

ACROSS THE OUTBACK

Breakaways, north of Coober Pedy



New business opportunity for pastoralists to undertake conservation stewardship

Expressions of interest are being sought from pastoralists in the SA Arid Lands region who are interested in incorporating conservation land use on their properties in return for a financial incentive.

This new one-year stewardship trial – the first of its kind in South Australia – is being delivered by Natural Resources SA Arid Lands with assistance from the Native Vegetation Council.

It will provide a financial incentive to support landholders to diversify their pastoral business through conservation stewardship with the incentive designed to offset any impacts on pastoral production.

'In the boom and bust environment of the arid lands, diversification has become a key management strategy for pastoralists to reduce risk and to help safeguard against highly fluctuating incomes,' said Mr Stuart Paul, Regional Manager, Natural Resources SA Arid Lands.

'Pastoral landholders already undertake stewardship of the land in many different ways through sustainable land management

practices – this innovative new trial offers a new approach to assist pastoral landholders to protect significant biodiversity areas while offering a diversification opportunity.'

Through the program, areas set aside for conservation will provide long-term protection for our region's significant plants, animals and habitats and enable pastoralists to actively support their survival as part of a viable pastoral business.

The value of the incentive will be established through negotiation with the landholder and will depend on the term of the agreement and the characteristics of the land set aside for conservation.

'The program recognises that pastoralists are among the best placed to manage these areas with their intimate local knowledge of their land,' said Mr Paul.

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STOP PRESS

SAAL NRM BOARD ALLOCATES LEVY TO INCREASE WILD DOG CONTROL

The SAAL NRM Board has allocated an additional \$100,000 of its regional (land-based) NRM levy to assist land managers to control wild dogs.

The money will be allocated to funding a second full time wild dog officer for the region, bringing the total Board contribution to wild dogs in 2014/15 to \$180,000. This new position will primarily concentrate on supporting land managers inside the Fence to undertake wild dog control, but also to provide an annual bait service outside (north of) the Dog Fence.

The Board has also been charged by Livestock SA with the delivery of \$200,000 in State and Australian Government drought assistance funding to step up strategic management of wild dog impacts in the region.

At the October Board meeting the Board decided to allocate \$170,000 of these funds to activities inside (south of) the Dog Fence – this includes workshops to train land managers in trapping and the contract of a professional dog trapper. The remaining \$30,000 will be allocated to outside (north of) the Dog Fence to subsidise manufactured baits and to support the engagement of volunteer shooters.

The SAAL NRM Board also considered the SA Arid Lands Wild Dog Management Plan at its meeting – see p. 14.

Further details on the additional funding and the wild dog management plan will soon be available at www.naturalresources.sa.gov.au or contact

Natural Resources SA Arid Lands 8648 5300.

Drought assistance flows to Far North pastoralists

Drought-affected pastoral properties in the SA Arid Lands region will receive an additional \$100,000 support for water infrastructure projects with the SA Arid Lands (SAAL) Natural Resources Management (NRM) Board deciding to reallocate some of its NRM levy funding.

The Board made the decision at an out-of-session meeting in August allocating \$100,000 of its levy funds to support pastoralists to participate as part of the Far North Water Infrastructure Grant Scheme.

The additional funds are being used to bolster the \$300,000 committed by the Australian and South Australian Governments to support pastoralists to manage water resources during extended dry periods.

The scheme enables drought affected pastoralists in the Far North to apply for up to \$25,000 in grant funding to cover up to 50 percent of costs for eligible water infrastructure projects.

Examples of eligible projects that improve the supply and spread of stock water include:

- replacing or upgrading polypipes, tanks, bores, troughs or pumps, and other materials required for their installation
- freight to purchase and install equipment
- costs of professionals to install the water infrastructure.

'The SAAL NRM Board recognises that parts of the region haven't had decent rainfall since early 2012,' said Ms Janet Brook, Presiding Member of the SAAL NRM Board.

'Supporting the pastoral industry to remain viable and resilient during extended dry periods has a ripple effect through our region, safeguarding our industry and the health and wellbeing of our outback communities.'

The Far North Water Infrastructure Grant Scheme is being delivered by Livestock SA, with assistance from Primary Industries and Regions SA (PIRSA).

First grants issued

The first grants to assist drought-affected pastoralists in the state's Far North have been approved.

Five grants totalling \$123,000 will enable pastoralists to upgrade or establish new infrastructure so they can better manage stock watering and grazing during this and future dry periods.

'The prolonged dry conditions in the region have led to hardship for pastoral businesses, and the new stock water infrastructure will improve their future resilience and preparedness,' said Minister Bignell in announcing the successful grants in September.

The applications have been assessed for consistency with the policies of the Pastoral Board.

Applications for drought assistance grants will remain open until 31 December 2014, or until funds are fully committed.

Guidelines for the scheme and an application form are available at www.livestocksa.org.au

SA Arid Lands Natural Resources Management Board, Livestock SA, PIRSA, Australian Government



Where is your favourite place?
Why is it special to you?

What do you love about your area, town, place or patch?

How do you want the outback to look in 10 or 20 years?

What's your favourite thing to do on weekends? Why?



What do you love about your place? – your kids could win an iPad!

Children and teenagers from ages five to 17 are invited to share what it is they love about South Australia's outback – and the most creative submission will score an iPad.

The competition is part of the SA Arid Lands (SAAL) Natural Resources Management (NRM) Board's broader campaign 'It's your place' which was launched in July to encourage community to share what makes the region such a special place.

