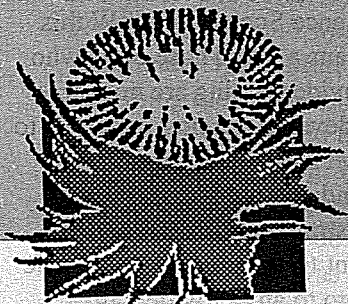


A Good Weed



*the NEWSLETTER of
The Weed Society of New South Wales Inc.*

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18

October 1999

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The 17th Australian Weeds Conference was held in Hobart during 12-17th September 1999. Here, Dr Ros Shepherd is seen handing over the Presidency of CAWSS to Dr Bruce Wilson at a special function during the Conference. A representation of the conference will be included in the next issue of the Newsletter.

WEED SOCIETY EXECUTIVE

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GUEST EDITORIAL

Implementation of the NSW weeds strategy

Richard Carter

Earlier editions of the *Good Weed* noted the process of development of the NSW Weeds Strategy, and later, the launch of the Strategy in 1997. We also saw the launch of the National Weeds Strategy in June 1992. You may wonder what ever happens with these documents. The answer is **plenty**.

As a result of the national Weeds Strategy, our federal quarantine providers, AQIS have for the first time had a dedicated team working on import of plants. They have applied Weed Risk Assessment to proposed imports and are developing a comprehensive permitted entry list and a complementary prohibited entry list. For the first time in Australia's history new plants are checked for weediness before introduction. This has shocked some of our colleagues. In the past, potential pasture plants were imported often without even determination of the taxa. Now potential plants must be subjected to a risk assessment.

The launch of the strategies has brought extra resources to manage weeds either directly by way of grants to councils or indirectly. One indirect way is the development of weed management competencies. These competency standards

were accepted by stakeholders in all states and territories and will lead to a specific national training program within a natural resource or land management training package. For members of the Weeds Science Society of NSW this means a lot. Those of us who provide training are now able to develop training materials to meet a common set of standards, acceptable across Australia. Those of us who want training will now be able to go to any providers in Australia to get the training and have some certainty of the value of it. If for instance NSW TAFE does not provide the training, we can do the external studies course offered by the SA TAFE to reach the same levels.

Other areas where the NSW Strategy has had an impact is in identification of new weed incursions. The Royal Botanic Gardens, Sydney has now adapted their database of herbarium records so that NSW Agriculture can search it from a desktop in Tamworth or Orange. A system called "WeedAlert" generates an automatic email message and sends it to NSW Agriculture to notify of plants new to the database. This allows a rapid check to be made. Along with other developments such as requiring local government control authorities to inspect nurseries and aquaria, the strategy has resulted in 46 investigations by NSW Agriculture into possible new weeds. Of these, during the twelve months to June 1999, the system highlighted 26 new weeds.

In NSW, councils have taken the strategies and developed regional and local weed management plans. The best way to see how this works is to look at an example. In 1997 a group of weed officers on the North Coast started working on an alligator weed strategy. The first thing they did was go to the Hunter region and talk to those already dealing with the weed. They then identified what they needed to do to find alligator weed if it was in the north coast. They recognised the likely will need for an EPA licence to treat an infestation if it was found. As part of their strategy, they applied for a more general licence. Less than twelve months later, an infestation was detected in the Byron Creek. The weed officer identified it easily because he had seen it before. They already had an EPA licence so the Far North Coast County Council could treat it immediately. This is the value of strategic thinking - it was anticipated that if alligator weed was found they would need an EPA licence, so they applied for a licence.

Some of the effects of the NSW Weeds Strategy are the changes in grants to councils. The emphasis has now moved to providing councils with assistance to employ competent weed officers whose function is broader than the old weed inspector whose job was to enforce the Noxious Weeds Act. The weed officer of today has a strategic planning role. They need to take a broader perspective including integrating weed control into other natural resource programs. They now

systematically survey the land rather than just responding to requests from councillors. These changes reflect the growing professionalism of these officers.

