Natural Resources
SA Arid Lands

April 2013
Issue 64

ACROSS THE OUTBACK

Science shapes water policy for Great Artesian Basin

Two Australian Government-funded research projects that were launched at the GAB Researchers' Forum in Adelaide in March will help shape future water management for the SA Arid Lands region.

Dalhousie Springs

Their combined scientific findings significantly update previously held knowledge about the water balance of the underground reservoir of the Great Artesian Basin (GAB) and the all-important pressure dynamics, particularly for water users in South Australia's remote region.

Representing the most comprehensive study of the GAB since 1980, the research will inform the scheduled 2014 revision of the *Far North Prescribed Wells Area Water Allocation Plan* led by the SA Arid Lands Natural Resources Management Board.

They will also be invaluable for South Australia – and the nation – in setting future policy positions against a backdrop of progressing sustainable development that considers environmental, economic, cultural and social impacts.

Water supply demands on the Great Artesian Basin will intensify in future years due to the projected expansion of mining, petroleum and thermal energy industries, population increases and the impacts of climate change in the South Australian Arid Lands region.

Then there are the existing water users to consider – pastoralists, townships and a growing tourism industry.

Having strong science that helps us understand the dynamic relationship between the hydrogeology and ecology of the GAB will assist governments, industry and communities make water use decisions that ensure future development co-exists with the region's natural assets.

Find out more on page 06.

ILUA negotiation: a pastoralist perspective

Douglas Lillecrapp & David Hanna, Executive Officer

An Indigenous Land Use Agreement (ILUA) was negotiated for Todmorden pastoral lease in 2006, the first of its kind in South Australia. Todmorden Station lessee, Douglas Lillecrapp, took the time recently to reflect on the process to negotiate the ILUA and discuss its benefits for the station.

Douglas and his family were first encouraged to negotiate an ILUA in 2002 following a presentation given by Andrew Secker (then of the Native Title Unit, State Attorney General's Department) at a Pastoral Board Meeting at Hawker.

'We wanted to address Native Title issues on Todmorden in a way that would respect our pastoral activity but also preserve our strong relationship with the Yankunytjatjara/Antakirinja people.'

Through the ILUA, the lessees, the Yunkuntjatjara/Antakirinja Group and the South Australian Government, now have a position on staying, camping, hunting and cultural activities on Todmorden Station.

While the negotiations were challenging and took over three years to complete, the Lillecrapp family strongly felt a need to do it as the landscape had changed after the Mabo decision and the passing of the Australian Government's *Native Title Act 1993*.

'Our family had a strong relationship with the Yankunytjatjara/Antakirinja people and we felt it was very important to maintain that relationship into the future, built around respect, trust and goodwill,' said Douglas.

Douglas was also keen to negotiate an outcome while the older Traditional Owners and his parents were still alive.

'They all have strong attachments to the land but there is also a high degree of mutual friendship, work ethic and respect and we felt a negotiated agreement – between ourselves as lessees, the Native Title Claimants and the State Government of SA – would provide the best outcome.'

'We received strong support from the South Australian Farmers Federation but the size of the process meant it soon became clear that to negotiate a successful outcome we would need to employ our own independent legal counsel.'

Dealing with Aboriginal heritage issues was also challenging, but as negotiations continued all parties developed a stronger understanding and were able to come to a position.

Being the first pastoral lease in South Australia to negotiate an ILUA did have advantages especially with regard to funding support from the State and Australian Governments, funding which is now harder to obtain.

And, through the ILUA, Section 47 of South Australia's *Pastoral Land Management and Conservation Act 1989* was further clarified: 'It means only the Yankunytjatjara/Antakirinja people have the traditional rights on Todmorden,' said Douglas.

'Aboriginal people from other areas of Australia, who are not bound by the ILUA, have the same rights as anybody else on the pastoral lease – they have to have the permission of the pastoral lessee or the Minister for access to the property.'

As lessee, Douglas is also protected from personal liability under Section 46B of the *Pastoral Land Management and Conservation Act 1989* from people exercising their ILUA rights on Todmorden.

Other benefits include providing clarity about the practical implications of Native Title rights and assistance in managing issues under South Australia's *Aboriginal Heritage Act 1988* including identifying heritage protection issues and processes.

ILUAs can also set out a process for resolving disputes that may occur and there is potential for Aboriginal employment in related work such as kangaroo harvesting.

So do the Todmorden negotiations provide a possible template for other pastoralists?

'Todmorden negotiations were seen by others as a possible pastoral ILUA model and while we didn't necessarily view it that way, we did share the information with others after we negotiated the agreement.' said Douglas.

Funding and time permitting, Douglas recommends ILUAs to other pastoralists commenting that a pastoral enterprise could become difficult to operate without one.

'An ILUA definitely lays out how to deal with Native Title issues on the ground like access rights – including notification and hunting – and dealing with Aboriginal heritage and cultural issues.

'Obviously an ILUA doesn't solve everything, but it is a good framework to work from.'

Further information
For further information on ILUAs, see *Across The Outback*, April 2012, www.saalnrm.sa.gov.au or visit the South Australian Native Title Resolution website

WHAT IS AN ILUA?

A voluntary agreement between a native title group and others, Indigenous Land Use Agreements (ILUAs) are arrangements that pastoralists and native title groups may find beneficial as they provide an opportunity to clarify relationships, roles and responsibilities of each party about the use and management of land and waters.

Within legal limits, an ILUA allows the parties to negotiate flexible agreements to suit their particular circumstances and can be negotiated over areas where native title has, or has not yet, been determined, including areas where there is no current native title claim.

South Australia has a strong record of finalising ILUAs.

IMPORT THE HAY, NOT THE PESTS

Pastoralists are advised to contact Natural Resources SA Arid Lands before importing hay into the region to prevent the introduction and spread of pest plants and animals (eg rats, snails or insect pests).

The *Natural Resources Management Act 2004* provides for the prevention or control of pest plant and animal species that adversely affect the environment, primary production or the community.

Further information
Contact the Biosecurity team, Natural Resources SA Arid Lands 8648 5300

PASTORAL BOARD AND UNIT CONTACTS

The Pastoral Board of SA
Level 1, 1 Richmond Road
KESWICK SA 5035
(GPO Box 1047, Adelaide SA 5001)

General enquiries
Phone 8303 9751
Fax 8303 9320
Freecall 1800 678 447

Presiding Member
Geoff Mills

Pastoral Board matters
David Hanna 8226 2127

Public access to pastoral lands
David Oag 8648 5174

Lease assessments
Craig Baulderstone 8303 9752

Lease inspections and tenure
Chris Turner 8303 9755

Supplementary feeding of stock

David Hanna, Executive Officer

Lessees are advised that the Pastoral Board has updated its policy on supplementary feeding of stock.

