

A GOOD WEED



Newsletter of The Weed Society of New South Wales Inc.

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#61 Summer 2012/2013



Soursob, *Oxalis pes-caprae* inflorescence

Soursob is a major crop, pasture, orchard, market garden & garden weed.
Image: Lawrie Greenup.



Rex Stanton
President



Kim Hignell
Vice President



Alan Murphy
Secretary
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Jim Swain
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2013
Executive
&
Committee



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2012 President's Report to the 47th Annual General Meeting of The Weed Society of NSW Inc.

Firstly, I would like to thank the members of the committee for their support and input into helping build and maintain the Society. I would like to report on the Society's performance over the past twelve months in the context of the strategic plan.

Meetings. Six committee meetings were held, with teleconferencing being a very cost effective method for the widely dispersed members of the committee to interact.

Membership. The society membership has remained relatively constant, with a steady flow of new memberships at least balancing the slow attrition rate. It is also very pleasing to note that several new members joined the executive committee and have made excellent contributions.

Activities. Seminars continue to be an annual activity, with Kim Hignell working tirelessly to represent the Society as a co-sponsor of a seminar '*Weeds – Our Focus, our Future*' held by the Hunter Central Coast Weeds Committee in Lovedale, Hunter Valley.

The Society has taken a more central role in the planning of the NSW Weeds Conferences, with the Organising Committee for the 2013 conference in Corowa making excellent progress this year developing themes and a draft program and budget.

Awards. One society member, Xiaocheng Zhu, was successful in gaining a CAWS Student Travel Award to help attend the recent 18th Australasian Weeds Conference in Melbourne. The Society Travel award attracted no nominations, however a more active approach to promoting society awards is planned to help address this issue.

Nominations will soon open for the biennial Buerkner and Stephenson awards, so please start considering recognising your peers for their contributions to weed management. Likewise, the Society Medal is another opportunity to recognise outstanding contributions.

Tertiary Prizes. The society offers student prizes to undergraduates who have made notable achievements in weeds subjects, with Leah Garnett from Charles Sturt University being the recipient this year.

Sponsorship. I would like to welcome Yamaha as a new sponsor for the Society. I would also like to warmly thank Luhrmann Environment Management for the many years of sponsorship they provided prior to discontinuing as a sponsor this year.

The society has taken a more active role in the NSW Biennial Weeds Conferences, which augurs well for both organisations. The Society has also provided Associate Sponsorship for *The Weeds News* operated by Dr David Low, and also sponsored the transfer and cataloguing of Peter Michael's weed collection to the Herbarium of NSW.

CAWS. The society has been represented by two delegates at the four CAWS meetings. The society has been actively participating though the tabling of several agenda papers, and Hillary Cherry has also been part of the strategic plan sub-committee.

Newsletter. The newsletter continues to be key communications vehicle for the Society output for the society. I would like to thank Lawrie Greenup and Hanwen Wu for their efforts in maintaining the high quality of the newsletter. Members will soon have access to historic newsletters back to the first edition in 1966 via the society website.

Website. The draft of the new Society website is progressing well and should hopefully become live later this year. The new site will contain more depth of information, arranged within a new format that will make navigation around the site easier and more intuitive.

The society has continued to meet the goals in the current strategic plan, although the committee should not become complacent as there are several areas in which progress can be made, particularly in regards to highlighting benefits such as awards. The time and energy contributed by individuals is what makes a Society. It is hard to put a value on these contributions, and I can not thank everyone enough for their contributions over the past twelve months. .



Thank you everyone for making the Society what it is today.

**Rex Stanton
President
15 November 2012**



Annual General Meeting - 15 November 2012

The 47th Annual General Meeting of The Weed Society of New South Wales Inc. was held on Thursday, 15 November 2012, at Pennant Hills Golf Club, Copeland Road, Beecroft, commencing at 4.30pm.

The following reports were tabled: Annual Report (Rex Stanton), Financial Report (Jim Swain) and Annual CAWS Report (Society delegates - Rex Stanton and Hillary Cherry).

The election of officers resulted in the re-election of Rex Stanton as President for 2013. All other positions were filled.

The meeting voted and passed a Special Resolution - *“The Weed Society of New South Wales Inc. recommends that CAWS revert to 3 year intervals for Australian Weeds Conferences”*.

The CAWS delegates will present the Society’s views to the next meeting of CAWS.

AGM Financial Report

Membership. The society has as at the 30 September 2012, 178 members compared with 180 as at the 30 September 2011.

Membership is made up of 4 life members with 32 who have not yet paid their 2012 members subscriptions. They will receive a reminder shortly and if payment is not received by the 31st December 2012 then, they will, whilst remaining as members cease to receive newsletters etc.

Those unfinancial for 2012 will be requested to pay the amount outstanding when 2013 tax invoices are sent in the New Year. Failure to pay the arrears by the 30 June 2013 will result in unfinancial members being removed from the membership list.

Sponsors. There are 7 sponsors of the newsletter – *“A Good Weed”* viz Dow AgroSciences, Scotts, Bayer CropScience, Syngenta, ChemCert Australia, Crop Optics Australia and Yamaha. Luhrmann a long term sponsor have withdrawn their sponsorship and the society thanks them for their support over the years.

Crop Optics Australia has advised that they will not be continuing as sponsors in 2013.

Financial Report. The financial report for the financial year 1 October 2011 to 30th September 2012 is presented for approval.

A full copy of the financial report can be seen on the website: www.nswweedsoc.org.au

The society made a profit of \$7,900.55 compared with a loss the previous year of \$12,322.62.

The profit this financial year can be attributed to the return to the society of \$18,185.36 from the profits

of the 16th NSW Weeds Conference which was held in Coffs Harbour in July 2011.

Whilst our income for the year is up by \$14,152.89 our membership subscriptions are lower than the previous year. The income increase is brought about by the return from the NSW Biennial Conference Future Fund of \$18,185.36.

We have continued to use the Bendigo Bank at Turramurra for the society’s banking and have a cheque account together with the credit card facility. In addition we have 4 term deposits with a total credit of \$79,277.03 with the Bendigo Bank.

The balance sheet shows that the society is in a sound financial position as total net assets are \$79,721.07 compared with \$71,820.52 the previous year.