It is one of the first steps the Board is taking to work with the community to develop its new *Regional NRM Plan* which will set the region's priorities for the next 10 years.

The aim of the kids' competition is to connect with children of all ages who have a relationship with the region.

'It is important for the Board to engage with all its community, and this competition provides a unique way to hear from our future leaders,' said SAAL NRM Board Presiding Member Janet Brook.

'We would like them to think about what they do on weekends or on holidays – do they go to the Flinders Ranges to go rock-

climbing, perhaps they fish at Algebuckina Waterhole or go camping in the Gawler Ranges?'

'It might be their local footy club or a recent school trip they loved, or maybe they're more into the sights and sounds or plants and animals of our unique part of the world – whatever it is we want to know.'

And the competition's not just for outback kids: 'Many people holiday here and we recognise the outback and its many experiences hold a special place for visiting kids too.'

Creative competition entries are encouraged: 'We'd love to hear what our kids think the region will look like in 20 years – maybe we'll be visited by aliens? Or perhaps we'll be grappling with the effects of climate change.'

And kids are encouraged to take advantage of technology and the variety of media available.

'Anything goes really – a story, a poem, a photo, a video – just as long as it showcases South Australia's outback region and what makes it special to them.'

There are three age categories – 5-8, 9-12 and 13-17 – with the winner of each category winning a 16GB iPad; there are also prizes for the seven runners up.

The competition is now open and runs until 30 November. Winners will be announced on the Natural Resources SA Arid Lands website www.naturalresources.sa.gov.au/aridlands on 19 December.

The rest of the community are encouraged to continue sharing their values with the Board – visit www.naturalresources.sa.gov.au/aridlands to find out how.

SA Arid Lands Natural Resources Management Board



PASTORAL BOARD AND UNIT CONTACTS

THE PASTORAL BOARD OF SA
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PRESIDING MEMBER
Geoff Mills

PASTORAL UNIT LEADER
Chris Turner 8124 4957

PASTORAL BOARD MATTERS
David Hanna 8226 2127

PUBLIC ACCESS TO PASTORAL LANDS
David Oag 8648 5174

LEASE ASSESSMENTS
Gavin Baird 8463 4826

LEASE INSPECTIONS
Chris Turner 8124 4957 or Jeff Stringer 8648 5195

LEASE TENURE
Lyn Taylor 8463 3281

PASTORAL BOARD 2014

MEETING 145
Wednesday 10 December, Keswick

Feral goat holding applications assessed case by case

In response to land manager enquiries the Pastoral Board has adopted a *Feral Goat Holding Paddock Policy* to guide decisions about the holding of mustered feral goats awaiting transport.

Under the new policy land managers who plan to hold mustered goats must now apply in writing to the Pastoral Board addressing four important criteria including the duration of holding, the frequency of holding, the number of goats being held, and the area and location of the proposed paddock.

Land managers need to allow 90 days for applications to be considered by the Board at which time the Board will consider the sustainability and carrying capacity of the landscape by calculating the number of 'feed-days' available in the holding paddock.

Each application will be assessed on a case by case basis.

The *Pastoral Land Management and Conservation Act 1989* allows for the running of only sheep and cattle as part of a commercial enterprise; in other words it is illegal to run any goats (domestic or feral) on pastoral leases in South Australia.

However, the Board acknowledges that mustering of feral goats can contribute to a land manager's integrated control program and a reduction in the overall total grazing pressure of the property.

Where mustering occurs, goats still need to be removed or destroyed within six weeks of capture and the new policy goes further to detail the holding requirements.

The Feral Goat Holding Paddock Policy came into effect after it was passed by the Pastoral Board at its August 2014 meeting.

For further details regarding land managers' rights and responsibilities around goat removal; see *Across the Outback*, April 2014.

Further information

Contact Chris Turner, Pastoral Unit, 8303 9755

Pastoral Board

GET INVOLVED

Annual aerial goat removal occurs as part of *Bounceback's* activities.

There may be an opportunity to participate in the the aerial program in March 2015.

To register your interest contact the *Bounceback* team on 8648 5300.

WHAT'S THE COST?

Feral goats cost Australia an estimated \$25 million in lost production and management costs.

A 2011 Department of Environment, Water and Natural Resources survey estimates that there are about 380 – 400,000 feral goats in South Australia's pastoral zone contributing to land degradation by overgrazing pasture plants, browsing established trees and shrubs and preventing their regeneration as a result.

When plants die or are reduced by excessive grazing, erosion can increase significantly.

In addition, feral goat populations can increase by as much as 60-75% in one year when food is not limiting.



Dan Duval

...continued from page 01

The expressions of interest are open to registered holders of a pastoral lease within the SA Arid Lands region who are operating a grazing business. Other eligibility criteria will apply.

The financial incentive will represent fair value for any estimated foregone pastoral production and will be paid as a lump sum on signing of a contract.

Pastoralists who receive an incentive payment will sign an agreement which will be fixed to the property's lease for the remaining term of the lease, or a minimum of 17 years.

Landholders interested in participating will need to submit an Expression of Interest form by **19 December 2014**.

To find out more...

Contact Andrew Willson 8124 4735 or andrew.willson@sa.gov.au or your local Natural Resources Management Officer 8648 5300 to obtain an Expression of Interest package. Further information is also available at www.naturalresources.sa.gov.au/aridlands

Natural Resources SA Arid Lands, Native Vegetation Council

WHAT IS 'STEWARDSHIP'?

Stewardship is about the responsible use and protection of the natural environment through conservation and sustainable practices.