Councils have responded. They have appointed regional coordinators such as Richard Graham based in the Riverina, and Cheryl Bate in Sydney North to help develop regional strategies. They are now beginning to offer a reasonable salary package to weed officers and they are moving the weed officers out of the depot and into the main-street offices.

The challenge for the NSW Weed Society is to be part of the process.

Richard Carter
Program Leader Weeds
NSW Agriculture
Locked Bag 21
ORANGE NSW 2800

GET INTO THE SWING OF WEEDBUSTER WEEK

**Weedbuster Week
10-17 October**

Bob Trounce

With 150 Weedbuster Events already registered in Queensland the competition will be heating up for the National Weedbuster Week Best Event rivalry. NSW has over 90 events registered and many worthwhile events planned.

This year is the second year where a \$1000 first and \$500 second prize is being offered for the best event.

In 1998, competition from Landcare groups, TAFE's, and Scouting groups around the country was fierce, with first prize going to a fantastic entry from a school group in Tasmania.

"There has been a lot of creativity and enthusiasm shown by many groups in their planning for their 1999 activities. I encourage all local coordinators planning functions to enter the Best Event competition"

Bob Trounce, Weedbuster
Coordinator (NSW)

NEW MEMBERS

Luke Dowler
Wendy-Ann Isaac
Chris Jones
Ian Lunt
Tom Nordblom
Kevin Palisi
Margaret Shepherd
Polly Thomson

TRAVEL REPORT

Third International Forest Vegetation Management Conference Sault, Ste Marie, Canada

Paul Adams

In late August 1998, I attended the Third International Forest Vegetation Management Conference in Sault Ste Marie Canada, to present a paper on my research, to find out about relevant research and to look for trends in forest vegetation management with implications for Australian forestry. The trip was generously supported by the Tasmanian Weed Society and CAWSS through a contribution towards travel expenses. My research on weed competition during tree plantation establishment aims to understand the mechanisms of competition for below-ground resources (soil, water and soil nitrogen), between young *Eucalyptus globulus* and herbaceous weeds. It is envisaged that knowledge gained from the study will lead to development of improved weed management strategies and methods.

The conference had three main themes:

1. Alternative methods of vegetation control.
2. Ecological effects of forest vegetation management; and
3. Ecosystem management and its implication for forest vegetation management.

The main sessions of interest to me were part of Theme 3. Tree and Vegetation Responses, Relative Competitiveness of

Forest Plants; and Mechanisms of Competition among Forest Plants.

My paper entitled: "The Mechanisms of Grass Competition in a Young *Eucalyptus globulus* Plantation", was well received, and complemented other research on below-ground competition. Interesting field and analysis techniques used for studying plant/plant interactions were observed along with information on future research directions.

Vegetation Management is seen as part of Ecosystem Management, where there is production and preservation of bio-diversity. However, we shouldn't be trying to manage every site for every resource, and there is a need in many places for separate areas for production, and separate areas for preservation. The ecosystem effects of vegetation management are being well researched, but there was a feeling that this is favouring very detailed 'narrow' views while the bigger picture' or 'sum' of effects are being neglected to the detriment of vegetation management.

The idea of ecological thresholds was introduced. These are points in time when vegetation changes occur, and these are usually a long time before crop damage thresholds and economic thresholds. The events leading up to an ecological threshold represent decision making time for vegetation management. These are the times when we can intervene in a system to minimise problems. The

development of non-herbicide alternatives has been slow; including research into biological control methods. No one method is the complete solution for a particular situation. It is considered that 'alternatives' can not substitute for herbicides but rather, are additional 'options' that could be considered an integrated management approach. Doing nothing is still management, and it still has a 'cost'. Successful communication of the costs and benefits of vegetation management is vital. It was felt that more use should be made of 'Risk Analysis' techniques.

