part of the vegetation in the refuge.

The practical outcome of the listing, if it happens, is that the Refuge will be more closely pro-

tected from development than it currently is. It would also mean that licenses might need to be applied for to carry out certain activities such as bush regeneration and seed collection in the refuge. However, the day to day management of the area would probably remain unchanged.

It may also mean that the Friends of Dee Why Lagoon's restoration project will face another complication in what has already been a fairly difficult birth.

Such is life.

Forthcoming Events

February 3rd

Reefcare site maintenance day. Long Reef Point 8.45 – 12.00

OzGREEN site maintenance day. Opp Mobile Service Station Fisher Rd North 9.00am – 12.00.

4th

Friends of Warriewood Wetlands bush regeneration 9.00-12.00 meet end of Katoa Cl

18th

Friends of Dee Why Lagoon bush regeneration 9.00-12.00 meet Richmond Av

March 3rd

Reefcare site maintenance day. Long Reef Point 8.45 – 12.00

OzGREEN site maintenance day. Opp Mobile Service Station South Creek rd 9.00am – 12.00.

4th

Training program. Jamieson Park 9.00-12.00. Meet end of James Wheeler Dr

4th

Friends of Warriewood Wetlands bush regeneration 9.00-12.00 meet end of Katoa Cl

11th

National Parks Association "Wandering Wildlife" Seminar. Coastal Environment Centre 10.00am call 9970 6905 for details.

18th

Friends of Dee Why Lagoon bush regeneration 9.00-12.00 meet Richmond Av

April 1st

Training program. Anzac Reserve 9.00am – 12.00. Meet end of Kent St

Friends of Warriewood Wetlands bush regeneration 9.00-12.00 meet end of Katoa Cl

7th

Reefcare site maintenance day. Long Reef Point 8.45 -12.00

OzGREEN site maintenance day. Opp Mobile Service Station South Creek rd 9.00am – 12.00.

15th

Friends of Dee Why Lagoon bush regeneration 9.00-12.00 meet Richmond Av

Contact John Harkin, Project Officer of Greenlink for further information, comments or contributions.

Any contributions, ideas or suggestions would be gratefully received.

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