



Issue 6
February 2008

weeds of national significance

National Blackberry Program

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DEFEATING THE WEED MENACE 2007-2008

BLACKBERRY PROJECTS UNDERWAY

The National Blackberry Taskforce (NBT) was successful in receiving funding for four blackberry projects in 2007-2008. All projects are well underway and are described below. Projects 1 and 2 have Steering Committees to guide the national application of the projects. The NBT also supported a project application for the eradication of blackberry on Kangaroo Island South Australia. This project was successfully funded and received \$81,440 for the removal of all currently known infestations of athel pine, blackberry and gorse.

1. National Blackberry Best Practice Management Manual

This project consolidates all information on the control and management of blackberry in a concise management guide. The manual will contain clear information on the biology and ecology options for blackberry management in various situations and case studies. This project is being undertaken by the NSW Department of Primary Industries-Weed Extension and Training Team and the manual will be available later in the year. The team will be contacting many of the blackberry experts and people with on ground knowledge to provide the most current information on blackberry management.

2. Developing Blackberry Management Priorities from the Local to the National Level

This project will develop a priority setting decision support system(DSS) for blackberry management that can be used on a regional scale. This decision support tool can be used by organisations such as NRM / CMA's and local councils to determine the optimum blackberry management for their area in terms of; prevention, eradication, reduction, impact reduction, containment, asset protection and biological control. The DSS and report will be available in the later half of this year.

3. National Blackberry Strategic Management (Eradication and Control) of Isolated and Outlier Infestations

This project aims to eradicate and contain blackberry in outlying sites that threaten agricultural production and environmental values. The project will focus on remote sites in south-west Tasmania, Warwick and Stanthorpe shires in Queensland and regions of Western Australia which are experiencing an expansion of blackberry.

4. Increasing Public Awareness of WoNS through National Blackberry Species Identification Workshops

This project is running five blackberry species identification workshops nationally. This will lead to increased capacity of weed professionals and community members to identify the blackberry species in their area; increased community capacity to map blackberry species and more targeted and effective blackberry control programs. Through value adding, an additional four workshops are being run to meet the demand. A total of 91 participants have already attended 5 workshops across NSW, Qld and WA.

For more information about these projects contact the National Blackberry Co-ordinator.

Penny.Richards@dpi.vic.gov.au



Maria Johns, Robin Coles (from SA) and Alex Arbuthnot (Chair of the NBT) at the National DSS workshop held for Project no.2 on 19th November 2007.

Photo: Penny Richards

We would love to hear of any blackberry projects and success stories especially those implementing actions in the National Blackberry Strategy (2001)

Please contact:

Penny

Penny.Richards@dpi.vic.gov.au



An Australian Government Initiative

DEFEATING
THE WEED MENACE

Supported by the State Government of Victoria



Department of
Primary Industries



National Blackberry Program

NEW DEVELOPMENTS IN BLACKBERRY MAPPING USING REMOTE SENSING

Geospatial technologies such as Remote Sensing, Global Positioning Systems (GPS) and Geographic Information Systems (GIS) can be used for weed management mapping and monitoring. Remote Sensing (the use of image data from a remote airborne or satellite platform) is a cost effective means of mapping and monitoring weeds.

Can remote sensing be used successfully for mapping and monitoring blackberry in Australia? Are there any successful examples. If so what factors influence mapping success?

Satellite Mapping of Blackberries in Nungatta Valley, NSW

The Genoa River Interstate Liaison Committee (GRILCO), a partnership between industry, the Victorian and NSW Governments and private landholders, have used remote sensing (satellite images) to map the extent of blackberry infestations in the Nungatta

valley, a sub-catchment of the Genoa River. The study area is 6414 hectares and is located just north of the NSW / Victorian border in south eastern Australia.

This work is part of GRILCO's \$215,000 Defeating the Weed Menace Project (2006-2009).

The principle objective of mapping is to determine the total area affected by blackberries for planning control programs and to monitor effectiveness of control work.

To map blackberry infestations, National Parks NSW used a helicopter to fly predetermined transects of major blackberry infestations and record point locality data using a GPS. The point locality data was then handed on to AGRECON, Canberra to commence satellite imagery analysis. Sample sites were also recorded by a 4WD (December 2006, 106 sites). Blackberry presence or absence at a site and the dominant canopy vegetation was recorded, eg. pasture, bracken/sedge tussock, kunzea/wattle, eucalypt, blackberry or willow. Site position was recorded using a GPS.

Two SPOT 5 satellite images were used to reduce the study area into a manageable number of like vegetation classes. A summer image, taken on the 1 March 2005 and a winter image, taken on the 15 August 2005, were used. They each capture visible and near infra-red light in four bands at 10m pixel resolution. ARCVIEW 3.3 GIS software was used to generate a 1:25,000 map of the 10 blackberry vegetation classes and a map of the probability of blackberry occurring in each of the 56 classes.