Overall, I was thoroughly impressed with the conference and got a lot out of it. It was valuable, interesting and timely for my research work. I was able to renew old acquaintances and make new contacts, and it enabled me to present my work to an international audience. There was a lot of research with direct application to mine, and I was exposed to the 'big picture' issues that are important in the northern hemisphere but which also have implications for Australia.

The conference proceedings are available in: Third International Conference on Forest Vegetation Management; Popular Summaries. Ontario Forest Res. Informn. Paper No. 141.

Paul Adams
Cooperative Research Centre
for Sustainable Production
Forestry, Hobart

TRAVEL REPORT

Visits to New Orleans and Grand Rapids, USA and attendance at the Tenth International Symposium on Biological Control of Weeds, Bozeman, Montana, USA

Eric Cother

The Tenth International Symposium on Biological Control of Weeds was held at the Montana State University in Bozeman, Montana, USA from July 4-9, 1999. This conference is held every 3-4 years to bring together researchers with a common interest in weed biocontrol. Of the 280+ people registered, by far the largest contingent from outside the US was from Australia, reflecting the strength and importance of this discipline in our weed management efforts.

There were no concurrent sessions over the 4 days of the conference. Direct presentations were limited to only 64 papers, with the majority of information being displayed in an extensive array of posters. Because of a Symposium policy of having no concurrent sessions and a tight schedule of speakers, this necessitated having evening meetings for group discussions. However, as they were held from 9pm to 11pm, these groups were not as well attended as they would have been had they been held at a more realistic time.

As weed biocontrol is historically an entomological

discipline, the papers were heavily accented to this science. The keynote address "Advancing biological weed control into the next millennium" was given to the Symposium by Ernest Delfosse and concerned the question "do we measure success properly?". He listed 6 elements of success (political, scientific, economic, social, legal and environmental) each of which must be addressed if a biocontrol project is to be truly successful in the long term.

Three distinguished scientists, Lloyd Andres, Peter Harris and Dieter Schroeder, were presented with awards honouring the contribution each had made to the field of biological weed control.

The science of plant pathology is built upon the classic disease triangle; ie. the interaction between host, pathogen and environment. All plant disease studies are based on this generic principle. In contrast, entomology as applied to weed biocontrol appears to be largely focused on the insect agent. A significant symposium at the conference focused on why so many weed biocontrol projects with insects had failed. Regardless of the weed and locality, only a fraction of the individual insect introductions establish and reproduce and an even smaller number succeed in their original intention ie. control of the weed.

Analysis by various speakers identified lack of good science (although it was not expressed as bluntly as this) as an important contributing factor. Much biocontrol using exotic

insects has been confined to funding collection of insects in the region of geographic origin of the target weed, conducting host range studies and eventually release of the agent in the New World area of concern. Follow up studies were rare and reasons for failure to establish, reproduce or effect weed vigour were unstudied. Even the documentation of release sites was sparse in many projects. Discussion on these issues lead to the adoption by the majority of Symposium participants of a Proposed Code of Best Practices for Classical Biological Control of Weeds (see box).

Proposed Code of Best Practices for Classical Biological Control of Weeds

1. Target weed's potential impact justifies release of non-endemic agents
2. Obtain multi-agency approval for target
3. Select agents with potential to control target
4. Release safe and approved agents
5. Ensure only the intended agent is released
6. Use appropriate protocols for release and documentation
7. Monitor impact on target
8. Stop releases of ineffective agents, or when control is achieved
9. Monitor impacts on potential non-hosts
10. Monitor interaction among agents
11. Encourage assessments of changes in plant and animal communities
12. Communicate results to public

There is a small vocal group of people in the United States opposed to the release of exotic agents for the control of weeds. Criticism is gaining ground as some introduced agents move across to, or increase their impact on, native endangered/threatened species that are related to the exotic target weed. These critics appear to be oblivious to the enormous damage being done, especially to non-arable, rangeland and conservation areas, by many of the introduced species. The loss of a threatened species may be an undesirable but small price to pay for the protection of these huge areas. It is an area of conflict that is likely to consume more time of the science administrators and scientists themselves in the US in years to come.