The objective of this policy is to enable pastoralists to provide supplementary feed to stock on a temporary basis to assist with stock management, while maintaining the condition of the land and the use of the land for pastoral purposes.

Approval from the Pastoral Board is required to provide supplementary feed to stock for a period of more than six months and when the stock are not being fed at a single location in a paddock, or in a yard, or in a confined area of 10 hectares or less.

There are three common situations where supplementary feeding of stock (through hay and other fodder) is undertaken on a pastoral lease.

Feeding of stock during extended dry periods

The Board accepts the use of supplementary feeding to maintain breeding stock during extended periods of rainfall deficiency.

However, the Board does not permit the use of supplementary feeding to maintain non-breeding stock.

Good management should anticipate the likelihood of acute forage deficiency and areas likely to be affected should be de-stocked well beforehand. This strategy should prevent the need to undertake emergency agistment or stock sales, or to provide supplementary feed to maintain stock on the lease.

Supplementary feeding is, at best, an emergency measure which is impractical to continue over a long time period, and it will increase the severity of the stock grazing impact on the condition of the land and the vegetation.

Calving or lambing

The Board accepts the use of supplementary feeding to assist with the management of breeding stock pre- and post-calving/lambing, provided that overall stock levels are not increased.

Stock management

The Board accepts the use of short-term supplementary feeding to assist with stock management activities such as weaning, preparing stock for sale, transporting and moving stock, and for holding stock in yards for other management purposes.

Further information
Download the full supplementary feeding policy at www.environment.sa.gov.au/Conservation/Managing_natural_resources/Rangelands_Pastoral_Program/Pastoral_Board

Pastoral Board meets with station owners in Coober Pedy

Five representatives from Kokatha, Billa Kalina, and Bon Bon Stations attended the Pastoral Board's open forum on Wednesday 10 April in Coober Pedy.

The land managers joined Pastoral Board members, supporting Natural Resources SA Arid Lands staff, and an Australian Government representative.

Geoff Mills, Presiding Member of the Pastoral Board, opened the forum with an overview of the Pastoral Board's strategic priorities, water point development guidelines, and Indigenous Land Use Agreements.

This was followed by an update from Chris Turner (Senior Pastoral Inspector, Natural Resources SA Arid Lands) on the Pastoral Board Lease Assessment and Inspection Programs.

The lessees then discussed with the Pastoral Board:

- the impact of mining activities on water supplies (such as the drawdown of aquifers)
- the importance of working proactively with mining companies and the Department of Manufacturing, Industry, Trade, Resources and Energy (DMITRE) in the early stages of mining development on a pastoral lease
- the opportunities available through the Australian Government's carbon farming initiative
- wild dog baiting and the importance of working with your neighbours in a coordinated approach to extract the most benefit, and
- support from the SA Government in negotiating and finalising Indigenous Land Use Agreements.

The Pastoral Board appreciated the input from the land managers and will follow up on the issues raised. Thanks to the Mud Hut Motel and John's Pizza Bar.

Further information
David Hanna, Executive Officer, Pastoral Board

YOUR CHANCE TO MEET THE BOARD IN MARREE

Pastoral Board Open Forum
4 June 2013, Marree

Land managers who missed the Coober Pedy forum are invited to attend the Pastoral Board's Open Forum on 4 June in Marree.

This is your opportunity to talk to Board members in an informal setting about topics such as the Lease Assessment and Inspection Program, Indigenous Land Use Agreements, the Board's strategic priorities, water point planning guidelines, or any other topic you might like to discuss.

The Pastoral Board will be writing directly to pastoral lessees in the surrounding districts of Marree to invite them to the Open Forum.

The Forum will start at 6pm and will conclude with dinner at about 7:30pm.

To RSVP...
Contact David Hanna, Executive Officer 8226 2127 or email david.hanna@sa.gov.au so that the Board can cater for numbers.

Cooper Creek workshop

Thursday 13 June • Innamincka Hotel

Understanding the Cooper Creek: aquatic ecosystems in arid environments

This free workshop is for people interested in the management and protection of the iconic Cooper Creek environment.

Find out the latest information on how the Cooper Creek has responded to the recent 'boom' conditions, including:

- fish and the importance of refuge waterholes
- the effects of the floodwaters on birds and vegetation
- how important wetlands can be protected
- what's happening with visitor information.

Be involved in workshopping what this new information means for your industry or group.

Dinner is included on the Thursday evening.

Register now!

Contact Henry Mancini, Natural Resources SA Arid Lands, Water Projects Officer 8648 5300 or henry.mancini@sa.gov.au

The workshop is sponsored by the SA Arid Lands Natural Resources Management Board

Hawker Bestprac Forum

Looking Beyond the Horizon
Friday 31 May 2013, 9am-4.30pm. Hawker Sporting Complex

Pastoralists in the SA Arid Lands are encouraged to attend a one day forum to discuss the uncertainties around climate, markets, and land management in terms of the future and performance of their business.

The forum will discuss topics that are important for looking 'beyond the horizon' of your business and help to improve your business confidence.

Topics include:

- Understanding climate and environmental management factors
- Wool production and marketing
- Grazing management practices and monitoring
- Industry updates
- Remote monitoring
- Succession planning in the pastoral zone

Registration is $55 per participant.

The event is sponsored by Bestprac and the SA Arid Lands Natural Resources Management Board.

To RSVP
For more information or to register visit the Bestprac website www.bestprac.info or contact Pene Keynes, Forum Coordinator 8841 4500. RSVPs must be received by 22 May.

Participants are encouraged to attend a dinner (at their own cost) the night before the forum (Thursday 30 May) at the Hawker Hotel.

Apply for $$ for your community NRM projects

Volunteer groups, Aboriginal communities, Progress Associations, and other community groups and land managers in the SA Arid Lands are invited to apply for funding for their NRM projects.

