



Weedscene

Volume 18 Issue 1

Newsletter of the Weed Society of Victoria Inc.

January 2007

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Travel grants

Are you a WSV member planning to attend a weeds conference? Or are you a student with a focus on weeds science? Or someone just starting out their career in weeds science and thinking of attending a conference or undertaking a study tour? Now is the time to consider an application for one of a number of WSV supported annual travel grants.

WSV Travel Grants

The Weed Society of Victoria provides travel grants annually, depending on the standard of the applications, to enable up to two of its members to attend a weeds conference. The maximum grant per recipient is \$1500.

WSV members are encouraged to apply for support to attend a conference in order to present a paper or to learn about the latest in weed research and management.

Council of Australasian Weed Societies (CAWS) Travel Grants

CAWS travel grants support students and early career scientists to attend national or international conferences, or to undertake specific overseas study tours of a short duration. The grants, awarded annually, depending on the standard of applications, are not restricted to WSV members, although they may be given preference.

The value of the annual student travel award is \$3000 and the value of the annual early career scientist travel award is \$2000.

Further details

You can download the travel grant guidelines and relevant application forms from our website: www.wsvic.org.au or email Ros Shepherd, Secretary at secwssv@surf.net.au.

Applications for the CAWS Travel Awards are to be submitted by 1 April 2007.

Applications for the WSV Travel Grants are to be submitted by 1 May 2007.

Over the Garden Fence and Far Away – Communities' Action On Weeds

A seminar organized by the WSV, Thursday 19 April 2007

Burrinja Community Centre and Gallery, Matson Road, Upwey (Melway 75 B12)

Speakers at the seminar will examine the problems that face community groups attempting to clear an area of weeds, and what can they do to clean up a weedy area so that it does not become a sea of seedlings but an area of restored bush. The questions what is a declared weed and how does that differ from the environmental weeds of bushland, and what are the weeds that require mapping and controlling will be answered.

This seminar looks at how communities can help themselves and also keep their areas weed-free. There will be space available for displays and posters – please notify the secretary Ros Shepherd, email: secwssv@surf.net.au, or WSV, PO Box 987, Frankston, Vic 3199, Ph/Fax 03 9576 2949 in advance if you would like space. Registration – upstairs near the Lecture Room.

PROGRAM

08.30–09.00 Registration

09.00–09.05 Introduction. Daniel Joubert, President.

09.05–09.30 How to live with the plants we have. Daniel Joubert, DPI Frankston.

09.30–09.55 Methods used to locate,

prioritize and map sites and how they should be used. David Blair, Shire of Yarra Ranges.

09.55–10.20 Management of pest plants and community involvement. Trevor McIntosh, Parks Victoria.

10.20–10.50 Morning tea

10.50–11.15 Timing, reduction and tidiness – how to manage weedy situations. Graham Peterson, EcoRepair.

11.15–11.40 Weed risk assessment and changes to declared weeds, what this means to the community. John Weiss, DPI, Frankston.

11.40–12.05 Clean up your backyard, how to do it. Darcy Duggan, Consultant.

12.05–12.30 Waterwatch monitors as eyes on the ground for weed detection. Trish Grant, Shire of Yarra Ranges.

12.30–13.30 Lunch

14.00–16.30 Field Trip to Dr. Ken Leversha Reserve, Montrose. *NOTE: Field trip is optional, please indicate if you plan to attend, closes 30 March.*

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Copy Deadline for Next Issue:
22 February 2007

The 41st Annual General Meeting of the WSV

The 41st Annual General Meeting of the Weed Society of Victoria will be on Thursday 19 April 2007 at 4.30 pm and will follow the seminar 'Over the Garden Fence and Far Away – Communities' Action on Weeds' (above) at the same venue (Burrinja Community Centre and Gallery, Matson Road, Upwey. Melway ref 75 B12). Participate in this meeting and have your say on how the Society operates and about where it is going.

See page 2 for Proxy and WSV Committee Position Nomination Forms.

Ecology and Management of Alien Plant Invasions (EMAPi9)

The Weeds Society of WA (Inc.) is hosting the 9th International Conference on the Ecology and Management of Alien Plant Invasions (EMAPi9). The organizing committee is pleased to invite all those who are interested in invasive plants, to submit an abstract for either an Oral or Poster Presentation at the Conference.