The Code of Best Practices can only add fuel to critics of classical weed biocontrol as it may be seen as an admission that many past introductions of exotic insects were based on poorly executed scientific procedures. Quite a large number of insects are available commercially for purchase and release by landowners with specific weed problems. This availability drew criticism from at least one scientist at the Symposium and there was contention as to what constituted a worthwhile agent for release.

Oral presentations were mostly confined to insect-based projects. However, there were 50 posters documenting plant pathogen/weed projects among the 169 posters presented. There is increasing interest in

augmentative and inundative biocontrol with pathogens because these can be more targeted than in the classical approach. Many disease projects are in an advanced stage of research. The most successful of these (in terms of commercialisation or widespread adoption of agents produced by the civil service) were pathogens to control unwanted perennial species in forestry in South Africa and Canada. Stumpout® is registered in South Africa for control of *Acacia mearnsii* and *A. pycnantha*.

There were only two papers exploring insect/pathogen interaction and possible synergy. These papers generated considerable discussion among the pathologists present and there is a realisation by some entomologists of the potential exploitation of such interactions. The famous control of prickly pear in Australia was achieved as much by the *Fusarium* spp. transported by the caterpillar as it was by the feeding of the larvae alone.

I presented poster papers describing the work of two NSW Agriculture projects in weed biocontrol. "Control of Alismataceae weeds in rice using the mycoherbistat fungus *Rhynchosporium alismatis*" described inoculum production experiments and the safety of this fungus to a wide range of agricultural and aquatic species that grow in southern Australia. The poster "Observations on the susceptibility of *Chrysanthemoides monilifera* to infection by *Sclerotinia*

sclerotiorum and implications for control of this weed" outlined the various inoculum options available for this pathogen and why colonised grain may be the most suitable inoculum for increasing disease incidence in bitou bush communities.

Prior to the Symposium, I visited the USDA Southern Regional Research Centre in New Orleans for discussions with Drs Don Daigle and Bill Connick. These chemists have developed techniques for stabilising and distributing fungal inoculum for biocontrol of a variety of weeds and insects. Their "Pesta" technology incorporates a fungal biocontrol agent in a wheat or rice flour-kaolin matrix and, using a pasta-like extrusion process, this is formulated as uniform-sized (1-2mm) pellets. The process has been used successfully with both liquid and solid-state fermentation products. These pellets can be formulated to have a variety of properties. I am interested in preparation of a floating dispersible granule using *Rhynchosporium alismatis* that will break down and distribute inoculum of this fungus over the surface of rice paddy water, from where it can infect emerging leaves of susceptible Alismataceae weeds. Various additives need to be investigated - these include micro glass beads, finely ground cork, sponge, bran, rice hulls and vegetable oils to lower density and give more flotation. The process is also suitable for fungal mycelium, meaning that poorly sporulating fungi now need no longer be ignored as potential

biocontrol agents. Dr Daigle has shown that retention of inoculum viability can be higher with mycelium produced on solid-state fermentation than with conidia grown in liquid culture. 'Pesta' granules of *Sclerotinia sclerotiorum* may provide an effective method of distributing mycelial inoculum throughout the canopy of bitou bush. The advantage over colonised grain is that the nutrient composition and size of individual units can be controlled.

In Grand Rapids, Minnesota, I spent 10 days with Professor Bob Nyvall at the North Central Experiment Station of the University of Minnesota. I visited a number of wild rice farms in northern Minnesota that were experiencing control problems with water plantain (*Alisma plantago-aquatica*). 2,4-D herbicide gives unsatisfactory control and MCPA is no longer registered. I found lesions on leaves that were consistent with those caused by *R. alismatis* and later isolation in the laboratory confirmed that this pathogen was present in wild rice fields. Of considerable interest was the presence of lesions on young leaves which had not fully expanded. In NSW, lesions have only been observed on fully expanded mature leaves. There is a possibility that these isolates, because they can infect young tissue, are more virulent than those we have in our collection.