Community Environment Grants
Grants between $5,000 and $50,000
Applications due: 8 May 2013

Community NRM Grant
Grants up to $30,000
Applications due: 17 May 2013

Volunteer Support Grant
Grants up to $5000
For volunteer groups, such as Friends of Parks, who are undertaking projects on land which is managed by the Department of Environment, Water and Natural Resources.
Applications due: 17 May 2013

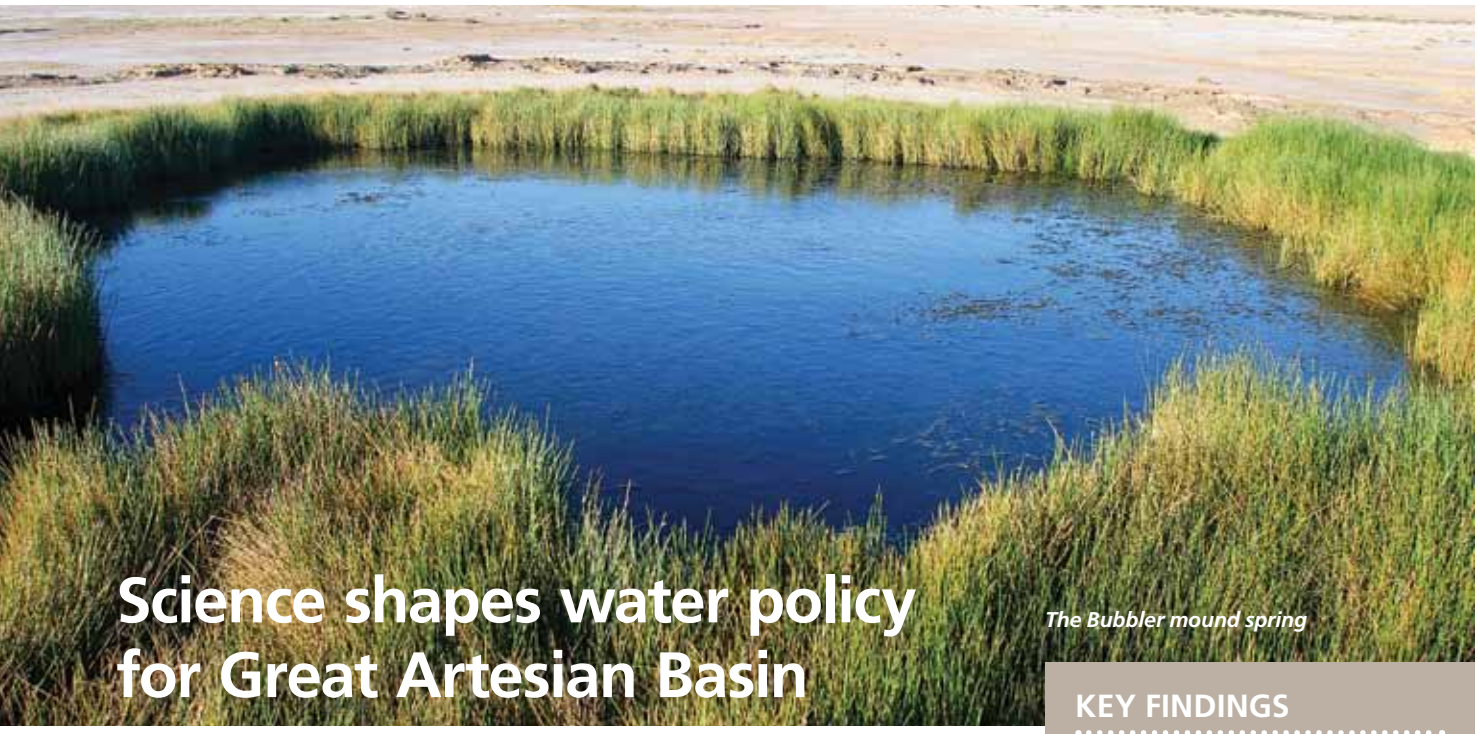
A range of activities are usually considered including trials of sustainable farming practices, undertaking pest plant and animal control, tree planting, maintenance programs,and protecting native habitat.

Past recipients of funding include the Blinman-Parachilna Pest Plant Control Group, Friends of Innamincka, and the Nipapanha community for their pest control, revegetation and landcare efforts.

The grants have been made available through the Australian Government's *Caring for Our Country* program and the South Australian Government.

For further information and application forms, visit: www.nrm.sa.gov.au/Funding/CommunityGrants.aspx and www.nrm.gov.au/funding/environment/ceg/index.html

NEED HELP WITH YOUR APPLICATION?
Community groups are encouraged to seek guidance on their applications from Community Engagement staff, Natural Resources SA Arid Lands 8648 5300



Science shapes water policy for Great Artesian Basin

The Bubbler mound spring

Continued from page 01

About the GAB Springs Project

The *Allocating Water and Maintaining Springs in the Great Artesian Basin* project has advanced our understanding of the south-western margin of the GAB's water balance and pressure dynamics, and the interdependent relationship between aquifer pressure and the flow patterns of natural mound springs of the western GAB.

As water users in the SA Arid Lands region are well aware, the primary GAB environmental assets are natural mound springs, many of which support unique species and ecosystems, and are reliant on aquifer pressure for flows to continue.

The project successfully mapped about 5,000 spring vents (both flowing and extinct) in South Australia and extended knowledge of the high genetic diversity present in the GAB springs – 25 new species of invertebrates were discovered that can be found nowhere else in the world.

With the interdependent relationship between the hydrogeology of the underlying aquifers and the health of natural mound springs based on natural flow rates now better understood, it will be possible to put in place management practices that preserve these natural assets.

The comprehensive mapping of the springs included baseline measurements of vegetation growth around major spring groups.

Ongoing monitoring that measures any decline or increase in surrounding vegetated wetlands will be an indicator of any change in flow rates from the natural spring vents.

Importantly, this monitoring will enable South Australia to identify potential impacts of water affecting activities and future developments in the region.

It also helps us to put in place effective mitigation strategies and adaptive management practices that will maintain healthy spring-dependent biological communities.

And it means that future groundwater extractions and development in the region can now be more accurately targeted towards areas that do not support high value ecosystems or other groundwater dependent assets.

In short, the outcome will be improved sustainable water allocation planning.

The four-year project was delivered by the South Australian Arid Lands NRM Board with $17 million funding from the Australian Government's National Water Commission, and in partnership with Flinders University, Adelaide University, CSIRO, the SA Department of Environment, Water and Natural Resources, and the Northern Territory Department of Natural Resources and Environment.

Get a copy of the reports

To find out more contact the Natural Resources SA Arid Lands Water team 8648 5300 or visit www.saalnrm.sa.gov.au where there are links to seven volumes of research reports dealing with the hydrogeology of the western GAB, spatial science and ecology. Volume 7 is a summary document.

KEY FINDINGS

- The overall recharge and inflow into the western GAB is less than assumed or estimated by previous studies and much of the inflow along the western margins occurred in a geological period more than 10,000 years ago under a very different climate than today
- The western GAB is in a state of natural, long-term pressure decline
- There is a large volume of water in storage in the western GAB and continuing inflows into South Australia from the eastern States that occur over long periods of time
- Diffuse leakage (water permeating slowly upwards where it is evaporated from the soil) is much less than is estimated in the current *Far North Prescribed Wells Area Water Allocation Plan* but new findings show vertical leakage via preferential flow paths is much greater than previously estimated
- Around 5,000 spring vents (both flowing and extinct) have been mapped with elevations of the outflow points recorded
- High genetic diversity and a high degree of endemism is present in the GAB springs with 25 new species of invertebrates discovered that can be found nowhere else in the world.