We should note that this financial year we have had no income from seminars and I believe that the committee must reverse this situation in the 2012/13 financial year.

We have, via a special project allocation, provided \$7,000.00 to Dr. Peter Michael to transfer his weed collection from Sydney University to the NSW Herbarium at the Royal Botanic Gardens in Sydney.

NSW Weeds Conference Future Fund. The Weed Society of NSW Inc. is administering the NSW Weeds Conference Future Fund established to ensure the financial success of future NSW Weeds Conferences which are held every 2 years.

The Future Fund balance as at the 31st September 2012 is \$54,924.07 made up of a cheque account with a balance of \$4,199.83 and 4 term deposits with balances of \$50,724.24.



Financial Report (Cont'd)

Auditing Procedures. By law we do not need to have our accounts audited by an independent auditor and this year the accounts have been reviewed by an audit committee comprising Warwick Felton – Chair, Lawrie Greenup and Jim Swain.

It is recommended that this procedure continues and that the new committee appoint an audit committee.

Approval of Report. I would like to move that the financial report for the year ending the 30 September 2012 be approved; the statement by members of the committee signed and the recommendation re the establishment of an audit committee be approved.

Jim Swain, Hon. Treasurer
5 November 2012

2012 Annual Report to the Weed Society of New South Wales on the Council of Australasian Weed Societies

1. Notable items of business

- The CAWS website now contains a full set of Australian Weeds Conference proceedings back to and including 1978.
- The request for support for David Low's *Weeds News* website was finally approved (\$250) after 18 months discussion.
- Discussions on developing the CAWS strategic plan 2013-2018 are ongoing.
- The frequency of Australasian weeds conferences was nominally discussed in October but no change, if any, will occur until at least 2018. Discussions on how to support weeds workers in the Northern Territory are ongoing.

- 2. Awards.** CAWS Student Travel Award. Four applications were received, with two successful recipients. **Christine Sheppard** (University of Auckland NZ): A\$2000 to attend and present at the Neobiota conference in Spain September 2012. **Xiaocheng Zhu** (Charles Sturt University NSW): A\$1000 to attend and present at the 18th Australasian Weeds Conference in Melbourne October 2012. CAWS Early Career Scientist Award. One application was received and subsequently awarded to **Carolyn Lusk** (AgResearch Lincoln, NZ): A\$2000 to attend and present at the Global Herbicide Resistance Challenge Symposium in Perth February 2013.
- No nominations were reported from Australia or New Zealand for the 2012 WeedWise Nursery Award.
 - No CAWS medal nominations were received.

3. Conferences

A final report for the 23APWSS is yet to be tabled, however the undisclosed loss has been borne jointly by the APWSS and the WSQ. The 18AWC held in Melbourne 8-11 October 2012 attracted nearly 300 delegates. Accounts need to be finalised to determine if the conference broke even. For both conferences, budgets were based on higher attendance levels than could have been reasonably anticipated given previous attendance patterns.

The Tasmanian Weed Society will host the 19AWC in 2014 at the University of Tasmania, Sandy Bay.

4. CAWS finances

CAWS started the 2011/12 financial year with a bank balance of \$111,214.00 and finished with a bank balance of \$105,334.58, leaving a net operating loss of \$5,879.42.

Major expenses include \$5,536.44 for travel awards and \$8,400.00 for CAWS Orators at the 23APWSS conference and the forthcoming Global Herbicide Resistance Challenge. Use of a new teleconference provider reduced costs to \$796.78.

Income was from four sources; additional profit share from the 17AWC (\$3,828.95), final repayments from sales of the poisonous plant book (\$1,984.54), term deposit interest (\$1,181.39) and membership fees (\$660.00).

5. CAWS Secretariat

At the CAWS AGM held in October 2012, Michael Widderick was elected President and Anna-Marie Penna Vice-President. The secretary and treasurer remain unchanged.

Prepared by:
Rex Stanton and Hillary Cherry
CAWS delegates for Weed Society of NSW
15 November 2012



Life Membership Medal Presentation



Life Membership Medal.



Mike Barrett (2011), Peter Michael (1989) & Jim Swain (2011).

The Society had a new antique gold medal cast to honour life members.

Rex Stanton presented a medal to each of the living life members Peter Michael - 1989, Mike Barrett - 2011 and Jim Swain - 2011. Kelvin Green - 2002, is in his 90's and was unable to attend the Annual Dinner.

Kelvin will be presented with his medal by Jim, Peter, and Mike in early 2013.

Life Members.

- 1976 Eric Cuthbertson
- 1989 Peter Michael
- 1999 Nelson Johnson
- 2002 Kelvin Green
- 2002 Leon Smith
- 2003 Alec McLennan
- 2011 Mike Barrett
- 2011 Jim Swain

Annual General Meeting elected 2013 Executive



Three of the newly appointed executive for 2013.

**L to R: Rex Stanton - President, Jim Swain - Treasurer
Alan Murphy - Secretary.**



Kim Hignell, Vice President.

Kim accessed the AGM by teleconference.



Robin Swain, Joanne & Brian Scarsbrick, Rae & Peter McMaugh. Image: Maureen Felton.



Alan Murphy, Warwick Felton & Peter Michael. Image : Maureen Felton.



Weed Society
AGM and Dinner
Thursday 15th November 2012

Menu

Entree
(alternate serve)
Smoked salmon and prawn salad with avocado and mango salsa

Tempura prawns with baby roquette and lime salsa

Main
(alternate serve)
Crispy-skinned duck breast served on gratin potatoes with winter greens and orange sauce

Herb crusted roast rack of lamb with gratin potatoes, wilted English spinach and honey and garlic rosemary jus

Dessert
(alternate serve)
Fresh fruit Pavlova with strawberry coulis and fresh cream

Belgian chocolate tart with hot whisky fudge sauce and white chocolate ganash

Tea, Coffee & Chocolates



Warwick Felton, Peter & Janet Michael, Lawrie Greenup Rex Stanton. Image: Maureen Felton.



Daniel Stanton - future member!



