



ACROSS THE

OUTBACK

Trial release returns SA-extinct Western Quoll to the Flinders Ranges

Thirty-seven Western Quolls – 17 males and 20 females – were translocated from their home in Western Australia to the Flinders Ranges during April as part of an ambitious trial aimed at improving the species' conservation status.

Last seen in the Flinders Ranges during the 1880s, the Western Quoll is a small Australian native carnivorous marsupial which once thrived across 80 per cent of the Australian continent.

Prior to the April Flinders Ranges translocation, the nation's Western Quoll population could only be found in south-west Western Australia where the remnants of the species have been successfully managed and expanded by the Department of Parks and Wildlife.

The project builds on the success of the Department of Environment, Water and Natural Resources' (DEWNR) *Bounceback* program which has actively undertaken land management activities including integrated pest control work to remove the threat of predation and competition from foxes.

In Western Australia, quolls co-exist in fox-free habitats with feral cats, and their natural survival instincts are expected to give them a fighting chance if and when they encounter cats in the wild.

However, to maximise the chances of survival in the Flinders Ranges, short-term control of feral cats within the release area was undertaken in preparation for the re-introduction trial to give the quolls an opportunity to establish shelters and territories unimpeded from cat predation.

Expected to bring ecological and tourism benefits to the Flinders Ranges, the Western Quoll also has great cultural significance for the Adnyamathanha people, for whom the quoll (Idnya) is a totem and an integral part of their Dreaming.

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Goat removal – know your rights and responsibilities

At the April SA Arid Lands NRM Board Meeting, goat removal was discussed and the Board commends land managers that are committed to their responsibilities in relation to feral goats. There have been some reports of land managers releasing goats back into the wild after mustering. This edition of *Across the Outback* offers a timely clarification of the legal requirements that need to be observed.

The *Pastoral Land Management and Conservation Act 1989* allows only for the pasture of sheep and cattle as part of a commercial enterprise. In other words, under lease conditions, it is illegal to run goats on pastoral leases in South Australia.

And when it comes to feral goats, under the *Natural Resources Management Act 2004* land managers are required to control them on their land to a satisfactory level determined by a regional Natural Resources Management Board.

Integrated control programs combining a number of options – usually mustering, trapping and aerial shooting – are the most effective in reducing population numbers.

Goats should be controlled using best practice methods and in line with humane animal welfare standards.

Where mustering occurs, goats need to be *removed or destroyed* within six weeks of capture; they must not be released back into the wild.

There is a market for feral goats and therefore the cost of control can be offset by the sale of feral goats and total grazing pressure can be managed in the face of drying conditions.

Some agents will accept smaller goats but, where they are not economically viable for transport, land managers must humanely destroy them.

Significant penalties can apply (\$100,000 or two years in jail) if goats are released into the wild for any reason.

This is to minimise the chances of feral populations being established or sustained.

Further information

If you would like further advice or clarification on your legal responsibilities contact the Biosecurity Team, Natural Resources SA Arid Lands 8648 5300.

SAAL NRM Board



Meet the Pastoral Board at Glendambo

GET INVOLVED

Annual aerial goat removal occurs as part of *Bounceback's* activities. During March 2014, 1380 goats and 46 donkeys were removed from seven pastoral and non-government organisation (NGO) properties and two National Parks in the North Flinders. A further 1000 goats were removed from the southern Flinders Ranges, in partnership with the Northern and Yorke region.

Since the *Bounceback* aerial program began more than 20 years ago, 85,000 goats have been culled across the Flinders and Olary districts with the long term aim to suppress goat numbers to reduce browse pressure on native vegetation, including the palatable species that are like 'icecream' to goats (eg. *Eremophila* species).

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

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

WHAT'S THE COST?

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

They compete with livestock and native fauna such as the Yellow-footed Rock-wallaby for pasture or shelter, damage fencing and other infrastructure, degrade waterholes and can be a vector for introducing weeds and diseases.

Feral goats contribute to land degradation by over-grazing pasture plants and browsing established trees and shrubs preventing their regeneration.

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

When food is not limiting feral goat populations increase by as much as 60-75 per cent per year.

Pastoral Board Open Forum. 24 June, Glendambo Hotel

Following successful open forums in Coober Pedy and Marree, land managers are invited to attend the Pastoral Board's Open Forum on 24 June in Glendambo.

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, waterpoint planning guidelines, or any other topics you might like to discuss.

The Pastoral Board will be writing directly to pastoral lessees in the surrounding Kingoonya district to invite them to the Open Forum.

The Forum will start at 6.00pm and will conclude with refreshments at about 7.30pm.

SA Arid Lands NRM Board members are also likely to be present with the two Boards set to meet the following day.

To RSVP...