Online submissions can now be made at the Conference website <http://www.congresswest.com.au/emapi9> until Friday 16 February 2007. Before you prepare your paper, see the Conference website to read a copy of the 'Call for Abstracts Fact Sheet'. The Conference topics will cover:

- ecological, biological and biogeographical studies on invasive plants;
- the management of plant invasions;
- the development of multidisciplinary activities focused on prevention of new incursions and management of existing infestations;
- appropriate legislation, public education and information; and
- any other relevant aspects of plants that invade natural areas.

CRITICAL DATES

Registration Opens February 2007
Abstracts Close 16 February 2007
Abstract Results 13 April 2007
Web Hot Special Closes 4 May 2007
Early Bird Closes 2 July 2007

For further Conference details, including information on The 2nd International Workshop on Invasive Plants of Mediterranean Type Ecosystems being held 10–13 September 2007 and the 2nd International Workshop on Weed Risk Assessment being held 14–15 September 2007, visit the website <http://www.congresswest.com.au/emapi9>.

Earth Wind Fire Water and Weeds

3rd Biennial Victorian Weeds Conference, 3–4 October 2007, Bendigo, Victoria
CALL FOR ABSTRACTS EXTENDED TO 28 FEBRUARY 2007

The Executive Committee of the Weeds Society of Victoria is pleased to invite submissions of abstracts for papers from speakers interested in presenting at the 3rd Biennial Victorian Weeds Conference: Earth Wind Fire Water and Weeds.

The four elements: Earth, Wind, Fire and Water were identified many centuries ago in both the West and in the East as being constitutive of the world in which we live.

The conference theme highlights the elements as they relate to weeds and may include such topics as:

- Earth:** • climate change; • geospatial technology; • global issues; • national, state, regional and local planning
- Wind:** • spray technology; • wind dispersal
- Fire:** • fire as a tool; • post-fire recovery
- Water:** • aquatic weed management; • water catchment health; • drought and its effect on weeds.

Speakers presenting include:

- Roger Cousens, University of Melbourne: *How far do weed seeds actually travel?*
- Nigel Ainsworth, Department of Primary Industries, Frankston: *Identifying appropriate aims and management approaches for aquatic weeds.*
- Ken Young, University of Melbourne: *The use of radiation (microwaves, heat, solar, and light) wavelengths to manage weed cover.*

Speakers are invited to present and discuss issues, experiences and learnings across weed management and science, their technical and operational applications, community partnerships and education. Jointly authored presentations are welcomed.

To submit an abstract complete the form below or download it from the website: www.wsvic.org.au. People wishing to present a poster complete the form and provide the title of the poster. **The closing date for submission of abstracts has been extended to: 28 February 2007.** Abstracts are to be emailed to: secwssv@surf.net.au or posted to Secretary, Weeds Society of Victoria, PO Box 987, Frankston Vic 3199. You will be advised of the outcome of your submission early in 2007.

Register your interest now!

Land managers, scientists, community volunteers, weeds officers, advisors and all people with an interest in weeds are invited to attend the conference in Bendigo on 3–4 October 2007 to hear the latest in weed management and science in Victoria, to network and share experiences. Register your interest now by completing the form that appeared in *Weedscene* 17 Issue 6 to be sure of being kept in the loop.

Weed Society of Victoria Inc.



MEMBERSHIP RATES

Students	\$20.00
Ordinary	\$40.00
Corporate	\$100.00

PROXY FORM

I, (a).....appoint
(b).....
as my proxy to represent me at the AGM on 19/4/07 and
vote on any motion as he/she sees fit.

SignedDate..... / /

(a) Name of financial member wishing to vote (votes from
non-financial members will be excluded).

(b) Insert name of member attending meeting to whom proxy
is delegated.

NOMINATION FORM WSV Committee Positions

I nominate
Company/Position
For the position of
Signed
Seconded Date..... / /

NOMINATIONS CAN ONLY BE MADE BY
FINANCIAL MEMBERS

Return to: PO Box 987, Frankston 3199 by 10/4/07

Outstanding Contribution to Weed Management in Victoria in 2005



In 2005, the Weed Society of Victoria awarded Brian Feltmann for an outstanding contribution to weed management in Victoria. Brian was an instigator and the main promoter, champion and worker in establishing and maintain a recognition scheme for properties that have a high level of weed management within the Dookie Land Management area. The properties are inspected three times a year, and are recognized as having a high level of weed management if the inspections show that

they have less than five plants of any one species and no more than 20 plants of combined species of plants identified as weeds in the book "Weeds of the Goulburn Broken".