Weed Herbarium Project

Transfer of a Significant Weed Collection from the University of Sydney to the National Herbarium of New South Wales

Dr Peter Michael, Senior Lecturer in Weed Science, collected many important weed genera whilst he was at the University of Sydney. From 1970 onwards he built up the Weeds Herbarium, consisting of some 4 000 to 5 000 specimens, comprising plant material from his own collections as well as from students and other sources. The collection comprised weeds from all Australian states and overseas and were stored in 240 cardboard boxes.

The Faculty of Agriculture and Environment, University of Sydney, was proposing to move to a new location in the Technology Park, Redfern, in 2012 and the future of the Weeds Herbarium could no longer be assured.

Peter submitted a proposal to the Society for funding a project **“Funding towards the moving of part of the herbarium of weed specimens housed in the former Department of Agronomy & Horticultural Science, University of Sydney to the National Herbarium of New South Wales, Royal Botanical Gardens, Sydney.”**

The project was approved and \$7 000 was provided to cull inadequate or damaged specimens, check and rewrite specimen labels, where necessary, rearranging of the collection and placing plant specimens into their specific herbarium boxes for transfer to the National Herbarium of New South Wales.

It was estimated the project would be completed in the first half of 2012 but a requirement, after the agreement between Peter and the Society was signed, imposed by the National Herbarium of New South Wales to enter all specimens onto a database required a significant extension of the time to complete the project.



Mike Barrett explaining to Jim Swain the database requirements of the National Herbarium of NSW.

The project funded the following genera which have been sent to the National Herbarium of New South Wales – Oxalis 653 specimens, Echinochloa 1500 specimens approximately, Gamachaeta (cudweeds) 480 specimens and Conyza (fleabanes) 400 specimens.

The following genera have been completed without financial assistance from the Society – Xanthium 245 specimens and Onopordum 262 specimens.

There are still three genera comprising Verbena, Senecio and Amaranthus, to be completed. A small number of other boxes containing Digitaria, Bidens, Eryngium (sea holly), and Argemone (Mexican poppy) are listed, and will be catalogued if the National Herbarium of New South Wales is interested in acquiring them.

Mike Barrett did the day to day work on the collection and the Society wishes to thank Mike and Peter Michael for successfully completing the project and ensuring a safe home for this important collection.



National Herbarium of NSW - final permanent resting place for Peter Michael's weed collection. Image: L. Greenup



The above image shows the Hornsby Shire Council Library's collection of both native and exotic plants, including a large number of weed specimens. Collected by a few enthusiastic amateur local botanists the specimens are accurately named and stored in folders arranged by families. Anyone can have access to the collection. Do other Councils have such a collection?



Weed Alert

Yellow Bells *Tecoma stans*

Yellow Bells is a native of Central and South America, originally planted in gardens for its showy yellow “trumpet-like” flowers.

It is an invasive weed that readily spreads by thousands of papery seeds that are produced from long pods during most of the year.

Yellow Bells readily invades bushland reserves, roadsides and disused or disturbed land and often self-seeds in gardens where it is cared for by unsuspecting gardeners.

It is a declared noxious weed in north east NSW and is spreading rapidly down the coast to areas of Sydney and Blue Mountains regions.

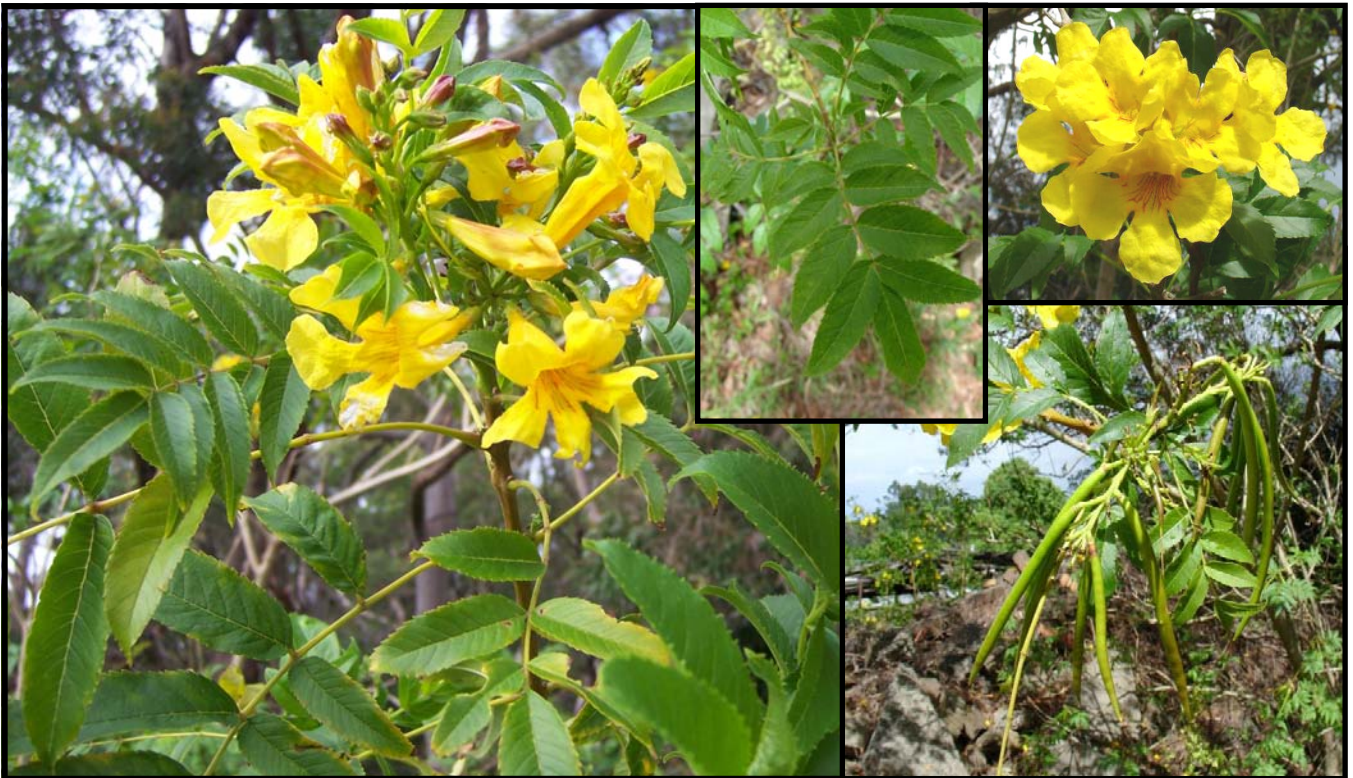
How to Identify Yellow Bells:

Plant: Usually up to 4m high, can get taller in low light conditions but will be thin and straggly.