Local managers of natural resources are an integral part of landscapes they manage. In the pastoral arid lands there are relatively few people on the land who manage vast remote natural landscapes, so supporting stewardship is vitally important.

Pastoral landholders already undertake stewardship of the land in many different ways through sustainable land management practices including:

- participating in land restoration programs such as Ecosystem Management Understanding (EMU)TM
- establishing environmental management plans
- implementing pest plant and animal control programs

By focussing land management on special areas for biodiversity conservation, this incentive provides for a form of stewardship which recognises that pastoralists are providing broader benefits to society as a whole.

Natural Resources SA Arid Lands support a variety of land stewardship programs and opportunities – phone 8648 5300 for further information.

Fishy mystery deepens

Water contamination has been ruled as the cause of a mystery skin disease affecting the endangered fish species, the Flinders Ranges Mogurnda.

Water was tested from the Weetootla and Nepouie Creeks in the Vulkathunha-Gammon Ranges National Park after the 2010 discovery that one fifth of the adult Mogurnda (*Mogurnda clivicola*) were suffering from skin growths and discolouration.

The tests conducted by the Environment Protection Authority (EPA) found the general water chemistry similar to other streams in the region, and were able to rule out water contaminants or radioactivity with no substances found in the water that would contribute to the disease.



Flinders Ranges Mogurnda

THREATENED FAUNA



Dale McNeil, SARDI

Another possible cause of the skin disease is in-breeding as a result of the species' restricted range.

Drought is now also a significant concern for the survival of these fish with the EPA reporting the Nepouie Creek completely dry in 2012.

The Weetootla and Nepouie Creeks have been home to the only known populations of Mogurnda that occur in adequate numbers to sustain viable population sizes.

Continued monitoring of the remaining Weetootla population will be important.

Further information

The tests were part of the EPA/SAAL NRM Board's 2011-12 health check of the major rivers and key waterholes in the region. See *Across The Outback October 2013* for further information about the health checks; *Across The Outback October 2010* for further information about the Mogurnda; or contact Natural Resources SA Arid Lands 8648 5300.

Environment Protection Authority



Searching the leaf litter for Bronzebacks, Mount Willoughby Station

Bronzeback Legless Lizard

Volunteers key to success in elusive lizard search

Reece Pedler, Community Fauna Officer

Dedicated searching and hundreds of volunteer hours has paid off in the hunt for the elusive Bronzeback Legless Lizard with the species now likely to be more widespread than previously thought.

When the SA Arid Lands NRM Board initiated work on this poorly understood reptile in 2007 it was known from just a few sites in northern South Australia, there were only about 50 individuals recorded, and the species was listed as vulnerable to extinction.

Today, 30 new records of the species have been added to the national database – along with new information on its habitat and distribution – helping to build a clearer picture of the reptile.

The project employed a range of initiatives to search for Bronzebacks, including searching by Antakarintja volunteers in areas of promising habitat on their country, thousands of trap nights using buckets suspended in opal prospecting shafts near Coober Pedy, and the use of pieces of old carpet substituted as artificial habitats in which to detect the reptiles.

Key to the success of the work has been the long-term efforts of volunteers such as Tim Webb and Brian and Judy Underwood

who checked the traps set in the Coober Pedy mine shafts over five years. Through this work a handful of Bronzebacks plus a host of other interesting reptiles and small mammals were captured.

Shontelle Lennon also facilitated the involvement of fellow Antakarintja traditional custodians during multiple survey trips over three years, putting lots more dots on the map to fill in the gaps in their known distribution.

In combination with recent surveys over the border in the Northern Territory, it is now clear that this secretive critter inhabits the creeklines and hill slopes in an arc of scenic 'breakaway' country between Coober Pedy and Oodnadatta with a second population along the South Australian-Northern Territory border.

This new information suggests Bronzebacks are more widespread than previously thought, despite being exceptionally hard to find!

The work has also shown that the species may be susceptible to disturbance caused by mining, as well as trampling of their leaf litter 'mat' habitat by cattle, feral donkeys and kangaroos.

A big thanks to the many volunteers and landholders who participated in this work and who showed that volunteer effort, combined with a multi-pronged research method, can go a long way in uncovering the secretive lives of outback critters!

A peer-reviewed journal article on the species biology was published in the scientific journal *Wildlife Research* in October this year.

Further information

Contact Reece Pedler, Community Fauna Officer, Natural Resources SA Arid Lands, 8648 5300

SAAL NRM Board, Natural Resources SA Arid Lands, Australian Government



The distinctive Bronzedback Legless Lizard (*Ophidiocephalus taeniatus*) spends its life beneath the thick leaf litter 'mats' which accumulate under slow-growing arid zone trees such as Northern Myall (*Acacia calcicola*), Western Myall, (*A. papyrocarpa*), Gidgee (*A. cambagei*) and Mulga (*A. aneura*).

Here they feed on tiny insects in the decaying leaves and are renowned amongst biologists as painfully hard to find, with days of searching through leaf litter mats in appropriate habitat typically yielding few, if any captures.

Many of the trees which provide the best leaf litter habitat in these landscapes grow in creeklines and gullies.

Although dry conditions are the norm in these areas, rare catastrophes occasionally strike when water flows along them, sweeping away the leaf litter and any Bronzedbacks within!

It seems that Bronzedbacks overcome this by hanging on in minor creeks and gullies at the tops of the catchment, gradually colonising lowland sites between these infrequent flood events.



