# WeedWise

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Newsletter of the Weed Management Society of SA



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#### From the President,

Welcome to the September Edition of WeedWise. Sam Buxton, our editor, has spear-headed another excellent edition! Sadly this will be Sam's last edition as editor, and I would like to thank her very warmly on behalf of all of us in the WMSSA for her great work and diligence. Leah Feuerherdt has generously volunteered to take over the reins from Sam for the next issue. Leah has made an early start with a terrific article about WoNS control in the APY Lands.

This edition also gives us a timely reminder that, along with living trees, dead trees can also be subject to Native Vegetation conservation regulations. Henry Rutherford warns of the hazards and threats posed by the dangerous Hudson pear cactus – one to really watch out for in SA. There is also some timely information about new publications and weed meetings.

As always, any articles or assistance for the next issue would be very welcome (see green breakout box below). Anyone who is interested in taking on the job of Editor for WeedWise on an on-going basis, please talk to me or Leah!

Our next AGM will be held at 7pm at Waite on Thursday 29th October 2015 (see page 5). All positions will be declared vacant, and we strongly encourage fresh nominations for Committee offices. Please contact me with any agenda items you would like discussed at the AGM.

As discussed last edition, your Committee has been discussing new initiatives for the WMSSA. I am delighted to report that at our last Executive meeting we invited Tony Vincent (very keen local environmentalist) and Tricia Curtis (Conservation Volunteers Australia) to further develop the idea of working with volunteers to rear and distribute insects for the biological control of weeds. We had a great discussion, and we have at last got the ball rolling. Anyone interested in joining in the fun can contact me for more information – the more, the merrier!

We will shortly announce the speakers for the AGM – hope to see you there!

Best wishes John Heap

### WEED ARTICLES NEEDED

Would you like to contribute an article, book review or some of your technical expertise battling a weed in your patch? Is there an event you would like to publicise?

We welcome submissions for the next issue of WeedWise by 1st November 2015

> Contact: Leah Feuerherdt Email: Leah.Feuerherdt@sa.gov.au



### Dead Trees Included as Native Vegetation

Native vegetation in South Australia is protected by the Native Vegetation Act 1991 and the Native Vegetation Regulations 2003. The legislation prevents broad-scale clearance and minimises smaller-scale clearance; enhances and restores the State's native vegetation; and outlines certain procedures and assessments that need to be undertaken before any clearance of native vegetation can proceed.

The Native Vegetation Council (NVC) is established under the Act and is responsible for advising the Minister for Sustainability, Environment and Conservation about the preservation and enhancement of the State's native vegetation, including determining clearance applications.

Within the Act, 'native vegetation' includes all naturally occurring local native plants, from small ground covers and native grasses to large trees. It also includes both freshwater and saltwater vegetation and certain dead trees. Plants may be isolated or part of a larger group or community.

A 'dead tree' is deemed to be native vegetation under the Native Vegetation Regulations 2003, Regulation 3A, where:

- the circumference of the trunk of the tree at 300 mm from the base of the tree is:
- -in the case of a tree located on Kangaroo Island 1 metre or more; -in any other case – 2 metres or more; and
- the tree provides or has potential to provide, or is part of a group of trees or other plants (whether alive or dead) that provides, or has potential to provide, a habitat for animals of a listed threatened species under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act).

This definition only applies to trees that are of a species indigenous to South Australia and occur naturally or have been planted in accordance with the Act, and then only to trees that provide, or have the potential to provide, habitat for threatened species as listed under the Commonwealth's EPBC Act.

The Act recognises the importance of habitat. Hollows in dead trees can provide important nesting and roosting sites for native fauna. For example, Glossy Black-Cockatoos often nest in hollows in dead *Eucalypt* species on Kangaroo Island. Hollows are formed mainly in living trees by termites, which enter via the trunk. A dead tree with a rotten butt has the potential to expose suitable hollows once smaller branches have dropped.