Brian was awarded his certificate and book prizes by Vice President of the Weed Society of Victoria, Dr. Ken Young at the recent celebration of 20 years of the Dookie Land Management Group.

Ken Young

Plant Collection Award

Matt Bissett was awarded a book prize for the best plant collection by an Advanced Diploma student at Dookie Campus of The University of Melbourne. Matt received a mark of 18/20 for his collection. Matt has continued his studies in agriculture by articulating into the Bachelor of Agriculture and will graduate from this course in 2007. Matt comes from a cropping enterprise farm at Serpentine, Victoria.

Ken Young
Lecturer in Agronomy

Over Semester Two of 2005, Dookie Advanced Diploma students studied the subject Crop Management. The subject focused on the fundamentals of crop growth, management and agronomy, through class discussions and more importantly in field demonstrations. Part of this hands on approach was the assigned task of collecting 50 plants from the field, identifying them and preserving them in a collection. The plant collection gave me the chance to recognize different plants and gain important information that I can then use in my future career. By completing the plant collection I obtained hands on experience in crop agronomy that I hope to take with me in future employment.

I would like to take this opportunity to thank the Weed Society of Victoria in presenting me with a prize for the best plant collection in 2005. The books I have been given will aid me in my present studies but will also assist me after graduation.

Matt Bissett

List of Financial Members

awaiting database from Ros...



Conference Report, 15th Australian Weeds Conference, Adelaide 2006

Michael Moerkerk, Weed Alert Training Officer, DPI Horsham

Recipient 2006 WSV Travel Grant

Congratulations must be said for the organizers of the 15th Australian Weeds Conference in providing an excellently run and organized event that allowed time for assimilating lots of information through formal presentations, mingling and socializing with 'weedos' from around Australia, New Zealand and the rest of the world at a variety of functions and events during the conference.

My thanks must go to the Weed Society of Victoria for assisting me in getting to the conference as it was the best conference I have been to in my 20 or so years in the industry. I would strongly urge members of the society to apply for the travel grants when they are offered as they provide a great opportunity for networking, information assimilation and a bit of fun to boot. Also thanks to the support for this work from Department of Primary Industries, Department of Sustainability and Environment, and the Victorian Pest Management Framework through Tackling Weeds on Private Land initiative.

Travelling over to the weeds conference on Sunday, driving from Horsham, with Mark Farrer DPI Stawell through Frances and Border Town just confirmed what a difficult year this has been and is likely to be for those managing the land. Crops under 30 cm high, beans finished flowering, barley in full head, canola so patchy that there is more bare ground than ground cover and weeds and, it's only late September!!!!

Puddles on the roadside left by the recent squalls, branches down, strong winds, bright sunshine gave us a taste of all the seasons. South Australia roadsides dominated by African love grass, scabiosa, perennial veldt grass, bridal creeper, wild turnip and Buchan weed, all easy to spot on the roadside at 100 km/h in the right light. Some remnant patches of native grass lands and Mallee scrub, relatively un-touched by weeds but most threatened, still there for us to see.

Monday at the 15th Australian Weeds conference saw almost 450 delegates hear Hal Mooney in the CAWS oration 'Invasive alien species – are we up to the challenge?' indicated that we are facing an ever increasing threat from invasive species around the world. Global trade, CO₂ emissions, nitrogen deposition and climate change are all influencing the frequency and intensity of outbreaks of pests

and diseases and a range shift of where they occur. An increasing challenge to weed managers, which will require diversity and flexibility in management options and decisions.

Catching up with colleagues from past years, discussing research and extension practices, confirming that we can and are making a difference in managing weeds by even doing the simplest of things was reassuring. Like taking the precautionary approach of the Bush Care groups in SA that only remove a weed if it will advantage a native species and turning a 7 ha patch of gorse infestation into 2 ha over seven years, allowing the native species to dominate the landscape again without replanting anything. What an achievement and rewarding process for those involved.

My feelings for the first day was well summarized by the last talk I attended presented by Sharyn Williams and Hamish Hurley on community driven weed control through the Victorian Gorse Task Force. An integrated approach, shared investment, strong partnerships, strategic delivery and identified responsibility are all key elements in getting effective weed control in the community. These principals were reiterated by many other speakers throughout the day and the rest of the conference.