Minister Ian Hunter, Travis Gotch (Natural Resources SA Arid Lands), Senator Amanda Rishworth and Andy Love (Flinders University) at the launch in Adelaide

About the GABWRA

The *Great Artesian Basin Water Resource Assessment* (GABWRA) assessed water resources across the entire GAB to better understand its hydrogeology in light of recent extractive industry development across the basin.

The research will strengthen the science underpinning decisions about coal seam gas, coal mining and their impacts on the GAB water resources.

The key finding was that vertical groundwater movement is more important than previously thought and this will undoubtedly have future management implications that guide decision making by governments, industry and the community.

Conducted over two-and-a-half years, the $6.25 million project was commissioned by the Australian Government and led by the CSIRO in collaboration with Geoscience Australia.

Further information
Visit www.csiro.au/organisation-structure/Flagships/Water-for-a-Healthy-Country-Flagship/Sustainable-Yields-Projects/Great-Artesian-Basin-Assessment.aspx

CARBON FARMING SERVICES GET A FUNDING BOOST

The SA Arid Lands Natural Resources Management Board has obtained over $500,000 in funding under the Australian Government's Carbon Farming Futures Extension Outreach Program.

The Board will oversee the development and delivery of extension services within the SA Arid Lands that provide trusted, industry specific support to land managers regarding climate change and opportunities within the carbon economy.

The new service will build on the Carbon Farming Initiative workshops that have been rolled out across the SA Arid Lands region in the last 12 months (see below and p. 11 for upcoming workshops).

The Australian Government's Carbon Farming Initiative is a voluntary carbon offsets scheme which provides opportunities for landholders to participate in carbon markets.

Examples of the activities which are being considered are carbon storage in plants through the management of grazing pressure and decreasing emissions through the management of fire regimens and destruction of feral ruminants.

The successful projects were announced in April by Senator Joe Ludwig, Minister for Agriculture, Fisheries and Forestry.

CARBON FARMING WORKSHOP IN YUNTA

Residents of the North East Pastoral district are encouraged to register their interest in a Carbon Farming Initiative workshop planned for Yunta in May/June.

Contact Louise Gavin, NRM Officer (North East Pastoral) 8648 5300

THE GAB

One of the largest groundwater reservoirs in the world, the GAB lies beneath 22% of the Australian landmass, stretching from Queensland's wet/dry tropics to the arid areas of South Australia's Lake Eyre region.

It underlies not only much of the Lake Eyre surface catchments, but most of the Queensland portion of the Murray-Darling Basin and a large part of the plains country of northern New South Wales.

HAVE YOUR SAY

The SA Arid Lands Natural Resources Management Board plans to start conversations with all water users in the region about water management issues and concerns later this year.

This information will inform the Board's review of the *Far North Prescribed Wells Area Water Allocation Plan* in 2014.

More information about ways to interact with the Board will be featured in a future edition of *Across the Outback*.

Further information
Contact the Water Program Manager, Natural Resources SA Arid Lands 8648 5300

Wheel Cactus collapse by Cochineal, Gum Creek Station

COCHINEAL

Cochineal (*Dactylopius* spp.) damages Opuntia species by attaching to their succulent pads and feeding on their juices. Tens of thousands of pinhead-sized nymphs secrete a white waxy substance to protect them from the elements and gradually suck the cacti dry. When they are ready to disperse, the nymphs produce long filaments that catch the wind and carry them away to new plants.

10-years on – is biocontrol the future?

Lorraine Edmunds, Blinman-Parachilna Pest Plant Control Group Coordinator

For the past 10 years, the Blinman-Parachilna Pest Plant Control Group (BPPPCG) has been controlling the spread of Wheel Cactus on nine properties in the North Flinders Ranges, successfully treating hundreds of thousands of plants with herbicide.

But the work is labour-intensive and funding-dependent.

Since 2003, more than $800,000 in State and Australian Government funding and $500,000 (in-kind) from landholders and volunteers has been invested controlling Wheel Cactus across the BPPPCG's 400 square kilometre project area.

And, to maintain control, all treated areas will have to be revisited every four years for a further two decades, to prevent recruits from fruiting and adding seed to the soil seed bank.

The program may not be sustainable for a second decade.

Meanwhile, specialist cactus-feeding insects like Cochineal and Cactoblastis, natural enemies of cactus in their native habitats, have been present in the project area for many years.

Up until now, they have not spread widely and only rarely killed individual plants.

However, after some recent success, the Group believes insects, rather than herbicides, may offer the greatest hope for achieving long-term, cost-effective and sustainable control.

Cochineal: the tiny insect sucking Wheel Cactus dry

Cochineal is now killing Wheel Cactus on a scale unimagined a decade ago with thousands of plants now in a state of collapse in an area of the North Flinders where the densest Wheel Cactus infestations occur.

The BPPPCG were encouraged to persevere with Cochineal after a strain tested in a three-year trial on Gum Creek Station killed many cactus plants and spread well beyond the trial area.

Since then Cochineal has been manually spread onto more than 1,000 Wheel Cactus plants across a 12 square kilometre heavily infested area on Gum Creek and Alpana Stations.

By distributing Cochineal on such a large scale, populations have increased rapidly, greatly improving the odds that the tiny wind-dispersed insects will land on and colonise other Wheel Cactus plants.

During a recent inspection of the release area, almost all plants were observed to have Cochineal present and, most encouraging of all, recruits, some barely five centimetres tall have been infected, and many have died.

So where to from here?

Like any biocontrol, the bigger the host population the more spectacular the impact.

While the Cochineal will be self-sustaining in the short-term, the real challenge will be keeping it going once Wheel Cactus numbers have really collapsed.

The BPPPCG will be looking at establishing nurseries to cultivate this strain, particularly because it works so well on recruits.

And they are keen to find the same sort of solution for the Prickly Pear which is in big numbers on Angorichina Station.

For more on Wheel Cactus control see p.16


Roger and his Cactoblastis trial

Roo shooter trials Cactoblastis

For the past fifteen months, retired kangaroo shooter Roger Christopherson has been waging war on Opuntioid cacti at his Stirling North home, breeding Cactoblastis in a purpose-built cabinet.

After first encountering cactus on Partacoona Station, north of Quorn, Roger concluded that spraying would never deliver long-term control of cacti across such big landscapes.

If landholders are to eventually achieve control, he believes that they need a natural enemy that will persist in the landscape and move through infestations, attacking established plants and small recruits.