One of the seven orphaned Idnya

Hamish Bannister

Baby Idnya born in the Flinders Ranges

For the first time in about 150 years the Flinders Ranges is home to baby Idnya (Western Quolls).

The news of up to 60 juvenile Idnya is a terrific milestone in this ambitious trial reintroduction – a partnership between the Foundation for Australia's Most Endangered species (FAME) and the Department of Environment, Water and Natural Resources – which saw 41 Idnya released in their former homeland in April-May.

It is also a significant achievement for DEWNR's 22-year *Bounceback* conservation program.

The new arrivals were first discovered in June and July when the reintroduction team found that 12 females had an average of six pouch young each.

Since then the team has been tracking the female Idnya which have now deposited their pouch young in dens, where they will be weaned at between five and six months.

The reintroduction team hope that the population will grow faster than the number which are lost through predation and accidents.

Feral cats have been the main cause of mortalities to date with intensive monitoring throughout the trial showing that one quarter of the Idnya has been taken by cats since their release in April.

Indeed, seven juvenile Idnya were rescued from their nest hollow in September after their mother was killed by a feral cat.

They are being hand-reared with the help of the Adelaide Zoo and will be released back into the wild before Christmas.

While the death of the Idnya is disappointing, some deaths were expected as the animals adapt to their new habitat and predation is a natural and necessary process in sustainable natural populations.

The team is also collecting useful knowledge about the interaction between quolls and feral cats, breeding habits, food and habitat preferences, critical information for conserving this species in our state.

Thanks to the many volunteers, contractors, donors, land managers and partners of *Bounceback* and FAME for their support for this project.



FAME is leading the drive to raise approximately \$1.7 million over a five year period to support the recovery of the Idnya. They need your help to continue this vitally important project and make it the success it deserves to be. Donations to the Western Quoll project can be made by visiting fame.org.au/projects/western-quoll or contact fame@fame.org.au for more information.



Pest plants under the spotlight

Sixteen people gathered at Bon Bon Station in the Kingoonya district in late May for a weed workshop designed to improve community understanding, knowledge and awareness of several regional pest plants.

The event – held by Natural Resources SA Arid Lands on the Bush Heritage Australia property – included several guest speakers and demonstrations and covered a variety of weeds including the Prickle Bushes – Mesquite (*Prosopis* species), Parkinsonia (*P. aculeata*) and Prickly Acacia (*Acacia nilotica*) – Athel Pine (*Tamarix aphylla*), and various cactus (*Opuntia* and *Cylindropuntia* spp.) species.

Buffel Grass (*Cenchrus ciliaris*) was also a focus and a highlight was a presentation by Rod Cramer, a land manager from Temple Bar Station near Alice Springs who described his experience with the grass.

Buffel Grass is attractive as a pasture plant – it establishes easily, grows and matures rapidly, and produces prolific seeds with high dispersal ability; however, these same

traits mean it can establish quickly as a weed species.

For Rod the initial, short-term benefit of the plant for pasture has now been surpassed as it has taken over his property making it difficult for native grasses and trees to survive.

The group visited one of the Buffel Grass trial sites included in Biosecurity SA's three year research project (see box, p.09) where Troy Bowman, State Buffel Grass Coordinator, explained how the 10 three metre by 10 metre plots are being used to carry out various trials in the highway roadside location.

This was of particular interest to the group as transport corridors are the high risk pathways for the spread of Buffel Grass.

The long-term view of Buffel Grass was presented by Jodie Reseigh from Rural Solutions, with particular emphasis on its ecological impacts, the restoration of ecosystems and the lack of nutritional value of Buffel Grass.

Natural Resources SA Arid Lands would like to continue the community conversation about Buffel Grass and other pest plants and will hold another weed workshop in early 2015.

Further information

Contact Paul Hodges, Sustainable Landscapes Officer, Natural Resources SA Arid Lands, 8648 5300

Natural Resources SA Arid Lands, SAAL NRM Board, Australian Government



BUFFEL BUSTERS GET TO WORK

Perri Carter, Arid Recovery

Roxby Downs volunteer group, the Buffel Busters, spent two days in September removing Buffel Grass from a heavily infested creek line on Bon Bon Station. Working by hand, the group removed more than 50 large bags of Buffel Grass from the site double checking their work to ensure that outliers were not missed in the initial sweep.

The work contributes to Bush Heritage Australia's co-ordinated commitment to controlling Buffel Grass on the property.



New outbreak of rabbit calicivirus

Land managers in the SA Arid Lands region are again being asked to send samples from their rabbit haemorrhagic disease (RHD or 'calicivirus') killed rabbit carcasses to Biosecurity SA which is keen to track outbreaks of the rabbit biocontrol.

The call comes after dead rabbits from Kalabity Station in the North East Pastoral district, Yorke Peninsula, the South East, Eyre Peninsula and near Gawler tested positive for RHD.

The July RHD deaths from Kalabity Station and Bute also suggests the virus in some regions became active some weeks earlier this year.

Testing rabbit carcasses for RHD over the next few years is especially important to ascertain if a new Chinese strain of the virus, recently detected in NSW, has spread, and if it subsequently has more or less impact than the current variants of the original Czech strain.

This becomes especially informative for the proposed release of a Korean RHD strain by the Invasive Animals Cooperative Research Centre.

For the past 18 years, Biosecurity SA has been studying the impact and management of rabbits, including the genetic changes in the RHD virus in Australia where there is a rising resistance to the original Czech variant.