Clearance of a dead tree that is defined and protected as 'native vegetation' may only occur through an appropriate exemption under a Regulation or by application to the NVC for consideration and approval.

In South Australia four birds and one mammal listed as threatened species under the Australian Government's EPBC Act use, or potentially use, large dead trees as habitat:

- Red-tailed Black-Cockatoo (SE Form) (Calyptorhynchus banksii graptogyne)
- Glossy Black-Cockatoo (KI Form) (Calyptorhynchus lathami halmaturinus)
- Regent Parrot (SE Form) (Polytelis anthopeplus anthopeplus)
- Princess Parrot (*Polytelis alexandrae*)
- South-eastern Long-eared Bat (*Nyctophilus corbeni*)

It is important that dead tress are protected to ensure the on-going survival of these birds and mammals. If you have any queries regarding dead trees, the species that use them and/or the Native Vegetation Act 1991 and Regulations 2003, please contact the Native Vegetation Management Unit, Department of Environment, Water and Natural Resources on 8303 9777 or email nvc@sa.gov.au.

This information has been taken from the Native Vegetation Information Sheet No.28, produced by The Native Vegetation Council and the Government of South Autralia.

### Hudson Pear - Be on the Lookout!

#### Henry Rutherford, Urban Animal and Plant Control Support Officer, DEWNR

An infestation of the cylindrical jointed cactus, Hudson pear (*Cylindropuntia rosea*) was located along the coastal reserve at Moana Beach. The prickly plant was reported to the City of Onkaparinga by dog owners who had had noticed the cactus parts stuck to their pets.

Grown in domestic gardens as novel ornamentals, cacti can become weeds when they are no longer wanted and irresponsibly disposed of, for example illegally dumped into reserves or other open spaces. The plants also move around by attaching to animals including rabbits, foxes, cats, and dogs and become established where they drop to the ground.

The most recognisable invasive cactus story is from the common prickly pear (*Opuntia stricta*). It became infamous in Australia in the early 20th century after invading over 100,000 square kilometres of Queensland and New South Wales, rendering much of this land useless. Efforts of chemical and mechanical control methods were abandoned due to difficulty and cost. Common prickly pear was eventually brought under control after the Prickly Pear Control Commission imported biological control agents from the Americas in 1920's and '30's. More recently, in 2012, the prickly pear cacti were group-listed as a Weed of National Significance (WoNS) and are declared in every state and territory (except Tasmania).

Originating from Mexico, the Hudson pear is a heavily spined, jointed cactus from the prickly pear group. Hudson pear has naturalised in the Murraylands, Kalgoorlie Goldfields, and western rangelands of Queensland and New South Wales. It presents a challenge due to the great density of long and dangerous spines with fine tapered scales that cover the plant. Hudson pear cannot be handled even with thick leather gloves and the spines will easily penetrate work boots. If left uncontrolled it could prevent most forms of outdoor recreation, including bushwalking and camping as well as impacting grazing and farming land.

The most effective way of controlling Hudson pear is for trained officers to carefully physically remove all of the plant and place into a registered deep burial waste facility. Great care needs to be taken as even the smallest nodule that dislodges will grow into a new plant. Biosecurity Queensland and the Department of Primary Industries NSW are currently working to find a biological control agent to target Hudson pear.

Interestingly, the Hudson pear was identified and controlled at the Moana site approximately ten years ago and had since re-established. However, the current infestation at Moana Beach has now been removed by the City of Onkaparinga and Natural Resources Adelaide and Mt Lofty Ranges officers.

Residents should please keep a look out for Hudson pear. Plants are easily identifiable with 50mm long narrow white spines on a jointed cactus, generally the size of a low shrub. Plants are particular visible in the early morning sunlight when covered with dew as the spines glow a brilliant translucent white.