By accident, Roger stumbled across Cactoblastis cocoons in Prickly Pear near his home in Stirling North and, after identifying and reading about them, Roger began a project that now occupies most of his waking hours.

Sourcing cocoons from a number of local sites, Roger is testing the larvae on different species of cacti collected from the Flinders Ranges and Upper Spencer Gulf.

Through experimentation in his home laboratory environment and then testing in the field, Roger hopes to identify provenances of cactus-feeding insects that are vigorous and resilient, and that will deliver long-term control of different Opuntia species.

Cactoblastis from Roger's lab was released by the Blinman-Parachilna Pest Plant Control Group in March on a dense infestation of Prickly Pear on Angorichina Station, east of Blinman.

The site will be monitored to determine its effectiveness.

CACTOBLASTIS

Cactoblastis larvae (*Cactoblastis cactorum*) damage Opuntioid cacti (eg Prickly Pear, Wheel Cactus) by tunnelling into the fleshy pads and creating open wounds. If there are enough larvae present they will eat the pad from the inside out. The larvae may also introduce plant pathogens that infect the plant causing it to rot. The larvae make silk cocoons, from which small grey moths emerge to lay distinctive curved eggsticks.


Cactoblastis larvae

FURTHER INFORMATION

For further information on the Blinman-Parachilna Pest Plant Control Group and its activities, contact Lorraine Edmunds lorraineedmunds@internode.on.net

PMRR SITE INSPECTION & INVOICE DUE BY 30 MAY

Land managers and community groups who are undertaking pest control and other activities as part of the Pest Management and Rangelands Rehabilitation (PMRR) program are reminded that the deadline to complete works was 30 April and invoices must be sent to Natural Resources SA Arid Lands staff by 30 May to ensure payment.

With funding for the project ceasing on 30 June, it is important that participants arrange inspection of their work and issue their invoice by 30 May as there is no ability to carry over the funds into the new financial year.

The PMRR program is funded by the Australian Government's *Caring for Our Country* program.

Further information
Contact the Natural Resources SA Arid Lands' NRM Officers 8648 5300

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The *Dingo Update* brings you the latest news from the Dingo Research Project, an initiative of the SA Arid Lands Natural Resources Management Board, as well as ongoing management news. North of the Dog Fence the Board is investigating the impacts dingoes have on beef cattle in baited and unbaited areas to determine optimum dingo management strategies. South of the Dog Fence, the Board and sheep industry fund the landholder-initiated *Biteback* program for dingo control, a critical program for protecting the region's sheep industry.

News from South of the Fence

Landholder participation in *Biteback*

The table below shows a breakdown of landholder participation in *Biteback*, per land tenure, in the SA Arid Lands region that is south of the Dog Fence.

The results show that in 2012, across the *Biteback* area, the highest participation rates per land tenure were properties managed for tourism (100%), National Parks (75%), and properties managed for primary production (65%).

Properties managed for mining (57%) and conservation purposes (50%) and Aboriginal-managed land (0%) had the least participation in *Biteback*.

Across all land tenures, 2012 saw a 63 per cent participation rate from all districts south of the Dog Fence which was just short of the target of 70 per cent.

Nearly 100,000 individual baits were purchased and/or injected.

In 2013, the landholder participation target is 67 per cent with each individual district also set specific targets to meet.

It is important to note that these results only relate to landholders who participated in *Biteback's* 1080 injection services for ground baiting in 2012. It does not include properties which participated in Biosecurity SA's aerial baiting trial in April 2012.

All landholders in the *Biteback* target area are reminded that where aerial baiting occurs, it should take place in conjunction with ground baiting. To maximise wild dog control across the region, ground baiting should be carried out twice a year in combination with trapping and opportunistic shooting.

Figures showing the 2012 breakdown of landholder participation in *Biteback* per district, and target participation rates for 2013, are available on request.

Look out for news from Biosecurity SA on the results of the April-May 2013 aerial baiting program in the next edition of *Across The Outback*.

FURTHER INFORMATION

Contact the Dingo Management team, Natural Resources SA Arid Lands 8648 5300

TENURE	LANDHOLDERS	PARTICIPATING	%
Primary producers	146	95	65%
Government (National Parks)	4	3	75%
Conservation groups	8	4	50%
Mining	7	4	57%
Tourism	1	1	100%
Aboriginal	5	0	0%
Other	1	1	100%
TOTAL	172	108	63%

Lesley of VOR Management

LOCAL KANGAROO PROCESSORS RECOGNISED FOR *BITEBACK* SUPPORT

Two kangaroo processors were both acknowledged in April for their contribution to the *Biteback* program for wild dog control.

Dew's Meats of Orroroo and Port Augusta-based VOR Management regularly provide kangaroo hearts and meat at little or no cost to themselves ensuring that landholders have several sources of meat available for their baiting programs.

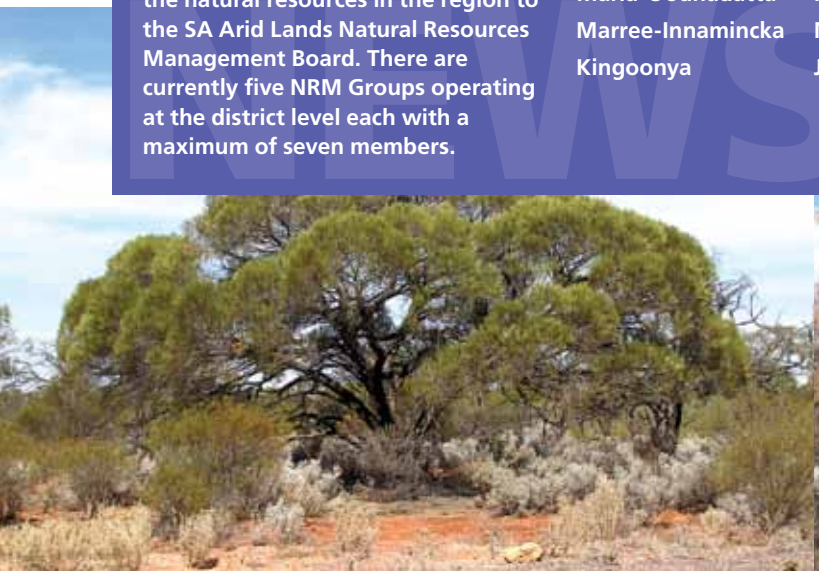
Both processors were acknowledged with a letter of thanks from Trevor Naismith on behalf of the SAAL NRM Board, and a certificate of appreciation from the NRM Groups participating in *Biteback*.