The research links with the Invasive Animals CRC's 'RHD Boost' program which has been importing new strains of RHD virus from Europe and Asia to test against Australian rabbits which have been developing resistance to the Czech strain, or which have been previously vaccinated by the non-lethal rabbit calicivirus (RCV-A1). (The RCV-A1 virus is believed to have come to Australia with the first rabbits, and rabbits that have been infected by it have about a 50% greater chance of survival if subsequently infected by RHD.)

In Europe and Asia, new RHD variants are reportedly out-competing the original classical RHD variants in the field and continuing to strongly suppress wild rabbit populations.

During testing the Korean strain has proven the most effective at killing rabbits that were previously infected by the partly protective non-lethal RCV-A1 virus, most common in the cooler wetter areas of Australia.

The CRC is currently working through the approval process to release this new RHD strain in the wild.

Biosecurity SA

BUFFEL GRASS TRIAL SITES TO INFORM BEST PRACTICE

Four herbicide trials have been established, monitored and treated in the SA Arid Lands and Alinytjara Wilurara NRM regions to help inform best practice management of Buffel Grass.

Trial sites are located at North Wells and Bon Bon Stations, the Arid Lands Botanic Gardens in Port Augusta and Umuwa in the Anangu Pitjantjatjara Yankunytjatjara lands. These sites were chosen to replicate the various situations in which Buffel Grass is found and include roadside, drainage line, conservation and township infestations.

Various treatments are being applied at different rates to test the effectiveness of foliar, granular and residual herbicides in controlling Buffel Grass. Burning in conjunction with follow up herbicide application will also be tested with a focus on how much regrowth is required to achieve control in addition to the use of surfactants for improved herbicide effectiveness.

In addition to the treatments, a range of monitoring has been undertaken to assess the success of each treatment in controlling Buffel Grass. Monitoring will be repeated annually over the next two years to assess the long term effectiveness of controlling mature tussocks and new germinations as well as their impact on native vegetation.

Biosecurity SA

SEND US YOUR DEAD RABBITS...

If you suspect rabbits on your property have died from RHD or you receive any reports of rabbits killed by RHD, or myxomatosis, contact Dr David Peacock, Research Officer, Biosecurity SA 0417 355 498 or david.peacock@sa.gov.au

David can advise on transport of any carcasses, livers (preferably) or leg bone samples.

RABBIT CONTROL

To keep rabbit numbers low, land managers should destroy warrens to reduce available harbour for rabbits. This is best done under dry conditions when the rabbits are few and underground, and to ensure an effective collapse of the warren structure. If you are concerned about rabbits on your property contact Natural Resources SA Arid Lands' Biosecurity Team 8648 5300 to discuss available management options.



A typical mound spring

New signs at Strangways Springs

Colin Harris, President, Friends of Mound Springs

Visitors to Strangways Springs on the Oodnadatta Track will come away with an improved understanding of the site’s historical, cultural and ecological significance after six new interpretive signage panels were installed in July.

The result of a partnership between the volunteer group Friends of Mound Springs (FOMS), the Arabana people and the SA Government, the new signs replace their aging and badly faded predecessors to tell the stories of the Overland Telegraph and the mound springs (see box).

FOMS members revised and updated the signage text while Natural Resources SA Arid Lands worked with Aaron Stuart, then Chair of the Arabana Aboriginal Corporation, to ensure the wording appropriately reflected the Arabana community’s traditional and ongoing association with the site.

The new signs were installed by FOMS members Bruce Gotch and Alan Williams on a bitterly cold July day when maximum temperatures over the inland struggled to reach double figures.

The new replacement panels were funded by Natural Resources SA Arid Lands and it is hoped that they will remain serviceable for the next six to eight years.

FOMS and Natural Resources SA Arid Lands would also like to acknowledge S Kidman & Co for the considerable funding and effort they invested in the 1990s to fence the mound springs and the ruins of the repeater station.



Colin Harris, President of FOMS, Alan Williams and Bruce Gotch with four of the six new panels

A RICH HISTORY

Both Strangways and the Peake are listed on the State Heritage Register because of their importance to the early operations of the Overland Telegraph.

With the successful completion of the Overland Telegraph in 1872, Australia was placed in almost instant telegraphic communication with Britain and Europe, a tremendous advance over the three to four months previously taken by sailing vessels.

This new technology required repeating of the morse code signal every 300 kilometres or so, and repeater stations were constructed and installed across the interior of the continent.

Two of the repeater stations in inland South Australia, Strangways and the Peake, were located on mound springs of the Great Artesian Basin.

The springs at both sites are also of considerable importance to the traditional owners, the Arabana people, and as isolated sources of fresh water in an otherwise arid environment they are of great scientific interest.



Members of the Australian Retired Persons Association translocating Cochineal

VOLUNTEERS AWARDED PREMIER'S CERTIFICATE OF RECOGNITION

The SA Arid Lands Natural Resources Management Board congratulates Blinman-Parachilna Pest Plant Control Group volunteers Ralph Abbot and Peter Trezise who have each been awarded the Premier's Certificate of Recognition for Outstanding Volunteer Service.

The Minister for Volunteers the Honourable Zoe Bettison MP attended the Toyota Landcruiser Club general meeting in July to recognise the Club's valuable volunteer work and present the awards.

Mr Abbot was nominated for his strong support of all environmental projects undertaken by the Club, and particularly for his strong leadership in cactus eradication in the Flinders Ranges on Gum Creek Station. Mr Abbot also organises additional cactus eradication work on Oratunga Station through the Overland 4WD Club.