The two maps, when read in conjunction, give the total area of land affected by blackberries in the Nungatta valley as 1677+35 hectares, an astounding 26% of the valley. Blackberries occur in five structural

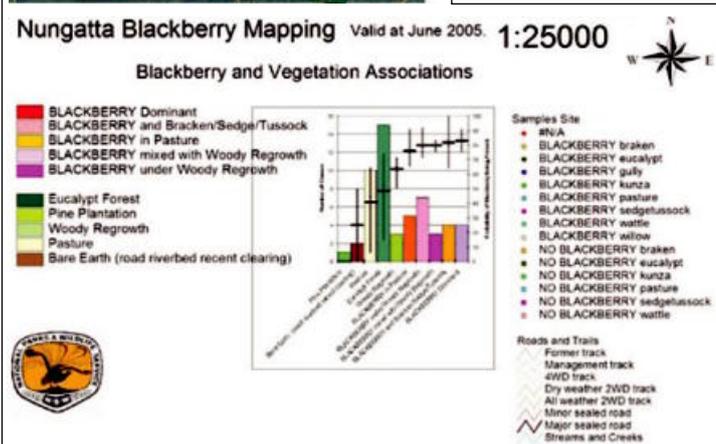
vegetation associations and dominate most wetlands and gullies. Steep slopes and woody vegetation restrict efficient and safe chemical control using vehicles. The total area that could be effectively treated by a vehicle based operation is 642 ha. This includes wetlands (115ha) that can only be treated chemically in very dry times when there is no standing water. A further 325ha is on the limit of safe operating for 4WD vehicle spray units. The remaining 700ha of land affected by blackberry can only be controlled using biological or pedestrian based chemical operations. This includes 121 ha of stream and their steep banks where standing water and steep slopes compromise effectiveness of environmentally safe spraying operations.

Max Beukers of the NSW Parks and Wildlife Division said 'The method for mapping blackberries using satellite data appears to work well.. It was found that the vehicle based sampling is more accurate and cost effective than the aerial surveying' ..

In the 2006/07 season, 954.2 hectares of blackberry and 20.6 km of blackberry infested riparian areas were treated in the Nungatta sub-catchment. It is envisaged that new satellite images will be used after three years to assess the success of the works across Nungatta valley.



Helicopter surveying of blackberry, Wild Bullock Swamp, Nungatta Station NSW.



Refs: Beukers, M. Blackberry Mapping in the Nungatta Valley Summer 2006-07. A Report Prepared for GRILCO by NSW NPWS.

A list of selected references on blackberry mapping using remote sensing is available at <http://www.weeds.org.au/WoNS/blackberry>

A National Remote Sensing Blackberry Mapping Forum will be held in 2008. For more information contact the National Blackberry Coordinator go to the website:

<http://www.weeds.org.au/WoNS/blackberry>

National Blackberry Program



LAUNCH OF COMMUNITY BLACKBERRY PROJECT AT COTTONVALE QLD.

Stanthorpe Shire Mayor Cr Glen Rogers and the National Blackberry Coordinator Penny Richards launched a Community Blackberry Control Project at a Blackberry Field day at Cottonvale in Southern Queensland on Fri 30th November 2007.

The Stanthorpe Shire has joined forces with the Queensland Murray Darling Committee and the National Blackberry Task Force to highlight the need for blackberry control.

Mayor Glen Rogers said "The Shire has received \$14,000 from the Australian Government's Defeating the Weed Menace Programme for a community awareness and education program for blackberry control. With additional in kind contributions of \$38,000 from a range of stakeholders this community based project highlights the importance of working together to control blackberries". Penny Richards then added "this project is strategically very important to stop the northern spread of blackberry in Australia. This project aims to contain, control and eventually eradicate blackberry from the Shire".

The field day was attended by 42 landholders from across the shire and featured the launch and demonstration of a new Quik Spray unit that the Shire has purchased for the project. Stanthorpe Shire Local Laws Officer Mr Kevin Pettiford said "the field day was a chance for landholders to learn more about blackberry control and to try using the new Quik Spray unit that we have for hire". He said "the landholders were very impressed with how easy it is to use". Staff from the various agencies involved and the National Blackberry Coordinator Penny Richards were on hand to answer many questions about blackberry control.

The informative Field day also featured presentations on electric fencing and electrification of sections of the rabbit fence. A talk by the Moreton Darling Downs Rabbit Board highlighted the importance of blackberry removal as it is a vital harbour for rabbits and other pest animals.

For further information on the project contact Mr Kevin Pettiford at the Stanthorpe Shire on (07) 46 815535.