Flowers: Bright yellow, trumpet shaped to 5cm long. Often have reddish-brown markings in throat. Flowers are found in clusters at the end of branches.

Leaves: Finely serrated compound leaves, 5-13 leaflets. Leaflets vary in size from 2-10cm long.

Fruit: Green linear-oblong pod, 10-22cm long and up to 1cm wide, drying to brown. Each pod contains numerous papery, winged seeds and up to 2cm long.



You can play an important role in stopping the spread of this invasive weed.

Further information contact the Weeds Officer of your local council.





“Weeds have no Boundaries”

The 17th NSW Weeds Conference will be held in Corowa, 9-12 September 2013 so put this important date in your diaries.



A conference organising committee has been established and consists of representatives from the Weed Society of NSW, Corowa Shire Council, Central Murray County Council, Greater Hume Shire Council, Wagga Wagga City Council, Urana Shire Council, New South Wales DPI, Victorian DPI, Murray CMA, NSW Weeds Officer Association, Eastern & Western Riverina Noxious Weeds Advisory Groups.

The conference venue is the Corowa RSL Club. The Club is centrally located in Corowa and only a few minutes away from the central business and retail precinct.

This conference is regarded as the premier event in NSW to discuss noxious and environmental weeds and related vegetation issues. The conference brings together weed experts from government, business, academic and other backgrounds to discuss past and emerging issues for the control of weeds.

The committee is currently working on finalising the conference program and are pleased to advise that Dr Tony Grice, CSIRO, Townsville will be one of the Keynote Speakers at the conference.

The organisers are asking you to share your experiences and programs that have made a difference in protecting our biodiversity, agricultural production and amenity against weed invasion by using targeted strategies, top shelf knowledge and skills, and effective partnerships. They want to hear your stories and for you to submit an abstract! **Submission date extended till Friday 25th January 2013.** If you are having difficulties meeting this date please contact us.

The finalised program along with registrations will be available online during February 2013.

Conference information can be obtained online at www.nswweedsconference2013.com or contact Rachel Robinson-Minogue, Corowa Shire, 02 6033 3221, 0418572849 or Rachel.Minogue@corowa.nsw.gov.au



Award for Best Photograph

Get out your Smartphone, compact or SLR camera and take some images for the photographic contest at the 2013 NSW Biennial Conference.

Hillary Cherry won the 2011 Photographic Contest with this image of bitou bush, taken at Barrenjoey Headland, Sydney. Hillary wanted to capture the ‘threat’ of bitou bush to coastal areas, so tried to include the beach (sand) and the ocean, as well as attempting to include a close up of leaves (and sand) for scale. Well done, Hillary.



Start thinking about nominations for the NSW Buerckner & Stephenson Local Government Weed Professional Awards



The Weed Society of NSW are now calling for nominations for the NSW Buerckner & Stephenson Local Government Weed Professional Awards. The Awards will be presented at the 17th NSW Biennial Weeds Conference, which will be held in Corowa from 9 to 12th September 2013.

The Awards were established in 2007 in honour of Parkes Shire Council Weed Officers, Mal Buerckner and Ian Stephenson, who were tragically killed on the job in a helicopter accident in 2006, along with the pilot, Shane Thrupp. The Awards acknowledge the work of NSW Local Government Weed Professionals and their outstanding contribution towards protecting NSW from the impacts of weeds.

There will be two categories in this year's Award:

The **Buerckner Award** – for outstanding contribution to the on-the-ground control of weeds in NSW.

The **Stephenson Award** – for outstanding contribution to planning and managing weed management programs in NSW.

Nomination forms for each Award are available from The Weeds Society of NSW Inc. website at www.nswweedsoc.org.au or NSW DPI Extranet for Weed Professionals.

Prizes

The winners of The NSW Buerckner & Stephenson Awards will each receive a book prize and a presentation medal. The Weed Society of NSW Inc. and The NSW Weeds Officers Association Inc. have each generously donated \$500.00 to each winner* to be used towards travel costs to attend the 18th NSW Biennial Weeds Conference in 2015 (the Buerckner Award recipient) or the 19th Australasian Weeds Conference in Tasmania in 2014 (the Stephenson Award recipient).

** To claim the \$500 prize, the winner must be a current financial member of the donating Society (The Weed Society of NSW Inc. and/or NSW Noxious Weeds Officers Association Inc.). The total prize to each winner is \$1,000 if they are a member of both organisations. The winner must gain their employer's approval to attend the conference. If the employer does not grant approval the money may be used towards training costs.*

To apply for membership to The Weeds Society of NSW Inc. visit www.nswweedsoc.org.au or contact Alan Murphy on 4341 3574 or email secretary@nswweedsoc.org.au

To apply for membership to the NSW Weeds Officers Association Inc contact Matthew Bailey on 6861 2351, email matthewb@parkes.nsw.gov.au

The NSW Buerckner & Stephenson Awards are proudly supported by:



Further information: If you need any help with your nomination, please email khighnell@lakemac.nsw.gov.au
Closing dates & details go to: www.nswweedsconference2013.com



Goldenrod *Solidago* spp.

A Weed of Interest

Warwick Felton

While travelling in Canada and the United States in September 2012 there was a “weed” that was abundant everywhere we went; Quebec and Ontario Provinces, New York State, Pennsylvania, Virginia and Maryland, and all the way up the Atlantic coast back to Quebec. It was in clumps along roadsides, grazing and cropping areas, and timbered reserves. The plants were slightly taller in the US than in Canada.



Roadside infestation of goldenrod, *Solidago* spp.
Image: Warwick Felton.

After 3 days I came across a nursery where I was told it was goldenrod (*Solidago* spp.). It has attractive small yellow flowers that occur along the tops and to the end of the branches.



Goldenrod, *Solidago* spp. inflorescence.
Image: Warwick Felton.

This is a diverse group of perennials and apparently is difficult to distinguish species with hundreds of forms, and also has hybrids. It is often used as garden plants but can cause allergies when handled.