Mr Trezise was nominated for being an outstanding role model in the Club's environmental projects. These included tree planting in National Parks, restoration of a heritage shepherd's hut on Willow Springs Station and cactus eradication at Gum Creek Station in the Flinders Ranges. Mr Trezise also volunteers with the Overland 4WD club and Friends of Flinders Ranges National Park.

Both men have contributed at least 450 hours of their time to various projects on-ground in the SA Arid Lands region over the past five years. This is the equivalent of 60 days of full time work each.

Ralph and Peter were proposed for nomination by the Toyota Landcruiser Club's Environment Officer Vince Monterola.



Cochineal in the cactus control toolbox

Lorraine Edmunds, BPPPCG Coordinator

Volunteers from the Australian Retired Persons Association (ARPA) are helping translocate Cochineal – a tiny cactus-feeding insect – across the North Flinders district, an approach that offers the Blinman-Parachilna Pest Plant Control Group (BPPPCG) a new weapon in its ongoing 'war' with Wheel Cactus.

In trials commenced on Gum Creek Station in 2008, the BPPPCG – a 10 year partnership between land managers and volunteer groups in the North Flinders district – identified a strain of Cochineal that was effective in knocking down and killing Wheel Cactus plants.

Although progress was very slow for the first three years, once the wind-dispersed Cochineal insects built up sufficiently large numbers, they began dispersing well beyond the initial trial area.

The Cochineal has been so effective that when ARPA volunteers recently visited the trial site to collect Cochineal-infected pads they failed to find any living Wheel Cactus material.

The volunteers had to walk some distance to find plants that were in a state of partial collapse, from which they could source Cochineal, cutting the infected pads from the plants and carrying them to vehicles in crates and buckets.

The infected pads were then transported to Alpina Station where the Cochineal was translocated onto 425 healthy Wheel Cactus plants, at sites where there were a significant number of young plants, or where, historically, there had been dense stands.

The volunteers also treated a further 534 plants using the standard procedure injecting Wheel Cactus stems and pads with neat glyphosate.

Meanwhile, other volunteer groups continue to undertake important follow-up work.

In early August, 15 volunteers from the Adelaide Bushwalking Club returned to Gum Creek Station to carry out stem injection for their fifth year.

Surveying steep hilly country covered with dense Native Pine, they found and treated 2640 Wheel Cactus, most of which were small plants.

Their findings reinforce just how important follow-up is – this area had been inspected and treated four years earlier.

Cochineal provides the BPPPCG with the best opportunity it will have to control Wheel Cactus on those properties where infestation has been greatest, finding plants that volunteers, contractors and landholders miss, in what is extremely challenging terrain.

With ongoing assistance from volunteers to help spread Cochineal across the landscape, the BPPPCG now have some hope of delivering a long-term, sustainable program that is not dependent upon high levels of funding.

Further information

For further information on the BPPPCG and its activities, contact Lorraine Edmunds lorraineedmunds@internode.on.net



Committee members discussing boardwalk construction, visitor impacts and spring ecology at The Bubbler, Wabma Kadarbu Mound Springs Conservation Park

Arabana Parks Advisory Committee hits the track

The Arabana Parks Advisory Committee (APAC) undertook a three-day tour in May to discuss management of visitor sites within Wabma Kadarbu Mound Springs Conservation Park and Kati Thanda-Lake Eyre National Park.

The group, including two representatives of the Arabana community, Committee Chair Fiona Gill and two planning officers visited The Bubbler, Blanche Cup and Elizabeth Springs in Wabma Kadarbu Mound Springs Conservation Park, as well as Halligan Bay Point and Level Post Bay in Kati Thanda-Lake Eyre National Park.

The tour is the next step in the development of two future management plans – one for Wabma Kadarbu Mound Springs Conservation Park and one for Kati Thanda-Lake Eyre National Park/Elliot Price Conservation Park – and provided the Committee an opportunity to familiarise themselves with existing on-ground issues and impacts and to consider management options.

It follows last year's efforts to collect people's treasured experiences and memories of the two national parks, and the March release of a discussion poster and paper which raised questions about how to balance the use, appreciation and enjoyment of the parks with their protection.

The Committee considered the feedback from the poster and paper during the three-day tour.

At Marree, Bob Backway, Lake Eyre Yacht Club Commodore, also presented the Yacht Club's history, operations and aspirations for use of the lake when in flood.

While not within Park boundaries, the committee also visited Strangways Springs and Kati Thanda-Lake Eyre South lookout to discuss impacts and future management options with other stakeholders in the area and Natural Resources SA Arid Lands staff.

Draft park management plans are expected to be released by March 2015 for a three month public consultation period.

Further information

To register your interest in receiving a copy of the draft management plans for review, contact Prue Adamson, Policy and Planning Officer 8124 4817.

Arabana Parks Advisory Committee



Committee members looking at current signage and discussing remote area travel safety at the self-registration station, located at the start of the Halligan Bay Public Access Route leading to Kati Thanda-Lake Eyre National Park



A traditional cookout prepared by Adnyamathanha elders



COMMUNITIES TRAIN IN CHEMICAL WEED CONTROL

Mark Walsh, Aboriginal Partnerships Officer

Ten people are better equipped to carry out safe weed control in the region after participating in one of two, two-day chemical accreditation courses held in Coober Pedy and Port Augusta in May and June.

Registered training providers Smith and Georg kicked off the small group sessions by asking participants about what duties they currently carry out using chemicals and what they may be doing in the future.

This enabled each session to be finely tuned for each group to ensure the training was delivering relevant and accurate information for individuals.