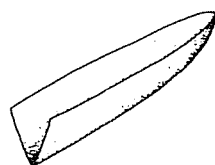
I spent 4 days in Dr Nyvall's laboratory subculturing and cleaning up *R. alismatis* isolates. Arrangements are

under way at the main campus in Minneapolis for DNA to be extracted from these isolates to enable comparison with 50 Australian isolates being examined at Charles Sturt University, Wagga Wagga as part of a Rice CRC-funded PhD project.

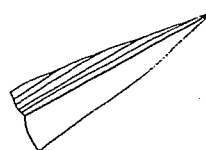
The next Symposium will be held in Canberra in 2003 with Mark Lonsdale, CSIRO, as chairman of the organising committee. It is hoped that the meeting will be held close to the date already set (2-8 February, 2003) for the 8th International Congress of Plant Pathology in Christchurch, NZ, so that the Biocontrol Symposium will benefit from the attendance of Northern Hemisphere pathologists already in our region.

For more information:-
Dr Eric Cothere,
NSW Agriculture & CRC
Weed Management Systems
Orange Agricultural Institute
ORANGE NSW 2800
Ph: 02 63 913886
cothere@agric.nsw.gov.au

LEAF TIPS



A. CANOE-SHAPED (HOODED)



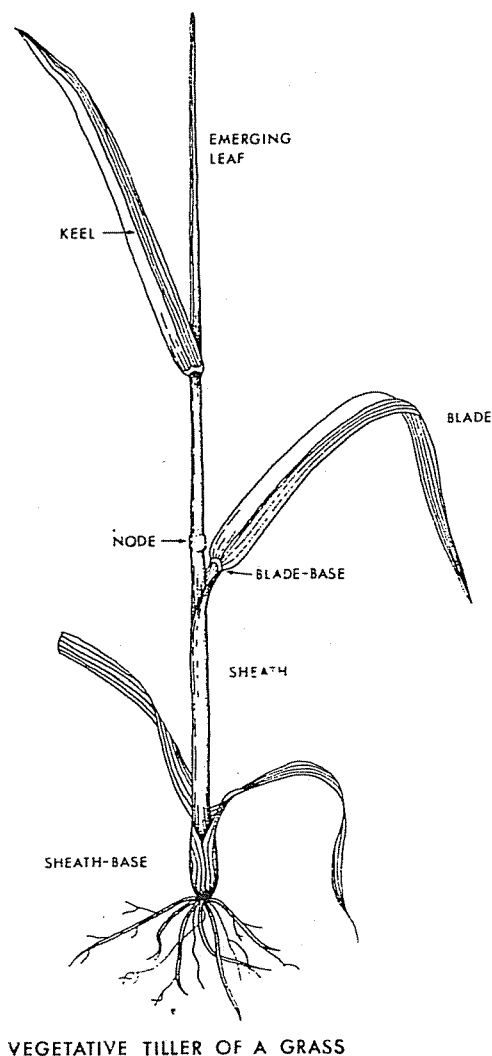
B. POINTED

Request from the secretary

From time to time it has been necessary to contact members quickly to gain a quick response to issues as they arise.

To facilitate this contact, the Secretary would like to update the Society's records with members' email addresses. If you would like to have your email address on the Society's data base, please communicate with the Secretary directly on nswweedsoc@bigpond.com.au

BOTANY LESSON



VEGETATIVE TILLER OF A GRASS

RESEARCH REPORTS

Kidney damage in sheep associated with ingestion of *Lythrum hyssopifolia* L., "Lesser loosestrife"

Adapted by *Barbara Moloney*, Veterinary Pathologist, NSW Agriculture Orange, from original article by JRW Glastonbury, RI Walker, IJ Links, JE Searson, and RH Locke, NSW Agriculture Wagga Wagga, in the 1991 proceedings of the meeting of the Australian Society for Veterinary Pathology.