Interestingly, it is the state flower in Kentucky, South Carolina and Nebraska.

In Australia, Auld & Medd (1992) list Canada goldenrod, *Solidago Canadensis*, as a garden escape, which is particularly common in wasteland near habitation in coastal and higher rainfall regions of eastern Australia. Most of the Australian material is classified as var. *scabra*.

Reference:

B.A. Auld & R.W. Medd (1992). Weeds -An illustrated botanical guide to the weeds of Australia. Inkata Press.

Canadian goldenrod *Solidago canadensis* var. *scabra*

Comments on the Australian situation

Common Names

American goldenrod, Canada goldenrod, Canadian goldenrod, common golden-rod, common goldenrod, golden rod, goldenrod, tall goldenrod

Naturalised Distribution

Widely naturalised in southern and eastern Australia (i.e. in the coastal districts of Queensland, in some parts of central and northern New South Wales, in south-eastern South Australia, and in the coastal districts of south-western, north-western and southern Western Australia). Also naturalised on Lord Howe Island and sparingly naturalised in Victoria.

Also naturalised overseas in western North America, China and Hawaii.

Notes

Canadian goldenrod (*Solidago canadensis* var. *scabra*) is regarded as an environmental weed in Queensland and New South Wales, and as a minor or potential environmental weed in Victoria.

Source: Text from Goldenrod Fact Sheet. Environmental Weeds of Australia for Biosecurity Queensland 2011.



Diuron

Australian Pesticides and Veterinary Medicines Authority's Final Review Report

The Australian Pesticides and Veterinary Medicines Authority (APVMA) has completed its review of selected products containing diuron and their associated approved labels.

Diuron is a broad-spectrum residual herbicide that has been registered in Australia for over 20 years. Diuron is used in agriculture for pre and post-emergent control of broadleaf and grass weeds in sugarcane, cotton, broadacre cereals (oats, wheat, barley, triticale), apples and pears, lucerne, peas, vineyards and citrus and in tropical crops such as pineapples and bananas. It is used for weed control in irrigation channels and drainage ditches, around buildings, railway lines, sheds and driveways and other industrial applications.

In 2002, diuron active constituent approvals, product registrations and associated label approvals were placed under review as part of the APVMA's Review Program. Concerns included the impacts of diuron on marine environments, specifically the Great Barrier Reef and the effects of diuron on mangroves, coral and seagrass. There were also human health concerns associated with the toxicity of impurities in the active constituent.

In 2005, the APVMA released a Preliminary Review Findings (PRF) report which identified that current uses of diuron did not pose a risk to human health but could pose risks to the environment. Without significant changes to how these products were used (specifically a significant reduction in application rates) there was the potential for contamination of aquatic systems and adverse impacts on non-target aquatic and terrestrial organisms.

In 2011, the APVMA published toxicological and environmental assessment reports relevant to the review and at the same time proposed suspension of diuron products. These assessment reports considered information provided in response to the PRF report as well as the availability of new scientific information and international regulatory activity. The APVMA received over 100 submissions to the review at this time.

In November 2011, the APVMA suspended the registration of selected diuron products and issued new instructions for use during the period of suspension to reduce the risks in the short term. The suspension was put in place to mitigate risks while new information was considered.

In March 2012, the APVMA completed its review of diuron in respect of active constituent approvals and the registration of diuron products intended for use as cotton defoliant, anti-fouling paints and pond and aquarium products. These conclusions were based on findings from the 2011 toxicology and environmental assessments. At the same time, the suspension for the remaining diuron products was continued as the assessment had not yet concluded.

In September 2012, the APVMA published a Review Findings Report, together with four volumes of technical assessment prepared by The Department of Sustainability, Environment, Water, Population and Communities (DSEWPoC). These reports were published ahead of the review's finalisation.

Final review outcomes 2012

On the basis of the findings contained in the 2012 DSEWPoC assessment and the subsequent consideration outlined in this report, the following regulatory decisions have been made in relation to diuron product registrations and associated label approvals.

- a) Revoke the current suspension of products in order to implement the review findings.
- b) Cancel product registrations—where no uses on the label can be supported on the basis of unintended effects to the environment.
- c) Vary label approvals—to remove those uses no longer supported on environmental grounds and to include additional information where necessary (restraints and environmental warning statements).
- d) Affirm product registrations (once variations have been made).
- e) Cancel 'old' product label approvals—instructions on these labels are no longer considered adequate.

Source: DIURON - FINAL REVIEW REPORT

The reconsideration of the registrations of selected products containing diuron and their associated labels. APVMA. November 2012.

www.apvma.gov.au/products/review/completed/diuron.php



How will rising atmospheric CO₂ affect weed responses to herbicides?

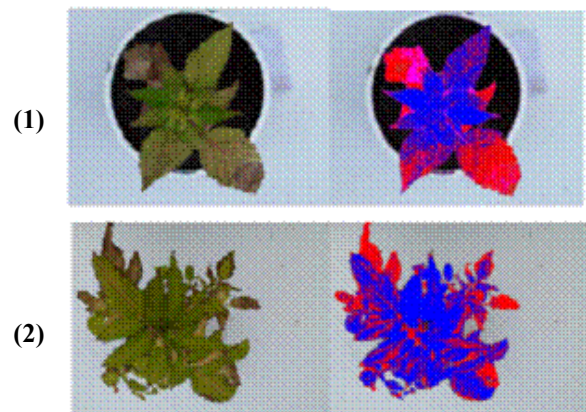
Associate Professor Michelle Leishman
Department of Biological Sciences, Macquarie University

One of the main methods for weed control, for both agricultural and environmental weeds, is application of herbicides. Non-selective herbicides such as glyphosate are used extensively around the world, however we know very little about how weed responses to commonly used herbicides may be affected by increases in atmospheric CO₂. Over the last two decades the amount of CO₂ available to plants has increased substantially and by 2100, atmospheric CO₂ is predicted to reach 700 ppm. Changes to plant morphology and physiology in response to increased CO₂ could influence uptake, transport and overall effectiveness of herbicides.