The course focused on personal safety through safely handling, mixing and storing chemicals, and reading and understanding labels.

Several members from the training session in Port Augusta commented that learning to read labels correctly was a particularly useful part of the training to not only take back to their workplace, but also their homes.

Theoretical training was delivered with practical demonstrations as well as opportunities for the participants to practice activities including measuring quantities of chemicals and spraying techniques.

This was the second time the course has been run in Coober Pedy with the course building on previous training and capacity building within the Umoona community.

Further information

If your community is interested in receiving similar training, register your interest with Mark Walsh, Aboriginal Partnerships Officer 8648 5300

Natural Resources SA Arid Lands, SAAL NRM Board, Australian Government

Adnyamathanha Cultural Day a big hit

Over 400 people were treated to tours, workshops, and a traditional cookout when they attended the highly successful Adnyamathanha Culture Day held at Wilpena in June.

The day, which was organised by the Adnyamathanha Traditional Lands Association (ATLA), brought together Adnyamathanha people to celebrate their culture and keep it alive while also sharing cultural knowledge with the wider community and tourists visiting the Flinders Ranges National Park.

'It was a brilliant day, and it was great to have our Elders here as well as some of our young people taking leadership roles,' said ATLA Chairperson Vince Coulthard.

'This is what these events are about, to ensure our culture is in safe hands going forward and it was heart warming to hear one of our young ones say the day had been good for her soul.'

People from all over Australia as well as international visitors from seven different countries enjoyed the day with about 60% of those in attendance Adnyamathanha people from across the state.

Activities included plant use tours, contact history tours, bush tucker tastings, art displays, language workshops, and genealogy workshops.

A highlight for many was the traditional cookout where Adnyamathanha elders prepared kangaroo and emu in the traditional manner. The cookout was accompanied by singing and yarns around the fire that went well into the evening.

A Natural Resources SA Arid Lands stall was also a big hit with a stuffed Idnya (or Western Quoll) drawing in passers-by and information offered on various programs running in the region including *Bounceback*.

The locally extinct Idnya is a culturally significant species for the Adnyamathanha people and the subject of a translocation trial in the Flinders Ranges National Park (see p. 07).



The stuffed Idnya (or Western Quoll) was a highlight of the Natural Resources SA Arid Lands stall



Community workshops wild dog management plan

Over 70 participants turned out to seven workshops held across the region over July and September to make 'real time' changes to the draft SA Arid Lands' Wild Dog Management Plan.

Hosted by the six district-based NRM Groups, the interactive workshops – held at Marree, Cameron Corner, Yunta, Coober Pedy, Iron Knob, Leigh Creek, and Kingoonya – were the first opportunity for community to comment on a physical document.

At each workshop, Dingo Project Manager Heather Miller facilitated the two hour long sessions with the draft projected on a screen and an NRM Officer tracking in the changes.

Discussions were often lively with many suggestions debated before alterations were made.

Inside (south of) the Dog Fence, where wild dogs are declared, workshop participants spent considerable time discussing compliance, the need for a minimum standard of control, and the relationship between fox baiting and wild dog baiting.

Outside (north of) the Dog Fence, where wild dogs are not declared, some discussion focussed on the impacts of wild dogs on the mining and tourism industries as well as the livestock industry.

Debate also centred on the valuable role of the wild dog in the environment as a top order predator and the need to keep the population at a level that limits impacts on livestock.

There were issues of relevance across the region too, with participants discussing how organic properties could be involved in effective control, especially in the buffer zone outside the Dog Fence.

And there was general agreement that organisations involved in dog control need to work together, including those involved in outback communities, mine sites, dumps and camping grounds, as well as across interstate borders.

Participants also discussed the difficulty in monitoring and evaluating wild dog populations and the effect they have.

An additional 30 stakeholders who were unable to attend also reviewed the draft and discussed or sent their comments which were raised at the workshops.

This community-developed draft has been sent to the six district NRM Groups for final review before being reviewed by Natural Resources SA Arid Land staff and sent to the SAAL NRM Board for consideration.

Thirteen additional suggestions that were outside the scope of the regional plan – because they contravened state policy or legislation or related to the resourcing of additional activities not already listed in the Plan – will be presented to the SA Wild Dog Advisory Group (SAWDAG) and to the SAAL NRM Board with the final Plan expected to be released after the December Board meeting.

SAAL NRM Board, Natural Resources SA Arid Lands, NRM Groups

WHAT'S IN THE PLAN?

Once complete the Plan will be an important document for the Board and for the region, providing a guide to land managers and government staff to conduct wild dog management in the region to 2017.

It will contribute to improved cattle and biodiversity outcomes outside (north of) the Dog Fence – where the wild dog/dingo is neither declared nor is it protected – and control program inside (south of) the Dog Fence where the wild dog is a declared pest.

The Plan also takes into account existing state and national policy including the National Wild Dog Action Plan and Biosecurity SA's draft 5-year strategic plan which is currently under review by the SAWDAG and the Minister.

THE CONSULTATION PROCESS

The draft Plan presented at the workshops was the culmination of a 12 month community consultation process with information gathered from 120 stakeholders through individual property visits, electronic surveys, individual phone calls, discussions at regional bait injection services, and various presentations and workshop.

It incorporated the views of managers of pastoral and conservation leases, parks, Aboriginal landholders, Co-management and Advisory Boards, mining companies and tourism interests.

Feedback was gathered at the conclusion of the consultation process

from 60 participants at the final workshops.