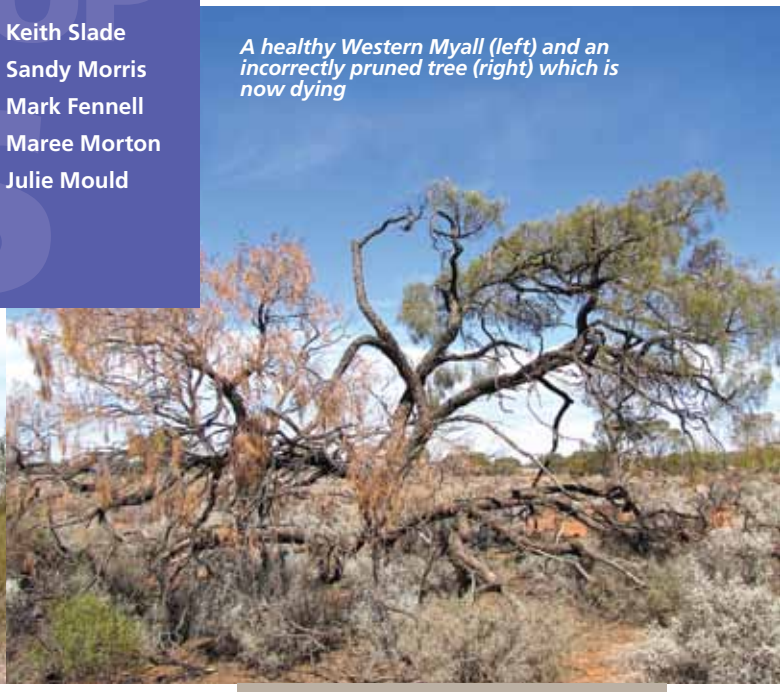
NRM GROUP NEWS

NRM Groups are the on-ground contact for the SA Arid Lands community, feeding district information or concerns relating to the natural resources in the region to the SA Arid Lands Natural Resources Management Board. There are currently five NRM Groups operating at the district level each with a maximum of seven members.

NRM GROUP CHAIRS

North Flinders	Keith Slade
Gawler Ranges	Sandy Morris
Marla-Oodnadatta	Mark Fennell
Marree-Innamincka	Maree Morton
Kingoonya	Julie Mould





A healthy Western Myall (left) and an incorrectly pruned tree (right) which is now dying

News from Kingoonya

Myall matters

With the cooler weather upon us, Natural Resources SA Arid Lands reminds visitors to the region of their responsibilities when collecting firewood.

Wherever you are travelling – be it on the bitumen, through a pastoral lease, or within a park – it is important to get the landholder's consent before collecting fallen timber.

Not only is this common courtesy but it also gives the landholder an opportunity to let you know if there are any restrictions about collecting fallen timber on their land.

Removal of wood from a living tree is only legal with an exemption under the *Native Vegetation Act 1991*. This is in addition to having the landholder's permission.

The reminder comes following reports of inappropriate or illegal cutting down or pruning of living Western Myall trees in the Kingoonya district.

Improper pruning of Western Myall limbs can cause the tree to go into decline and slowly die over several seasons.

Further information
If you see people removing or pruning native vegetation, or see loads of freshly cut wood being carted along local roads contact the Sustainable Industries team, Natural Resources SA Arid Lands 8648 5300. To find out more about exemptions under the *Native Vegetation Act 1991* visit www.nvc.sa.gov.au or call 8303 9777.

NEW WEAPON FOR WEED CONTROL

Land managers in the Kingoonya district now have access to a spray unit for their weed control thanks to the Kingoonya NRM Group and their district weed strategy planning.

The new 600 litre quikspray unit (with 100 metre hose reel) is available to all Kingoonya land managers for control of weeds like Buffel Grass and invasive cacti. It is only to be used for water-based mixes, not diesel.

To borrow the unit contact Bon Bon Station 8672 8932.

This article was initiated by the Kingoonya NRM Group.

WESTERN MYALL

Western Myall (*Acacia papyrocarpa*) is a long-lived, iconic arid zone tree which provides important shade for stock, and shelter, food, and/or nutrients for many native plants, birds and animals.

They can be slow to recruit (ie. reproduce saplings), needing the right combination of conditions, including high enough rainfall but low enough grazing pressure.

Given that these trees are often several hundreds of years old, and recruitment of new trees is inhibited by rabbits and other grazing animals, we cannot afford to lose any more through deliberate cutting.

How can you help?

- Avoid damaging living trees
- If you are collecting dead wood, always make sure you leave some behind, whether standing or fallen – don't leave an area bare
- Avoid removing hollow logs – these have excellent habitat value, and take a very long time to grow
- Look for alternative sources for your firewood (eg sustainable plantation timber, or recycled timber such as old fence posts and off-cuts).

Further information
www.environment.gov.au/land/publications/firewood-brochure2.html

ABORIGINAL NRM NEWS

HOW CAN WE HELP YOU?

Our goals as Aboriginal Engagement Officers are to help the SAAL NRM Board better engage with Aboriginal communities in the Arid Lands and to provide an opportunity for Aboriginal communities to successfully achieve their project outcomes. Does your community have a project in mind? Call 8648 5300.

Witjira National Park

NEW CHAIR FOR WITJIRA

The Witjira Co-management Board welcomed their new chairperson in April: Grant Pelton.

Grant takes over from Trevor Naismith who has held the role since the Witjira Co-management Board's inaugural meeting in 2008.

Grant is currently the Director of Regional Coordination for the Department of Environment, Water and Natural Resources where he has responsibility for volunteers, asset management, health and safety, compliance, and public lands. He has a strong background in fire ecology and fire management and planning.

Grant's role with the Witjira Co-management Board is his first in working with traditional owners and he looks forward to working with other Board members to continue to improve Witjira National Park and meet the aspirations of the Board.

CARBON FARMING INFORMATION SESSIONS

Members of Aboriginal communities are invited to register their interest in attending an information session on carbon farming. Sessions are still being planned but are expected to be held in Port Augusta, Coober Pedy and Leigh Creek in May.

To find out more about CFI, see p. 07.

Register your interest today!

Contact the Aboriginal Engagement team, Natural Resources SA Arid Lands 8648 5300

Aboriginal Partnerships strategy

The SA Arid Lands Natural Resources Management Board released its draft strategy for building Aboriginal partnerships in April, opening it to a period of public consultation.

The publication – *Everybody's land: A strategy for Aboriginal Partnerships in the SA Arid Lands Natural Resources Management Region* – is being developed with the input of a range of Aboriginal and regional stakeholders and is built on feedback from prior engagement activities.

It describes the SAAL NRM Board's vision, guiding principles, strategies and success measures when working with Aboriginal partners and participants across the SA Arid Lands region.

The draft strategy takes into consideration the needs of Aboriginal groups, and provides a basis for all other stakeholders to understand what will be required when working on country with Aboriginal groups in the region.