The plenary session on Tuesday started with a presentation on farming in the EU. It struck me as a very strongly regulated environment with farmers having to have 40% of land under cover by winter, a minimum of three crop types and a minimum of 15% area under each crop, set-a-side areas for biodiversity, reduction

in active ingredients being registered and no new modes of action herbicides being registered in the last decade paint a very regulated picture and maybe one not attune to the changing global situation. This was in contrast with Canadian experience where farmers are much freer to make choices about land and management options and have strongly embraced conservation farming practices, whilst maintaining flexibility in their systems, allowing for opportunistic weed management, seen as essential for future sustainability. Very much a reflection of the Australian farmers' attitude and maybe a more sustainable approach to the global changing environment.

Detailed scientific papers on the weed seed ecology, seed viability, germination ecology of common heliotrope, wider papers on Environmental weeds along roadsides in NZ reflected the importance of the letterbox effect in introducing environmental weeds, epitomized by *Agapanthus* in NZ and, should I say it?, *Gazania* in Victoria.

I presented my paper on weed spread on vehicles to a packed room of about 130 delegates. The paper created quite a bit of discussion at lunch afterwards about the threat weeds on vehicles pose to creating new infestations. The message is clear, minimize contamination of vehicles and equipment by weeds and clean contamination off when it occurs does make a difference.

The concurrent sessions at conferences makes choosing which presentation you listen to difficult, especially when there are over 230 presentations and posters over three days. Having the complete

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proceedings allows you to read those papers that you could not get to listen to. I am about a third of the way browsing through the proceedings and reading the papers that interest me.

I attended a field tour to the southern regions on the Wednesday looking at environmental weeds in sand dunes and the difficulty community groups are having managing pyp grass at Port Norlunga, Olives in the Onkaparinga river valley and surrounding hills, and Bridal Veil around Victor harbour. (Watch out for this one which is on the Victorian alert list with good reason). The field tour ended up in the information centre at McLaren Vale where we heard a talk about managing Paterson's curse and partook in wine tasting from the Shingleback winery with three bottles for the price of two – needless to say I bought a few.

The conference dinner on the Wednesday night was an excellent event, providing further opportunities to catch up and socialize with colleagues and friends and the opportunity to dance to a fantastic Latin band. My legs and those of many other delegates were sore for a few days after.

Thursday saw the conference theme address climate change with Peter Hayman indicating that each year there is decreasing uncertainty surrounding the evidence of increasing world temperatures, which poses a significant challenge in trying to understand the impacts and complex interactions of climate change on crops, weeds and management options. It looks like that there will be decreasing areas of cool climate and Mediterranean weed infestations in the southern regions of Australia and an increase in the range southward of tropical weed species.

I attended most of the symposium session on animal dispersed weeds and realize that this is a very complex issue on how far birds and animals can spread weeds.

Unfortunately I had to leave the conference at lunch on Thursday to drive home to Horsham for a family commitment. Although the conference was a very rewarding and informative experience, after almost a week away, nothing beats the welcome home from three delightful children and a loving wife.

Over-all the high light of the conference for me was being able to renew and strengthen ties with colleagues around Australia, New Zealand and the rest of the world with common interests in weeds.

Michael Moerkerk

Weed IDentity: Norm Stone

An interview with our treasured treasurer



Norm Stone's WSV membership number has only two digits which gives you an indication of the length of time he has been around. His interest in agricultural plants and weeds started as a child spending time on his cousin's dairy farm, which led Norm to study at Burnley Horticultural College where he was awarded prizes for both his weed and plant collections.

A man of many passions and interests, happily for WSV some of these were combined when Peter Whitehouse, former WSV secretary convinced Norm to join the committee around 1975. At this time the annual general meetings were held in the rooms of the Kooyong Tennis Club. Norm enjoyed a game of tennis and it was a real buzz to be close to where tennis greats did what they do best. It wasn't long before Norm's talent for numbers was put to good use and he commenced what has turned out to be over two decades in the role of treasurer for WSV – so far.

A few years ago the executive committee meetings were moved to the comfortable rooms at Bayer CropScience, where Norm works as a research and development specialist. In this role Norm designs protocols for trials which test the efficacy of newly developed herbicides and fungicides and their safety to crops. Norm also trains and supports staff to use a computer program, used by Bayer CropScience

internationally, to log the trial results. The Australian Pest and Veterinary Medicines Authority (APVMA) approves new herbicides, fungicides and insecticides for sale on the commercial market. The results of the trials form a part of the application to APVMA, which must demonstrate that the new product is at least as effective if not better than existing products on the market, as well as that, other requirements related to toxicology and environmental safety have to be met.