Lythrum hyssopifolia is a hairless creeping forb which germinates in autumn and winter and grows through to flower in summer. Growth is favoured by wet conditions and in some years, on the southwestern slopes of New South Wales it is the predominant species found in fallows and cereal stubbles. The above authors reported substantial deaths in sheep grazing *L. hyssopifolia* on 5 farms during the summers of 1989/1990 and 1990/1991. (Further cases were also recorded in the Wagga Wagga laboratory records for the summer/autumn of 1993).

The 5 farms were widely separated throughout the southwest slopes of New South Wales. Affected sheep were merinos and crossbreeds and varied in age from weaners, 7 to 8 months of age, to ewes, 2 to 3 years of age. At the onset of the outbreaks, sheep were

grazing canola, wheat or oat stubbles, containing abundant *L. hyssopifolia*, which provided the only green feed and showed evidence of having been eaten. The interval between being placed on the stubbles and the first death varied from 3 to 14 days. Death rates varied between 3.0% (25 of 750 ewes) and 6.5% (40 of 620 ewe weaners).

Affected animals lost weight, became weak and recumbent or died suddenly.

Post mortem examinations were performed on 9 sheep. Kidneys appeared swollen and pale khaki in colour, with variable numbers of pinpoint haemorrhages in the outer part of the kidney and under the capsule. There was a lot of clear jelly-like fluid around the kidneys in 3 of the sheep. The livers of 3 animals were swollen and had a mesh-like pattern on the surface. Other findings included pinpoint haemorrhages on the outer intestinal surfaces and excessive volumes of clear straw-coloured fluids, particularly in the abdominal cavity.

Microscopic changes were most significant in the kidneys. Areas of loss of kidney tissue with early scarring was seen in cases which had access to *L. hyssopifolia* for longer than 5 days. Animals which had been exposed to the plant for greater than 10 days showed some evidence of kidney tissue regeneration. Five animals from 2 farms also showed degenerative changes in the liver.

The pathological examination of these sheep suggest that they died from uraemia (increased circulating blood waste product toxins due to kidney failure) as a result of toxic damage to the kidney tubules (nephrotoxicity). Possible nephrotoxins include some antibiotics, heavy metals, oxalate containing plants, ochratoxin-A (mycotoxin - produced by a fungus), *Amaranthus retroflexus* ("redroot amaranth") and *Anagallis arvensis* ("scarlet pimpernel"). Except for ochratoxicosis, each of these possibilities was eliminated in this study. The present epidemiological information, previous circumstantial evidence and similar reports from north-east Victoria strongly incriminate *L. hyssopifolia*.

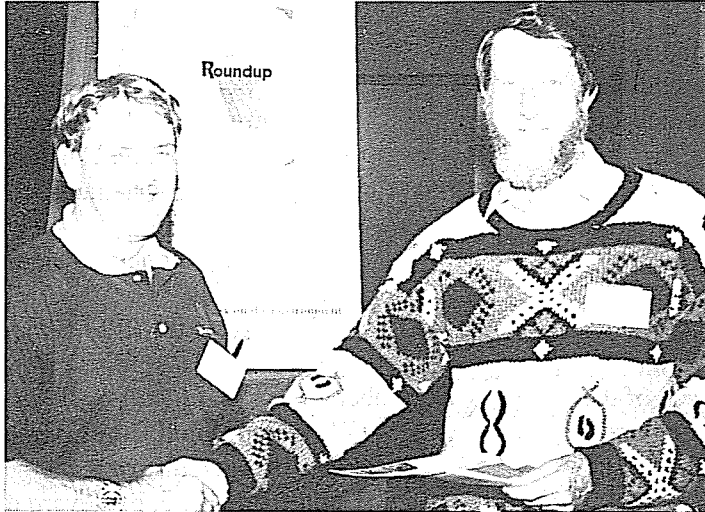
Two possibilities would be that *L. hyssopifolia* contains a nephrotoxin at certain stages of its growth, particularly at maturity, or that it and/or the cereal stubbles become contaminated with ochratoxin-A-producing fungi following summer rain. The liver changes are suggestive of a mycotoxicosis.