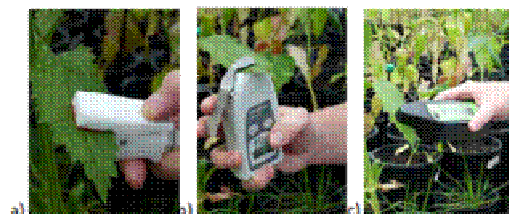
In a recently published paper (*Weed Science* 2011 59:28–36), Anthony Manea and colleagues compared the response of four exotic C4 grass species to glyphosate under ambient (350 ppm) compared to elevated (700 ppm) CO₂. They found that three of the four species showed increased tolerance to glyphosate under elevated CO₂, due to increased biomass production resulting in a dilution effect of the herbicide. As a consequence of this work, Dr Paul Downey (University of Canberra), Prof. Lesley Hughes and A/Prof Michelle Leishman (Macquarie University) obtained funding through the Rural Industries Research Development Corporation's National Weeds and Productivity Research program to extend this research to examine the response of a broader range of species to a wider range of herbicides under elevated CO₂.

Experiments are now under way at both the University of Canberra and at Macquarie University's Plant Growth Facility. The range of plant species being studied includes herbaceous species such as *Bidens pilosa*, *Foeniculum vulgare*, *Senecio madagascariensis* and *Verbena bonariensis*, vines such as *Acetosa sagittata*, *Anredera cordifolia*, *Myrsiphyllum asparagoides* and *Tradescantia fluminalis*, grasses such as *Avena barbata*, *Bromus catharticus* and *Chloris gayana*, and shrubs such as *Cotoneaster glaucophyllus*, *Lantana camara*, *Ligustrum sinense*, *Olea europea* subsp. *cuspidata* and *Senna pendula*. The herbicides being tested are glyphosate (RoundUp), metsulfuron-methyl (Brush-Off) and fluroxypyr (Starane Advanced).

Plants will be grown for 8-10 weeks under ambient and elevated CO₂ before the application of the different herbicide treatments at recommended and double-recommended rates. Before herbicide application, plant growth and photosynthetic performance will be assessed. All plants will then be monitored for 6 weeks to assess survival. The main expected outcome of the project is an understanding of how a range of weed species of different growth forms will respond to herbicides under elevated CO₂ conditions. The outcomes will be used to develop a series of recommendations for weed managers and policy makers to help manage weeds more effectively under climate change and to minimise the impacts of broad-scale herbicide use on the environment.



Leaf area measurement - *Bidens pilosa* (left photograph of plant and right software analysis showing healthy leaf blue and herbicide damaged area red) at about 8 weeks of age (1) and after herbicide application (2).



Leaf measurement.
(a) stomatal conductance
(b) photochemical reflectance
(c) chlorophyll content



Glyphosate Resistance Symposium 18th Australasian Weeds Conference Melbourne 2012

Andrew Storrie and Chris Preston

Important points:

- Continued investment in research and development into alternative products is required, with sufficient protection of intellectual property.
- Extension effort is critical, as we have many of the answers to glyphosate resistance management, but they aren't being adopted.
- Australia will survive without glyphosate, but at what cost?

A "Glyphosate Resistance" symposium was held at the 18th Australasian Weeds Conference in Melbourne in early October to discuss the current 'state-of-play' of glyphosate resistance in different weed control sectors within Australia.

Chris Preston opened the proceedings by outlining numbers of populations of different species currently confirmed resistant to glyphosate. There are now so many resistant annual ryegrass populations across Australia University of Adelaide are only testing samples from previously unconfirmed herbicide use areas. See the Australian Glyphosate Sustainability Working Group website for more information.

The fact that any weed can evolve glyphosate resistance is a wakeup call to weed managers. In the last issue of 'Giving a RATS' David Thornby highlighted the fact that one in ten weeds species tested is at high risk of developing glyphosate resistance.

Rob Long, consultant from Moree, NSW, highlighted the fact that no-till farming systems are over-reliant on glyphosate and they need to get the integrated weed management message sooner than later. He felt grain production in northern systems would survive without glyphosate, but at considerable extra cost and threat to the resource base.

Main species to worry about in northern NSW and southern Queensland were the summer grasses: awnless barnyard grass (*Echinochloa colona*) and feathertop Rhodes grass (*Chloris virgata*), plus annual ryegrass, fleabane and sowthistle (*Sonchus oleraceus*).

No-till farming was using up to 7 applications of glyphosate per field per year with the additional cost of \$30 to \$50 per hectare when glyphosate resistance was a problem. Extra spraying capacity is required on each farm to be able to apply additional sprays required to manage resistant weeds. The whole property needs to be sprayed in 10 days. This means another spray unit, costing \$200,000-300,000 is required, plus additional labour. This is a large extra cost to maintain current production.

Graham Charles, NSW Department of Primary Industries, Myall Vale outlined the threats faced by the cotton industry. Graham added Roundup Ready® Flex cotton volunteers to the list of glyphosate resistant weeds and has also seen a shift to weeds never well controlled by glyphosate.

Ninety eight percent of the Australian crop is now Roundup Ready® Flex, which has simplified weed management and reduced production costs. Glyphosate resistant and tolerant weeds are being managed by re-introduction of components of the traditional system such as residual herbicides.



Auscott, Moree February 2011.
Image: Andrew Storrie.

Peter Bothwell, Rail Infrastructure Maintenance Services manager with John Holland P/L in Western Australia said that weed management was a critical component of maintaining Australia's 44,000 kilometres of track. Many weeds move from adjacent agricultural land onto the tracks and glyphosate resistant annual ryegrass is an increasing problem. Grain loading terminals are weed hot-spots.

Herbicides are still the most cost effective management treatment because mechanical weed control on rail tracks costs \$4,000 per kilometre. Currently his company is using Group B and C herbicides with glyphosate, however alternatives that pose little risk to the surrounding environment are needed.



Glyphosate Resistance Symposium 18th Australian Weeds Conference Melbourne 2012 (Cont'd)

Mark Slatter, Nufarm Australia P/L, gave a company perspective on the issues resistance to glyphosate are posing on the chemical industry. Mark considered the Australian chemical industry has a considerable commitment to stewardship of their products and gave examples such as support of the Australian Glyphosate Sustainability Working Group and development of management plans for herbicide resistant crops.