The feedback indicated that the workshops were considered the most useful, with most respondents scoring them 'very good' to 'excellent'. This was followed by discussions over the phone, and at baiting workshops, which were also generally scored as 'very good' to 'excellent'.

Property visits and surveys were seen as the least useful elements, with the majority of respondents scoring them from 'good' to 'excellent'. A minority of the respondents scored any of the elements below 'good'.



Bucks for brains

Pastoralists in the SA Arid Lands region are being asked to contribute to the national TSE surveillance program by submitting brains from eligible sheep and cattle to confirm the neurological health of livestock across the country.

Transmissible spongiform encephalopathies (TSEs) are a class of rare, fatal brain diseases that can affect people and animals and have no treatments or vaccines. They are associated with the accumulation of abnormal infected proteins in the brain and affect the central nervous system. This group of diseases includes Bovine Spongiform Encephalopathy (BSE) which affects cattle and is commonly referred to as 'mad cow disease', as well as Scrapie which affects sheep and goats.

BSE has never been recorded in Australia, however, Scrapie has had one occurrence in imported sheep on a single property in 1952 at which time it was promptly eradicated.

Australia's ongoing status of being free from TSEs in animals can only be assured by ongoing and co-ordinated preventative measures complemented by a surveillance program across the country.

Pastoralists are being offered \$300 for eligible cattle and \$100 for eligible sheep that are made available for testing. Eligible livestock are those that may have shown signs of (but are not limited to):

- Increased nervousness
- Staggery gait
- Muscle tremors
- Unable to stand
- Poor coordination
- Difficulty in rising
- Falling
- Excessive nose and flank licking
- Head rubbing or pressing

The ongoing surveillance program runs year round and samples can be collected at any time. Pastoralists who identify that they may have suitable livestock for testing should contact Trent Scholz, Animal Health Officer or their local vet, who will assess the suitability of the animal and will collect a sample for testing if appropriate.

Further information

**Trent Scholz, PIRSA Animal Health Officer,
Biosecurity SA. 0427 970 453
trent.scholz@sa.gov.au**



Surveying the Simpson by camel

The Kallakoopah Creek which flows through the Simpson Desert Regional Reserve was the focus of a unique, 10-day ecological and scientific survey in June. The trip was done on foot alongside traditionally outfitted pack-camels to look for evidence of megafauna remains. Tony Magor, a ranger with nine years knowledge of the Simpson Desert joined the team and shares his experience here.

I've spent a lot of time in the Simpson. It's vast. It's isolated. And it's remote. And there are still massive areas I've not seen, including this section of the Kallakoopah Creek on Cowarie Station – but I certainly never expected to see it on foot and with 18 camels.

Having spent much of my career ridding the landscape of feral camels, fixing the fences they've damaged, and lamenting the waterholes they've muddied, the idea took some getting used to.

But next to choppers – which are expensive – domesticated and trained camels are probably the best means of getting people and equipment to these remote and fragile areas with the smallest environmental footprint.

Over the days I got used to loading, unloading and hobbling them, and dealing with their individual personalities – and I came to understand a little of what Burke must have felt as the camels travelled slowly over the dunes.

Down swales, the camels covered up to 15 kilometres but crossing the dunes was harder going and we'd travel only half that distance.

Walking gave me more time to really look at the country and to appreciate just how much it had returned to desert after the 2010-11 boom.

Most remaining vegetation is still in good condition and the area is riddled with the disused holes of native rats which exploded in the area during the previous good seasons.

Rabbit tracks were not as prevalent as I thought they might be but the number of cat tracks was concerning.

For Dr Aaron Camens and James Moore – the Flinders University palaeontologists who went in search of new megafauna fossil beds from the late Pleistocene period (70,000 to 100,000 years ago) – there was fossil evidence of *Procoptodon* (a giant short-faced kangaroo), and *Macropus ferragus* (a giant relative of the Red Kangaroo), along with fossilised fish, turtle, *Thylacine* (Tasmanian Tiger) and crocodile.

The discovery of a *Diprotodon* tooth pushed the known distribution of this giant relative of the wombat further north than previously known – and we even found its fossilised shit!

Small scatter sites and some very impressive grindstones – evidence of a rich Aboriginal culture – were all left *in-situ*.

Geomorphologist Gresley Wakelin-King was also collecting information as part of a broader SAAL NRM Board-funded project to better understand landscape function and the natural features of key refuge waterholes and wetlands along the Diamantina River, Warburton and Kallakoopah Creeks; see *Across The Outback*, June 2014.

ACROSS THE OUTBACK

Across the Outback is prepared and edited by the Communications team, Natural Resources SA Arid Lands, a division of the Department of Environment, Water and Natural Resources.

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

This edition edited by Meg Barker and Jenny Barker.



Government of South Australia

ABOUT THE SURVEY

This Kallakoopah Creek/Southern Lakes Expedition was one of seven surveys of the southern and central Simpson Desert conducted in 2014 as part of Australian Desert Expeditions' Project 138. Project 138 is examining the current status of desert flora and fauna, Aboriginal occupation and European heritage along a broad research corridor within the Simpson Desert.

Australian Desert Expeditions is a not-for-profit organisation that partners with numerous scientific bodies. The surveys are subsidised by paying guests who assist with fieldwork while the Outback Camel Company organises the logistics and supplies the camels.

INTERESTED IN TAKING PART?

Visit www.desertexpeditions.org or www.camelexpeditions.com if you are interested in assisting scientists in similar outback surveys. The 2015 survey schedule will be available at the end of the year.