Stanthorpe shire landholders try out the new Quik Spray unit (with water) for controlling Blackberry.

Photo : Penny Richards

TASMANIA JOINS NATIONAL BLACKBERRY BIOCONTROL PROGRAM

The first official release of eight additional strains of the leaf-rust fungus *Phragmidium violaceum*, as part of the National Blackberry Biocontrol Program, occurred in Tasmania at a field day at Forth (North central Tasmania) on 27th of November 2007.

At the field day, held in collaboration with the Cradle Coast NRM, CSIRO staff demonstrated release techniques for the additional strains of the fungus.

While this rust fungus has been present in Tasmania for some time, probably as a result of its illegal introduction to Australia in the 1980s, the release of the eight additional rust strains should enhance biocontrol because, as a group, they can infect a wider range of blackberry biotypes. These releases should also increase genetic diversity in the population of the rust and contribute to the emergence of fitter strains over time.



John Lester (CSIRO) demonstrating techniques for release of the eight additional strains of the Blackberry leaf-rust fungus at Forth in North central Tasmania.

Photo: Greg Taylor

Before being approved for release, the rust strains were rigorously tested in CSIRO's Canberra Containment Facility to show they were not a threat to commercial or native *Rubus* species.

Begun in 2006, this three-year research partnership between CSIRO, the Victorian Department of Primary Industries and the University of Tasmania, is funded by the Australian Government's Department of Agriculture, Fisheries and Forestry's Defeating the Weed Menace Initiative.

CSIRO is inviting more Tasmanian landowners and managers to join the fight against European blackberry. Release kits with easy-to-follow guidelines will be again available in spring 2008. Dr Louise Morin, of CSIRO Entomology and the Cooperative Research Centre for Australian Weed Management, says they are inviting more expressions of interest in order to identify suitable release sites.

The Blackberry Biocontrol Program will continue on a national scale until May 2009, with more releases and field days planned in the States most affected by European blackberry. Research is also underway to confirm establishment and persistence of the additional strains following their release at a series of selected sites and measure their impact on blackberry.

Land owners or managers in Tasmania who want to lodge an expression of interest in releasing the rust should contact:

Ms Ruth Aveyard

Ph: 02 6246 4348;

Email: Ruth.Aveyard@csiro.au or

Mr John Lester

Ph: 02 6246 4325 or 02 6246 4340;

Email: John.Lester@csiro.au

Further information and an Expression of Interest form is available at

<http://www.ento.csiro.au/weeds/blackberry/eoi.html>



National Blackberry Program



Alex Arbuthnot Chair of the NBT (left) and Greg Taylor (Regional Weed Coordinator-Cradle Coast NRM) collect blackberry samples near the blackberry rust release site on the Forth River in Tasmania.

Photo:
Penny Richards

QUOTABLE QUOTES FROM THE WONS NATIONAL BLACKBERRY TASKFORCE TOURS.

'You have to know your beast !'

Lee Fontanini, WA (NBT Community Rep. Private Land)

'It takes 6 minutes for a Blackberry seed to pass through a silvereye!' (bird!)

John Moore – NBT WA rep

"You have to take away their excuses"

Greg Dight – Pest Management Officer-Warwick Shire Council (explaining his approach to encouraging landholders to control their blackberries).

FUNDING OPPORTUNITIES

Recreational Fishing Grants Program- Victoria

The 2007/08 Recreational Fishing Grant Program is now open!

Applications close on Friday 29 February 2008.

If you've got a great project that will improve recreational fishing in Victoria (this may involve removal of blackberry!) then apply for a Recreational Fishing Grant.!

The purpose of the grant is to provide funding to improve recreational fishing in Victoria such as recreational fishing access and facilities (not boating related infrastructure);_ recreational fisheries' sustainability and habitat improvement(including fish stocking);_recreational fisheries research; and _recreational fisheries-related education, information and training. Incorporated, statutory and government bodies and registered companies are eligible to apply for grant funding. For more information see

:<http://www.dpi.vic.gov.au/>

Or contact

Robert Krix

Tel. (03) 9658 4369, or

email robert.krix@dpi.vic.gov.au



Tim Rudman NBT Tas Rep (left)and Jonah Gouldthorpe (Weeds Coordinator- NRM South) collecting Blackberry samples for species identification near Huonville Tasmania.

Photo:
Penny Richards

NEXT ISSUE

Features:

Our native Rubus species

Blackberry (Rubus fruticosus L. agg) listed as a potentially threatening process in Victoria.

Baw Baw Shire's Blackberry Control Program

Blackberry species mapped in WA

UP COMING EVENTS

February 2008

Monday 25th - 26th

National Blackberry Taskforce meeting, Australian National Botanic Gardens Canberra

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