Future investigations of similar outbreaks should include attempts to demonstrate mycotoxins in the offending forage and experimental feeding trials with *L. hyssopifolia*.

Barbara Moloney
Veterinary Pathologist
Orange Agricultural Institute

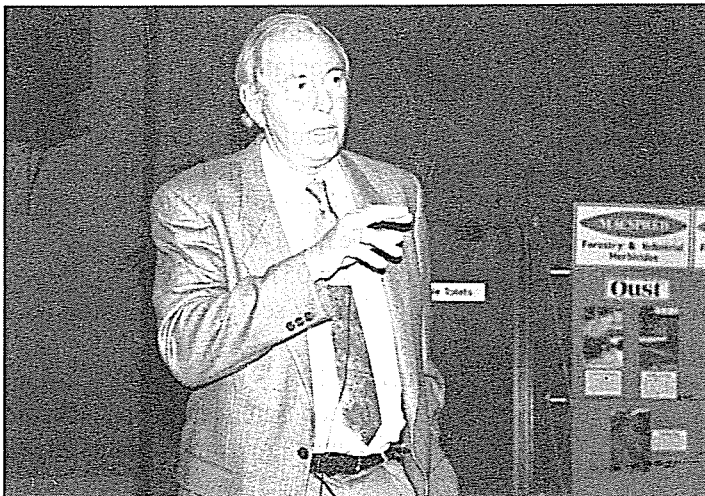
**10th Biennial Noxious Weeds Conference
held 20-22 July 1999 at Ballina RSL Club**

Two events of interest shown below:



Ken Hayes (above left) was the winner of the NSW Weed Society's Weed Identification competition conducted at the Ballina Biennial Noxious Weeds Conference in July.

First prize was a \$100 open order for books, videos and merchandise at the NSW Agriculture bookshop. The prize was donated by the Weed Society and presented at the conference by Bob Trounce, competition organiser.



Mic Julien (CSIRO Queensland) was the keynote speaker on biological control of weeds. Mic's comments embraced the expectations we should have when employing biological control agents for weeds.

**CRC Horehound
Workshop;
Horsham (Vic)
19th, 20th April 1999**

Jim Dellow

The aim of the workshop was to provide overall direction for horehound research and development; in particular to identify gaps in horehound management. The first day of the workshop focused on the impact of horehound in southern Australia, current research and followed up by a field inspection to view integrated control options.

The second day focused on best bet management options and further research and extension requirements.

In all, 25 people attended ranging from those involved in biological control, herbicides, national parks and natural ecosystem.

The proceedings will be published later this year in the Plant Protection Quarterly.

Jim Dellow
Weeds Agronomist
NSW Agriculture
ORANGE

COMING EVENTS

Email: 44-171-228-8034
Website: www.BCPC.org

1999

October 10-16

Weed Buster Week
A week of activities on a national level, aimed at raising awareness in the community about the effects of weeds.

Contact: Bob Trounce
Tel: 02 6391 3156
Fax: 02 6391 3740

October 12

Special day of weed activities in Wagga
Wagga hosted by the Riverina Branch of the Weed Society of NSW (see notice on page 10)

October 13-16

5th International Conference of Invasive Alien Plants

Venue: Sardinia, Italy
Contact: Giuseppe Brundu,
Dipartimento di Botanica ed Ecologia Vegetale, Università di Sassari, Via F. Muroli, 25, 07100 Sassari - Italy
Tel: 39-335-237315
Fax: 39-79-233600
Email: gbrundu@tin.it
gbrundu@box1.tin.it

October 15

Weed display in Wagga Wagga
Market Place with a visit from Woody Weed, the Weed Buster Week mascot.