The Natural Resources SA Arid Lands' Aboriginal Engagement team are accepting feedback on behalf of the SAAL NRM Board. Copies of the draft strategy are available at www.saalnrm.sa.gov.au or contact 8648 5300.

Diesel generator survey

Residents of the SA Arid Lands are invited to add their diesel generator data to a survey of diesel generation and loads in South Australia.

South Australians have long known the high cost of power generation in remote areas. As diesel fuel prices continue to rise, the viability of incorporating renewable generation in diesel mini-grids is worth re-examining.

The survey is being conducted by IT Power on behalf of the SA Department of Manufacturing, Innovation, Trade, Resources and Energy (DMITRE) in preparation for the Australian Government's Regional Australia's Renewables program which aims to demonstrate the viability of renewable energy in regional and remote locations.

Where respondents permit, some of the survey information will be made publicly available through an interactive map on a SA Government website. The consultants will also undertake modeling of the performance and economics of a variety of stand-alone power systems. Data will be accepted until 24 May.

Further information
If you would like to add your diesel generator data to the survey visit tinyurl.com/SADieselGenSurvey or contact Nic Jacobson (IT Power) 0449 921 899 or nic.jacobson@itpau.com.au

INTERESTED IN A GREENHOUSE NRM SCHOLARSHIP?

Land managers in the SA Arid Lands who want to increase their knowledge and understanding of climate change are encouraged to apply for a GREENHOUSE 2013 natural resources management scholarship.

This scholarship gives you full access to the GREENHOUSE 2013 conference in Adelaide as well as a special climate change awareness program delivered by the CSIRO and the Bureau of Meteorology.

Applications are due Friday 17 May 2013.

Further information
www.sa.gov.au/climatechange

Strzelecki Track floodway upgrades

Floodway cement stabilising work will upgrade several existing creek crossings on the Strzelecki Track and enhance general public safety.

The work will upgrade the existing creek crossings at Mundy Creek, South Creek, Taylors Creek and Yerelina Creek on the Strzelecki Track, east of Lyndhurst.

This will reduce storm water damage to the road during rain events, providing improved accessibility and safety for travellers.

The works commenced in mid March 2013 and are expected to be completed by the end of May 2013, weather permitting.

Department of Planning, Transport and Infrastructure (DPTI) advises that speed restrictions will apply at the proposed creek crossing works to ensure the safety of road workers and the travelling public.

The $1.2 million works are funded by the Australian Government's *Roads to Recovery Program*.

DPTI thanks motorists for their patience while these important safety upgrades are carried out.

Further information
For community and road user enquiries email dpti.northern&westernregion@sa.gov.au or call 8648 5211

ARE YOU ON THE *ACROSS THE OUTBACK* MAILING LIST?

Across the Outback is a free publication that is issued to 1500 individuals or organisations with a stake or interest in the SA Arid Lands region.

If you would like to join the mailing list or update your details please contact the editor jenny.barker@sa.gov.au.

Please include your name, mailing address and email address (to receive electronic notification).

CALL FOR CONTENT

Across the Outback June 2013 edition

Content due by COB 24 May 2013

Contact jenny.barker@sa.gov.au or 8463 3354 for further information.

6TH LAKE EYRE BASIN CONFERENCE

17-19 September 2013

Port Augusta

Land managers and other interested community members in the SA Arid Lands region are encouraged to attend the 6th Lake Eyre Basin Biennial Conference in September.

Be a part of this rich community conversation about the management of the Basin's water and related natural resources, and explore what we can do, as a connected community, to manage the system sustainably.

The conference will link science with management through a program of oral presentations, landholder stories, poster displays, small group discussions, social gatherings and local field trips.

To register...

Registrations will open in May. For program and registration information visit www.lebmf.gov.au/conference/index.html or call the Lake Eyre Basin Secretariat 02 6275 9348

Simpson Desert re-opens

Tony Magor, District Ranger (Desert Parks)

The Simpson Desert Regional Reserve and Conservation Park re-opened again on 16 March after its fifth annual summer closure, and this annual occurrence now seems to have general acceptance amongst visitors.

With the Simpson Desert straddling two states and a territory, its closure during summer was first discussed after a meeting between Parks and emergency services agencies from South Australia, Queensland and the Northern Territory.

Over summer, temperatures in the Park frequently soar into the high 40s and sometimes into the low 50s, threatening the lives of tourists – especially international visitors – and those who may need to save them.

Dunes are soft and constantly changing shape, increasing the chance of vehicles becoming bogged and people becoming stranded, and high temperatures also increase the risk of vehicle failure.

During the proposed 1 December to 15 March closure period, it was estimated that no more than 35 vehicles would cross the Simpson, causing minimal impacts to local businesses.

The first closure of the Simpson Desert Regional Reserve and Conservation Park occurred in the 2008-09 summer after a period of public consultation.

Queensland Parks and Wildlife Service also closed the Munga-Thirri (Simpson Desert) National Park during the same period.

The closure attracted a lot of media attention, and created online forums, some people even claiming that we were hiding aliens in the desert!

Large closure signs are located in strategic locations in NT, Qld and SA to inform visitors of the closure and the risks of travelling in the Simpson Desert during that period.

During the 2012-13 closure, Park staff at the adjacent Witjira National Park, and businesses at Mt Dare and Birdsville, did not report any visitors crossing the Simpson Desert.

The annual closure will continue into the future.

Further information
Contact the Desert Parks team, Natural Resources SA Arid Lands 8648 5300

2013 OUTBACK RACES CALENDAR

Yunta Races	**4 May**
Oodnadatta Races	**11 May**
Marree Picnic Races & Gymkhana	**7 Jun**
Innamincka Races	**31 Aug-1 Sep**
Birdsville Races	**6-7 Sep**
Glendambo Gymkhana	**12 Oct**
Blinman Races	**19 Oct**

Simpson Desert

DON'T FORGET YOUR DESERT PARKS PASS

If you are planning to travel to the national parks and reserves in the SA Arid Lands you may need to purchase a Desert Parks Pass.

The Desert Parks pass provides 12 months unlimited entry (and camping where permitted) to the Simpson Desert Conservation Park and Regional Reserve, Innamincka Regional Reserve, Coongie Lakes National Park, Lake Eyre National Park, Witjira National Park, Tallaringa Conservation Park and Wabma Kadarbu Mound Springs Conservation Park (camping not permitted), as well as a comprehensive 4WD handbook and maps, hints, tips and attractions.

A Desert Parks Pass is a condition of entry for the Simpson Desert Conservation Park and Regional Reserve or any travels east of Dalhousie Springs.