Any sightings can be reported in the following way:

- Do not handle or disturb the plants
- Flag any suspect plants with a visible marker
- Take photos to help with identification
- Use your phone's GPS to record a location
- Check out our website to find out more
- Immediately report any plants to your nearest natural resource centre or to Henry Rutherford on 0429 584 080 or henry.rutherford3@sa.gov.au.



Figure 1: Hudson pear (Cylindropuntia rosea)

# Controlling Weeds of National Significance in APY Lands

### Leah Feuerherdt, WMSSA Executive Committee

The Anangu Pitjantjatjara Yankunytjatjara Lands (APY Lands) in SA is approximately 100,000 square kilometres of diverse spectacular landscapes of ranges, red sand, and intact desert vegetation communities, which supports an array of wildlife. Apart from buffel grass (*Cenchrus ciliaris*) there are minimal weed issues to address in the region. Unfortunately buffel grass is quite widespread in APY and much could be written about that issue. Instead, this story is about several other weeds which are currently restricted in distribution and eradication is still possible.

This area in the NW of SA is one of the hottest and driest areas of the State with a climate perfectly suited to the following desert loving species, which are all Weeds of National Significance (WoNS):

- athel pine (Tamarix aphylla)
- wheel cactus (Opuntia robusta)
- Hudsons pear (Cylindropuntia rosea)
- prickly pear (Opuntia stricta)

There are two distinct, but manageable populations of athel pine on the APY Lands, one of which is located on the upper reaches of the Lake Eyre Basin catchment. The cacti are also limited in distribution to several populations near the towns of Mintabie and Indulkana.

Natural Resources Alinytjara Wilurara (NR AW) received some funding from the Australian Government to help control these Weeds of National Significance (WoNS) on the APY Lands.

In May 2015, WMSSA members Dave Blewett and Leah Feuerherdt (Rural Solutions SA) accompanied Daniel Bailey (NR AW) and Walter Tjami (APY/NR AW) to train Anangu (Pitjantjatjara/ Yankunytjatjara word for people - referring to the Indigenous people of the area) in controlling these weed species.

Seven young men and two young women received training (including chemicalhandling training) and practical experience in controlling athel pine or cacti species.



Figure 1: Leonie and Serafina digging out cacti.



Figure 2: Walter Tjami (APY/NR AW Landcare Officer) using a chainsaw to remove athel pine prior to spraying



Figure 3: Dave Blewitt filming Anangu mixing chemicals for athel pine control.

# Controlling Weeds of National Significance in APY Lands (cont.)



Figure 4: Anangu spraying cacti infestation near Indulkana.

The athel pine was controlled by two methods using a mixture of Triclopyr and diesel:

- Cut and spray chainsaws or loppers were used to cut the trees at ground height. Herbicide was then immediately sprayed on the stump of the tree.
- Foliar spray some smaller plants (less than 2m high) were treated by spraying the entire plant with herbicide while it was still standing.

Cacti were controlled by two methods using a mixture of Triclopyr and water:

- Spraying the plants with herbicides
- Digging out small plants by hand

There is still a lot of work to do to successfully remove athel pine populations, but a large proportion of cacti populations were treated during the training. Follow up control will still be required because of the tenacity of these species. By providing practical training to Anangu, they will be able to continue the work without the need for external contractors.

Dave filmed a lot of the work, and is finalising a DVD for distribution in the APY Lands so that other Anangu can learn about the right techniques before more weed control is undertaken. The Anangu involved were all keen to learn, and it was a rewarding experience helping them to look after country. With some ongoing support the people of APY will be able to remove these Weeds of National Significance and reduce the threat to their desert ecosystems.

### WMSSA Annual General Meeting

The Weed Management Society of South Australia Executive Committee invites you to our Annual General Meeting.

#### Thursday 29th October 2015 @ 7pm

#### Soil, Water & Environment Centre (SWEC) meeting room, Adelaide University, Waite Campus Guest speakers to be advised.