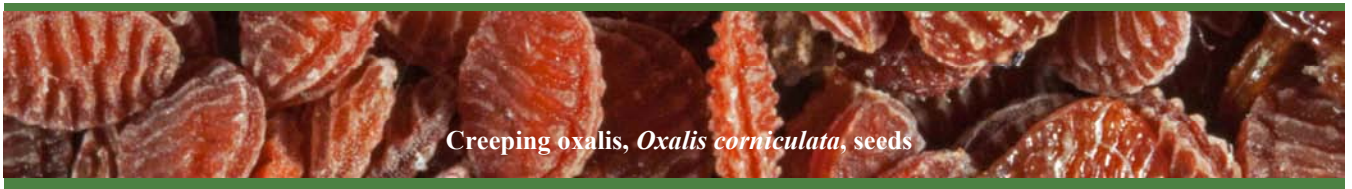
Mark also felt that there was a need for additional products for managing glyphosate resistant weeds. However, one issue is the difficulty for companies to recoup their investment in research and development with off-patent products and there may be a need for greater incentives to allow companies to benefit from broadening labels.

Source: "Giving a RATS"
givearats@agronomo.com.au

Further information:

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Chris Preston
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Creeping oxalis, *Oxalis corniculata*, seeds

The Global Herbicide Resistance Conference shines the light on our food production future

Global grain and fibre production is substantially underpinned by herbicide use, yet the evolution of herbicide resistant weeds threatens global crop productivity and food security.

The Global Herbicide Resistance Challenge conference, which takes place at Freemantle, Western Australia next February, will investigate state-of-the-art science and address issues ranging from molecular evolution through crop science, agro-ecology, resistance management and socio-economics.

Conference convenor, Stephen Powles from AHRI, has pulled together the leading authorities on herbicide resistance from across the globe and will have leading world experts like Dale Shaner from the US Department of Agriculture and Jason Norsworthy from Arkansas. Jason will talk about best management practices that mitigate the risks of herbicide resistant evolving in cotton and soybean crops.

Field agronomists are invited to the Global Herbicide Resistance Conference on Thursday, 21st February to hear how other nations are tackling herbicide resistance in the major world crops.

The conference runs from February 18th – 22nd, 2013. **For Conference registration and more information, visit the website listed in banner.**

Source: A. Storrie givearats@agronomo.com.au

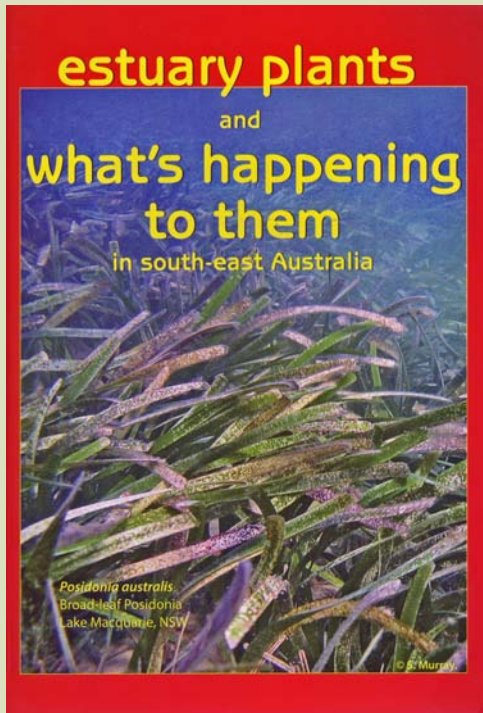
AHRI
AUSTRALIAN HERBICIDE RESISTANCE INITIATIVE

INTERNATIONAL CONFERENCE
18-22 FEBRUARY 2013
• PERTH AUSTRALIA •

THE UNIVERSITY OF WESTERN AUSTRALIA
Achieve International Excellence

GLOBAL HERBICIDE RESISTANCE CHALLENGE

www.herbicideresistanceconference.com.au



Cover image - *Posidonia australis*, a native seagrass.
Image: Shane Murray

This hardcover book has 652 pages of information on estuary plants in south-east Australia.

It give species information on seagrasses, algae, low saltmarsh and high saltmarsh plants as well as fringing and brackish plants.

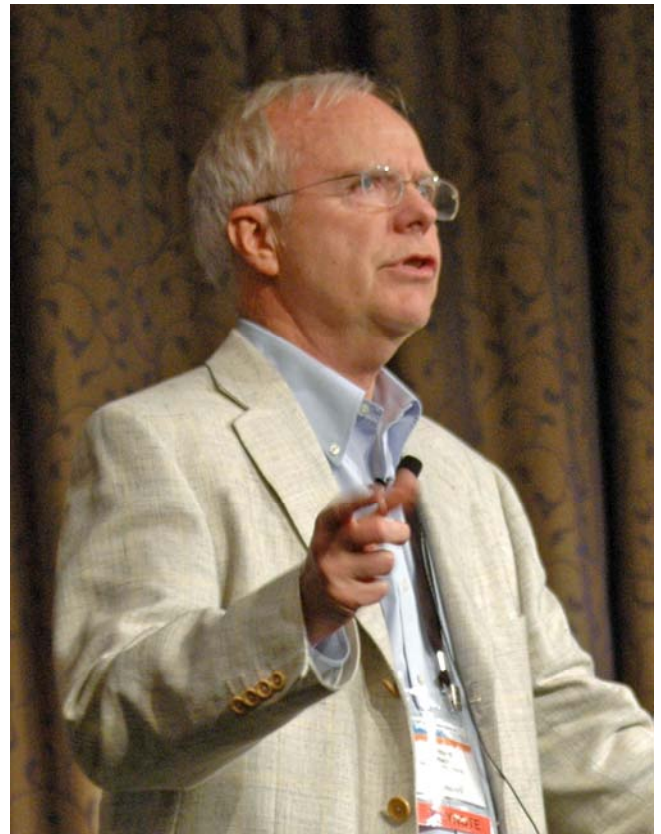
Plus there are 23 sections written by specialists on management, monitoring, rehabilitation, case histories, catchment, midges, birds, fish and mosquitoes.