For further information, contact Natural Resources SA Arid Lands 8648 5300

Transferring livestock? Update the NLIS database

Land managers in the SA Arid Lands region are reminded of their responsibility to update the National Livestock Identification System (NLIS) database when receiving stock (sheep, cattle or goats) on their property.

Every week, in South Australia, about five per cent of cattle that are moved from one property to another, to the saleyard or to an abattoir, aren't registered to the property from where they have been moved.

Yet, without accurate and timely updates to the NLIS database, its integrity is compromised and our ability to trace animals that may be diseased or stolen, or are otherwise of interest, is diminished.

Whether you have purchased bulls or rams; bought breeding or finishing animals after drought; or returned animals from agistment, *you* are responsible to ensure details of this movement are recorded on the NLIS database.

Do not assume that someone else has done the transfer for you, but if you are relying on someone else check the database to make the transfer has been completed.

In the case of cattle, notifications of transfers must be made to the database within two working days of the cattle arriving on the property and, in the case of sheep or goats, within seven working days of the animals arriving on the property.

In order to successfully complete an NLIS transfer you should:

- have an NLIS database account
- have a list of scanned tag numbers, or visual tag records for cattle
- know the Property Identification Code (PIC) of the property from where the animal(s) came and the date that the animal(s) were moved
- have the associated national vendor declaration (NVD) or other valid movement documentation on hand.

Movement documents must be kept for seven years.

Failure to record the transfer of stock on the NLIS database can attract a fine of $385 or up to a $5000 penalty if this is not done accurately.

Further information
If you have any questions about the NLIS or database transfers contact Trent Scholz, PIRSA Animal Health Officer 8648 5166 or 0427 970 453

SHEEP DISEASES – THE FARMERS' GUIDE

Land managers are encouraged to pick up a copy of a free 'glovebox guide' which details a range of sheep diseases which may be encountered in South Australia.

It has an A-Z list of sheep diseases (many with photos) and outlines their causes, symptoms, diagnosis, treatment and prevention.

It also contains sheep health management guides and a list of who to contact when you need assistance.

The guide was produced by Biosecurity SA with the assistance of Australian Wool Innovation, Meat and Livestock Australia, and the SA Sheep Industry Fund.

To get your copy, contact PIRSA Port Augusta 8648 5166

SETTING UP AN NLIS ACCOUNT

To set up your free NLIS database account visit the Meat & Livestock Australia website www.nlis.mla.com.au or contact NLIS Ltd on 1800 654 743.

If you are unclear on how to record your transfer, there are guides in the 'Help Tools' section of the website to help you.

Your NLIS account will also give you access to some carcass feedback information if you were the breeder of the animal, or if you were the last owner before slaughter, even if you sold the cattle through the saleyard.

It also allows you to receive email notifications if an animal registered to your PIC is transferred off with a different PIC of consignment – and is therefore useful in locating straying animals.

ACROSS THE OUTBACK

Across the Outback is prepared and edited by Jenny Barker, Senior Communications Officer, Natural Resources SA Arid Lands.

It is currently jointly funded by the SA Arid Lands Natural Resources Management Board; Department of Environment, Water and Natural Resources; the Pastoral Board; and Biosecurity SA (a division of Primary Industries and Regions SA).

Comments and suggestions are always welcome.

Please contact jenny.barker@sa.gov.au or 8463 3354

Damien wages a different war

Damien Healy has seen some action and crossed some pretty harsh country during his 37 years, having completed two tours of duty in Afghanistan with the Australian Army. But these days, he's part of a different war – a war on Wheel Cactus – and this fight is in the scenic but rugged terrain of the Flinders Ranges.

When Frank Bernhardt (Blinman-Parachilna Pest Plant Control Group (BPPPCG) contractor) contacted Damien in 2011, he found him in Adelaide fabricating and installing street signs and signs for fast-food stores.

Damien was not long returned from Afghanistan and he wasn't exactly enjoying his job. With the pair mates for some 20 years and both from Edithburgh, Damien needed little persuasion to return to the Yorke Peninsula to help out with Frank's pest control business.

'My first job was spent with eight other people, for one month, on my hands and knees,' said Damien. 'We were removing Boneseed seedlings, a Weed of National Significance, from Innes National Park – and there were thousands of them overtaking the native stuff.'

Frank soon commandeered Damien for the BPPPCG's work.

Frank had been working for the Group since 2004, undertaking Wheel Cactus control in the more inaccessible cliff-faces and high, steeply dipping slopes along the Blinman Pools walking trail in Parachilna Gorge – and, before long, he was lowering Damien down the cliff-faces to inject wayward Wheel Cactus.

Abseiling-delivered pest plant control is logistically challenging – all of the gear, including 200 metre lengths of rope, helmets, harnesses, knapsacks, injector guns and cordless drills, must be carried to the cliff-tops. A spotter helps abseilers navigate to the plants.

At once careful and courageous, this hazardous work suited Damien's temperament perfectly.

'I like to push myself to that point where I'm a little bit scared,' he said. 'I've been shot at and survived explosion attempts so it's not that hard to jump off a rope.'

But safety is paramount. Ropes can become tangled on rocks and other obstacles during descents, requiring a second attempt.

'If there's a plant that I can't get to safely, it's better to wait and get a safety line – it might take a bit longer but it's better than the alternative.'

Damien's had a few challenging moments though with dizzying heights, rockfalls and beehives.

'Frank called down to me once – 'Damien – rock coming down' – I thought it would be the usual rubble, but I looked up to see half a bag of concrete coming my way!'

The 10 kilogram rock landed right between his feet but, true to form, Damien had kept his cool: 'There's no point being stupid about it – you can't start panicking.'

The drops vary in height from smaller drops of up to 10 metres to many over 100 metres.

'The biggest drop I've done was 187 metres – and I also did a drop of 100 feet where I came across a couple of beehives!'

Across The Outback thanks Damien for agreeing to this interview. Damien would like to thank Lorraine Edmunds, BPPPCG Coordinator, for sourcing the funding to continue this work, Frank Bernhardt, and Aldo Caruso (Operation Flinders) for training him in abseiling, as well as all of those who contribute to the BPPPCG project.

In Afghanistan, Damien was a member of the 1st Reconstruction Task Force, a six month tour, and 1st Mentoring and Reconstruction Task Force, a nine month tour, both based in the Urizghan Province. He reminds people to think of the men and women doing the job in Afghanistan – 'you don't have to agree with what they do but you have to support them.'

Ultimately, Damien's just happy to get control of the cactus and make it to the bottom of the hill in one piece.

And while he confesses to having little interest in protecting the natural environment previously, he's become a bit of a weed warrior.

'I don't like weeds – cactus, Horehound, Pepper Tree, African Boxthorn – they're not meant to be here and if we let them go they'll overtake everything.'

For more on Wheel Cactus control see p.6