The WMSSA Executive Committee welcomes new members and would like for you to come along to celebrate the Society's achievements of the last year. All positions are available for tenure as follows:

- President
- Vice-president
- Secretary
- Treasurer
- General executive committee members x 4

The WMSSA Excutive Committee encourages anyone new to the industry to apply for one of the available positions. We welcome fresh faces and encourage enthusiastic participation in our meetings and activities.

#### For more information please contact John Heap at wmssa01@hotmail.com.

# New Broom Management Manual



The new Broom Management Manual is now available to assist those managing these Weeds of National Significance (WoNS).

Compiled by H. Cherry, NSW Office for Environment & Heritage, as an update of the 2008 guide by J.R. Hosking and J.G Virtue, "Weed Management Guide: Scotch Broom, *Cytisus scoparius* and other introduced brooms". The manual contains information on biology, ecology and effective control of the brooms listed as WoNS, and highlights other new and emerging broom weed threats. It also includes advice on planning, holistic management, restoration and monitoring, as well as case studies that provide real examples of the successes and challenges of broom weed control.

The manual is freely available on the WoNS broom page http://www.weeds. org.au/WoNS/brooms/ and on the OEH broom page http://www.environment. nsw.gov.au/pestsweeds/Brooms.htm.

### New Book on Feral Cacti

### 'Feral Opuntioid Cacti in Australia. Part I. Cylindricalstemmed Genera: *Austrocylindropuntia*, *Cylindropuntia* and *Corynopuntia*'

R. J Chinnock (2015)

Published by the Herbarium of South Australia Journal of the Adelaide Botanic Gardens Supplement 3 (2015)

With sixty-nine colour pages, this book is an essential reference tool for land owners and managers, staff of government agencies, conservation groups, people involved in bushcare, and anyone concerned with identifying and eradicating weedy cacti. It will also be a valuable addition to libraries of ecologists and botanists, and people who are generally interested in cacti and succulents.

A field identification section will provide an easy means to identify the plants and the taxonomic section will contain detailed descriptions and notes on every species. Introductory chapters on opuntioid morphology, how to collect and prepare pressed specimens, dispersal and biological/chemical control, and a glossary complete the book.

The cost of the book is \$25 (incl. GST). More information and an order form can be downloaded from http://know.ourplants. org/cacti/.

### Feral opuntioid cacti in Australia

Part I. Cylindrical-stemmed genera: Austrocylindropuntia, Cylindropuntia and Corynopuntia

R.J. Chinnock





State Herbarium of South Australia



### 13th Queensland Weed Symposium

The program committee is pleased to announce Ninian Stewart-Moore as the first keynote speaker for the 13th Queensland Weed Symposium.

Ninian Stewart-Moore is a 3rd generation grazier situated west of Hughenden on the Mitchell grass downs and has spent the last 30 years eradicating Prickly Acacia on the families 46000ha property, and then continuing to maintain a (nearly) clean status. Currently, Ninian is Deputy Mayor of the Flinders Shire and is Chairman of the FSC Pest Management Advisory Committee, and recently appointed Chairman of Agforce's Weeds Working Group, as well as a member of QDAF's War On Western Weeds Advisory Panel.

Ninian has been closely involved in developing the Flinders Shire's Good Neighbour Program which has been written into the Shire's Pest Management Plan, and is in the early stages of implementation. The Good Neighbour Program is being viewed as a potential game breaker in turning back the spread of Prickly Acacia as well as other weeds.

The 13th Queensland Weed Symposium is being held in Longreach in Western Queensland. Visit www.qws2015.com for more information.

### Canadian Weed Science Society Workshop

### Knowledge Nexus: Applying Transdisciplinary and Systems Approaches for Sustainable Weed Management

### Alberta, Canada, 6-10 June 2016

- Are you enthusiastic about learning from, and working with, people from other disciplines?
- Are you looking for an opportunity to apply your expertise in a new context?
- Would you like the chance to explore how social science, agricultural and natural systems can come together to work more effectively?