Over the period of his involvement Norm has seen a change in emphasis within WSV with an increasing focus on environmental weeds, and this is reflected in the much larger representation of the public sector on the executive committee than previously. Norm is the only representative from the three large companies involved in research and development on agricultural weeds in Victoria – one of Norm's motivations for continuing his involvement. He encourages others from the private sector to get involved to ensure representation of the diverse views of WSV membership. The advantages of being on the committee and being treasurer are the opportunities for networking. Norm reflected, 'I like being involved and helping out. Being the treasurer means you get to meet a lot of people and keep in touch with members'. *Lisa Minchin*



Bayer CropScience

The effect of dinitroaniline herbicides on the legumes rhizobium symbiosis

by Brad Bennett and Ken Young, University of Melbourne, 03 5833 9200

Key message

- Trifluralin and pendimethalin caused root length and nodule reduction in peas under field conditions.
- Trifluralin decreased the growth of rhizobia under laboratory conditions.

Aim

To investigate the cause of lower nodulations levels in pulse crops where Group D herbicides (trifluralin and pendimethalin) have been used.

Method

Both a field experiment and a laboratory experiment were conducted. The field experiment trifluralin and pendimethalin were applied at the registered rate (Table 1) just after sowing and followed by a light harrowing. After 11 weeks plants were sampled for root length, root and shoot dry weight, and nodule score (a 0 to 5 range, where a low score reflects poor nitrogen fixation and a high score high nitrogen fixation).

The laboratory experiment investigated the effect of these herbicides on the growth of rhizobia under controlled conditions in a yeast mannitol broth. A cultured strain of the rhizobia was obtained from the NSW Department of Agriculture.

The laboratory study rates used were dilutions equating to one, two and four times the registered rate. These were applied as a dilution into 50 mL of rhizobia broth. Spectrometer readings on the broth were conducted giving an indication of growth of the rhizobia within the broth.

Results

The herbicide rate had the most effect reducing root dry weight and length, tops dry weight and nodule number (Table 2). Trifluralin had a greater effect than pendimethalin on nodule number and rate and herbicides had differing effects on nodule score with trifluralin at the highest rate causing severe reduction in nodule score (Table 3).

In the laboratory study the least absorbance occurred under the highest trifluralin rate indicating the least amount of growth of rhizobia. The highest absorbance occurred with pendimethalin at the highest rate, which suggests that this had the greatest amount of rhizobia growing in it. As both trifluralin and pendimethalin decreased root growth and nodulation score the spectrometer results need further clarification to determine the difference between the absorbance spectra for the two herbicides.

Table 1. Chemical rates as applied in the field and laboratory experiments.

Rate	Description	Trifluralin (Treflan)	Pendimethalin (Stomp)
0	Control	0 g ai/ha	0 g ai/ha
1x	Registered rate*	864 g ai/ha (1.8 L/ha)	825 g ai/ha (2.5 L/ha)
2x	Double Registered rate	1728 g ai/ha (3.6 L/ha)	1650 g ai/ha (5 L/ha)
4x	Quadruple Registered rate	3456 g ai/ha (7.2 L/ha)	3300 g ai/ha (10 L/ha)

*Registered rate of application (HerbiGuide 2003).

Table 2. The effect of herbicide rate on dry weight, root length and nodule number of field peas.

	Registered herbicide rate		
	0	1x	2x
Tops Dry Weight (g)	4.8 b	2.3 a	2.4 a
Root dry weight (g)	1.8 d	0.9 c	1.0 c
Root length (mm)	20.1 f	15.5 e	15.2 e
Nodule Number	33.2 h	18.6 g	14 g

Different letters within a row represent significant difference between treatment effect according to Fisher's protected LSD. ($P < 0.05$).

Table 3. The effect of the herbicide type and rate on nodule score of rhizobia on field peas.

	Registered herbicide rate*		
	0	1x	2x
Trifluralin	4.3 c	3.2 b	1.8 a
Pendimethalin	4.2 c	2.9 b	3.0 b

Different letters represent significant differences between treatment effects according to Fisher's protected LSD ($P < 0.05$).

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