October 23-24

Weed display by Riverina Branch at
Spring Garden Fair in the Wagga
Wagga Botanical Gardens.

November 15-18

Brighton Crop Protection Conference, 1999, Weeds

Venue: Brighton, United Kingdom
Contact: The Event Organization, 8
Cotswold Mews, Battersea Square,
London SW11 3RA, United Kingdom
Tel: 44-171-228-8034
Fax: 44-171-924-1790

November 22-27

17th Asian Pacific Weed Science Society Conference

Venue: Bangkok, Thailand
Contact: Dr. Sombat Chinawong,
APWSS Secretary, Department of
Agronomy, Faculty of Agriculture,
Kasetsart University, Chatuchak,
Bangkok 10903, Thailand
Fax: 662-579-8580;
Email: agrsbc@nontri.ku.ac.th
Website:
aggi.kps.ku.ac.th/APWSS/index.html

December 7-9

5th International Conference on Pests in Agriculture

Contact ANPP, 6, boulevard de la Bastille, F-75012, Paris
Tel: 33-1-43-44-89-64
Fax: 33-1-43-44-29-19
Email: anpp@anpp.asso.fr

2000

January 18-20

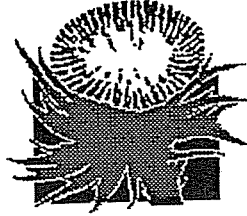
Joint Congresses of the Southern African Weed Science Society, the South African Society for Crop Production and the Southern African New Crop Research Association

Venue: Sand du Plessis Theatre,
Bloemfontein, South Africa
Contact: J.C. Pretorius, PO Box 339,
Bloemfontein 9300, South Africa
Tel: 051-401 2217
Fax: 051-401 2217
Email: seefpret@lanbou.uovs.ac.za

February 5-10

Weed Science Society of America

Venue: Westin Harbour Hotel,
Toronto, Canada
Contact: J. Breithaupt, PO Box 1897,
Lawrence, KS 66044, USA
Tel: 1-913-843-1235
Fax: 1-913-843-1274
Email: jbreith@allenpress.com



**THE WEED SOCIETY
OF NEW SOUTH WALES INC.**

**ANNUAL GENERAL MEETING
& LAUNCH OF
WEEDBUSTER WEEK**

DATE: TUESDAY 12TH OCTOBER 1999

WHERE: CITY COUNCIL CHAMBERS WAGGA WAGGA

TIME: COMMENCES AT 11AM WITH MORNING TEA AT CITY COUNCIL CHAMBERS, TO BE FOLLOWED BY

11.30 am - 12.00 noon	NSW State launch of Weed Buster Week at Wagga Wagga City Council Chambers by Darryl Maguire MP
12.30 pm-1.30 pm	Picnic lunch on banks of Murrumbidgee River
1.30 pm - 3.30 pm	Riparian weed tour of Murrumbidgee River by boat
4.00 pm - 5.00 pm	Annual General Meeting of the Weed Society of NSW at Charles Sturt University Winery
7 pm	Annual Dinner at Manor House Restaurant, Wagga Wagga

RSVP: Richard Graham Ph: 02 6926 9335
Email: grahamr@wagga.nsw.gov.au

The day includes a range of weed activities in Wagga Wagga hosted by the Riverina Branch of the Weed Society of NSW.

A Good Weed

the NEWSLETTER of
The Weed Society of New South Wales
PO Box 438
WAHROONGA NSW 2076

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The Weed Society acknowledges the generous support of Dow AgroSciences Aust Ltd,
Frenchs Forest, and Eagle Environmental Services, Lidcombe, for their sponsorship of

A Good Weed.