Then this is the workshop for you! The Canadian Weed Science Society is looking for researchers and managers from a broad range of disciplines and systems to join their next international weeds workshop. Their ambitious goal is to make holistic weed management a reality by bringing together a diverse group of enthusiastic researchers and managers with expertise from within and beyond weed and invasive plant management

Questions that will be considered at the workshop:

- How can ecological, agronomic, socio-economic and political dimensions of weed and invasive plant management be simultaneously addressed?
- How can successfully engagement with societal stakeholders to better understand complex weed issues and how to solve them be undertaken?
- How can truly transdisciplinary research be achieved?
- Will a transdisciplinary approach provide different outcomes?

#### Interested in knowing more?

- Apply now! http://andinaalberta.weebly.com/participation.html
- Join the Canadian Weed Science Society mailing list
- Have your say on the program (email sonia.graham@unsw.edu.au)
- Visit the website for more information (http://andinaalberta.weebly.com)

#### Weed Management Society of SA Membership Form

The Weed Management Society of SA Inc. was formed on 15th October 1999, bringing together people actively involved in managing weeds and researchers with interests in protecting our agricultural and natural environment. The Society is a forum to share knowledge, debate issues and generate ideas, drawing on practical weed control experience and the latest research.

New members are always welcome, or simply come along as a visitor to public meetings. The Society's newsletter *WeedWise* is distributed by mail to all financial members.

Please tick relevant boxes, fill in your contact details and send to the address below (Note: GST is not charged by the Society)

Annual Membership with Plant Protection Quarterly Subscription: • \$90 standard, \$75 Concession/Student

- Annual Membership only:
- \$30 standard, \$15 Concession/Student, free for community groups

I want to become a member of the WMSSA and would like to receive the society's newsletter WeedWise by: 
abla mail 
bla email

- □ I enclose a cheque for \$ \_\_\_\_ (payable to Weed Management Society of South Australia)
- □ I have made an electronic payment of \$\_\_\_\_\_ to the WMSSA Account.

Account Name: Weed Management Society of SA Institution: Peoples Choice Credit Union BSB: 805-050 Number: 2378 7221 Reference: Your surname Payments by electronic transfer from accounts with People's Choice Credit Union will need to use: Account number: 2349916, First three letters of account name: "wee".

Name: Mr/Mrs/Miss/Ms/Dr Address:

Telephone Work: Facsimile Work: Email: Mobile: Home:

Forward with payment to: Secretary, WMSSA c/- Henry Rutherford, PO Box 517, Torrens Park, SA, 5062

#### **Upcoming Events**

The 25th APWSS Conference "Weed Science for Sustainable Agriculture, Environment and Biodiversity"

13-16th October 2015, Hyderabad, India.

http://117.240.114.67/apwss/

18th New South Wales Biennial Weeds Conference "Weeds - The Future: Innovation & Adaptation" 12-15th October 2015, Cooma, New South Wales

http://nswweedsoc.org.au/ conferences/2015\_conference/

WMSSA Annual General Meeting 29th October 2015 Soil, Water & Environment Centre (SWEC) meeting room, Adelaide University, Waite Campus

WMSSA 5th South Australian Weeds Conference 4th & 5th May 2016 Plant Research Centre, Waite Campus, Urrbrae

Canadian Weed Science Society Workshop Applying Transdisciplinary and Systems Approaches for Sustainable Weed Management 6-10 June 2016, Alberta, Canada

7th International Weed Science Congress 19-25th June 2016, Prague, Czech Republic http://www.iwsc2016.org/

20th Australasian Weeds Conference September 2016, Perth, Western Australia http://www.wswa.org.au/20awc.

#### www.wmssa.org.au

President: John Heap - john.heap@sa.gov.au

Secretary: Henry Rutherford - wmssa01@hotmail.com

WeedWise Editor: Leah Feuerherdt - Leah.Feuerherdt@sa.gov.au