This book is primarily of native plants as there are few introduced species that survive in sea strength salinity. Probably the biggest weed of saltmarsh is *Juncus acutus*. It is often mixed up with another fully salt tolerant *Juncus*, *Juncus kraussii*. There are numerous weeds fringing these tidal areas and these are covered in the book, notably alligator weed *Alternanthera philoxeroides* which thrive in brackish water, and in full sea strength salinity conditions for brief periods of say a few weeks.

This new book is available from Sainty and Associates for \$85 inc. GST + postage - 3 or more the cost is \$65 inc GST + postage.

Email: geoff@sainty.com.au The order form is online. Ph: 02 9332 2661 Fx: 02 9331 5372

Prof. Mack's visit to NSW jointly funded by the Weed Society of NSW and the University of Wollongong



Professor Richard Mack, School of Biological Sciences, Washington State University, USA addressed a seminar organised by The Institute of Conservation Biology and Environmental Management, University of Wollongong. The subject of his talk was "Invasive Plants as catalyst for the spread of human parasites".

Prof. Mack was a keynote speaker at the 18th Australasian Weeds Conference in Melbourne.

The Society provided \$500 to assist in bringing Prof. Mack to Wollongong.

Hillary Cherry and Lawrie Greenup, Society members, attended the seminar.

Have you paid your 2012 dues?

If you have not paid your 2012 membership subscription by 31 December 2012 you will still remain as a member but will no longer receive the newsletter and other membership benefits.



New Members

The Society would like to welcome the following two new members:

Alan Hill

National Parks & Wildlife Service
Armidale

Alex Mackensic

Granville

Members' benefits include:

- a quarterly newsletter,
- reduced registration fees for Society functions and biennial Weed Conferences,
- reduced membership fees for students, &
- the opportunity to become involved in all of the Society activities.

New e-Letter

A new publication is planned to start in the new year.

This electronic newsletter will be produced on a regular basis to keep members informed of important events and to link with material on the up-graded Society website.

'A Good Weed' will continue to be produced four times a year and will provide quality articles and Society information.

The new electronic newsletter will be issued approximately mid-way between editions of 'A Good Weed' and will be only available in pdf format via email.

If the secretary doesn't have your email address and you want to be on the mailing list for the new newsletter could you forward your email details to:

secretary@nswweedsoc.org.au

The Society has a privacy policy and will not use your email address or other personal information other than to inform you of Society matters.

Treasurer's Report (As of 10 December 2012)

Financial Report.

For the period 1 October 2012 to 10 December 2012 the society has shown a loss of \$1,334.97.

As is indicated in the Balance Sheet the society is in a very sound financial position with total equity of \$78,386.13 and thus able to consider allocating additional funds to projects that meet its objectives.

To maintain our ability to support financially viable projects now and into the future it is I believe essential that in 2013 we organise seminars etc which show a profit as we cannot plan on achieving a return from the NSW Weeds Conference at the same level in the future as occurred in 2011.

To maintain an adequate supply of cash in the cheque account, \$ 5,000.00 was transferred from Term Deposit 2504 to the cheque account on 9 October 2012.

Membership.

As at the 10 December 2012 the society has 180 members which include 4 life members.

Reminder notices for the 2012 subscriptions were sent out to by email and post to members who as at 1 October 2012 had not renewed their subscriptions.

13 members who had not paid their 2011 subscriptions were removed from the membership list.

145 members have paid their 2012 subscriptions.



**Jim Swain
Treasurer
10 December 2012.**



The newsletter is the major source of information to our members and we are sure they want to read about all the exciting, interesting and unusual things you are doing in weed management.

Let us know about local and regional news, people and events, new emerging weed species, weed management issues, bushland regeneration, bush-care programs, weed research summaries, noxious weeds, legislative issues and book reviews.

We prefer short & interesting articles of about 200 to 500 words with good quality images which will reproduce well in colour.

If you want to submit material or discuss possible articles email - editor@nswweedsoc.org.au

Submission dates for material for 2012/2013 are:

#62 Autumn 2013	28 February 2013
#63 Winter 2013	31 May 2013
#64 Spring 2013	31 August 2013
#65 Summer 2013/14	30 November 2013

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Letters to the Editor

The editors welcome members comments on articles that have appeared in 'A Good Weed' or have weed-related issues they would like to bring to the attention of the Society members.

If you would like to contribute a 'Letter to the Editor' it must be under 150 words, submitted by the due date for the issue you would like it to appear and contain your contact details.

The editors reserve the right not to publish a letter.

Committee Meeting Dates

8 February 2013	Executive Committee Meeting
12 April 2013	Executive Committee Meeting
14 June 2013	Executive Committee Meeting
9 August 2013	Executive Committee Meeting
11 October 2013	Executive Committee Meeting
13 December 2013	Executive Committee Meeting

All dates need to be confirmed

Society Contact Details



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Editor: editor@nswweedsoc.org.au
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Season's Greetings



Christmas bush *Ceratopetalum gummiferum*

This is the last issue of 'A Good Weed' for 2012 so I would like to take the opportunity to thank the committee for the hard work they have put in ensuring the Society runs smoothly and is financial sound.

I would not like to add up the number of hours that each committee member gives to the Society free of charge. Thank you for your dedication.

Also, I would like to thank the members for their continuing support for the Society, without which the Society would not exist.

May I extend the season's greeting to you all and best wishes for 2013.

Rex Stanton, President

If unable to deliver return to:

The Newsletter of
The Weed Society of New South Wales Inc.
PO Box 438
Wahroonga NSW 2076

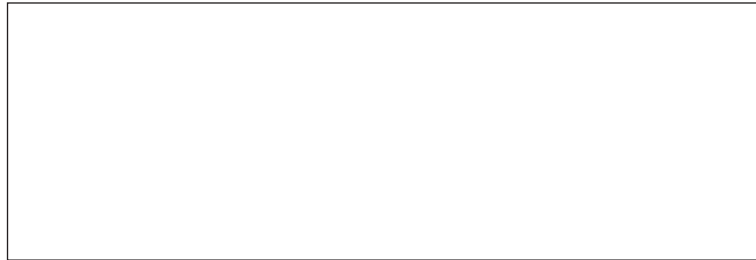
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The Weed Society of New South Wales Inc. acknowledges the generous support of the following organisations for their sponsorship of the Society and this Newsletter