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

Pastoral Board

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 8124 4837
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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 142

Wednesday 25 June, Glendambo
(joint meeting with SAAL NRM Board)

MEETING 143

Wednesday 20 August, SAAL region (TBA)

MEETING 144

Wednesday 15 October, Waite

MEETING 145

Wednesday 10 December, Keswick



Brumby Creek, Ingomar Station, April 2014

Wet weather hijinks, Pink Roadhouse, Oodnadatta, April 2014



Seasonal conditions report

Jeffrey Stringer, Pastoral Inspector

Following a very dry spring and summer, most pastoral areas have received beneficial late summer and early autumn rain, providing feed reserves for winter and in some cases stock water supplies.

Marla-Oodnadatta

The Marla-Oodnadatta district in the far north-west of the region received scattered, variable rain of 10-50 mm in February after an extremely dry 20 month period. The follow-up rainfall event on 8-9 April resulted in Hamilton recording 44 mm, Mt Sarah 41 mm, Todmorden 70mm and The Peake 45 mm. As a consequence most pastoralists in the far north west are in a much happier position currently, with stock feed sprouting and surface water supplies bolstered.

Marree-Innaminka

Most properties the Marree-Innaminka district in the far north east have not received significant rain for 12 months and destocking on many stations is well underway. The recent rainfall in April gave light recordings in the area of 10-25 mm, well below that required for a turn-around in seasonal conditions.

Gawler Ranges

Properties in the Gawler Ranges have received good rains in 2014, with falls in February of 50 mm at Nonning and Iron Knob and rainfall in April at Nonning of 100 mm and Moonaree 113 mm. As a result, most stock water reserves are full and annual grasses such as bottlewashers and spear grass appear to be flourishing and providing good winter stock feed.

Kingoonya

The Kingoonya district appears to be missing the substantial rainfall events as only 20-25 mm was recorded in February at sites such as Mulgathing, Bon Bon and Mount Eba. The follow up rain recorded in April was variable, with falls ranging from 18 mm at Mulgathing to 45 mm at Bon Bon and Arcoona and 66 mm at Bulgunnia.

Flinders Ranges

The Flinders Ranges has received sufficient rain for chenopods and perennial plants, with falls in February ranging generally between 30-50 mm and falls in April varying from 30-40 mm. Annual vegetation is currently limited to copperburrs, wards weed and spear grass.

North East Pastoral

The North East Pastoral district appears to have missed the February rain, with Yunta and Lilydale recording 10 mm and Koonamore 15 mm. The recordings for the April event were more substantial as Yunta recorded 40 mm, Melton 50 mm, and Lilydale and Braemar both recording 50 mm. The April rain event has provided surface stock water in most areas, adequate for germination and replenishment of annual grasses and herbs.

Pastoral Board, Natural Resources SA Arid Lands



CSIRO asks pastoralists for input into arid zone fauna management

The CSIRO in Alice Springs has mounted a three-year project to better understand both the booms and busts of arid zone fauna, and the drivers of mammal loss – and, as Jane Addison reveals here, they're keen to involve pastoralists in the SA Arid Lands region.

Australia's mammal extinction rate is the highest in the world. Mammal loss in the arid zone has been particularly significant, with predation by feral animals like cats and foxes the most likely cause.

The CSIRO's three-year project is focussed on the ecology and off-reserve management of small mammal "refuges" in the arid zone of the Northern Territory, South Australia and Queensland.

"Refuges" are the small areas of land that species retreat back to during dry times in the arid zone. These refuges are not necessarily wet areas or areas with high levels of livestock feed.

Conservation in these areas may exist happily within a livestock production system, and pastoralists may be the best people to manage these areas.

We are trying to answer questions of small mammal ecology. Where are the dry time refuges for threatened species? Why are they there? How do these refuges change through time? What are the main threats to these areas? Can we predict where new refuges might be?

These questions will be answered using small mammal surveys, GIS modelling, genetic techniques and expert input.

We also want to better understand what management options there are for these dry time refuges, and to understand what sort of factors may help or hinder pastoralists in looking after these areas.

These questions will be answered through discussions with pastoralists and other stakeholders, policy analysis and economic modelling.

We have been inviting pastoralists to share their perspectives on conservation options through surveys or interviews (see box), or for permission to work on their properties, and have already sought feedback from the Kingoonya and Marla-Oodnadatta NRM Groups.

We plan to meet with the Marree-Innaminka NRM Group in late May.

Further information

Contact Jane Addison, CSIRO Alice Springs on 08 8950 7176 or jane.addison@csiro.au

CSIRO, Territory NRM, Australian Collaborative Rangelands Information System (ACRIS)



Above left: Stripe-faced Dunnart (*Sminthopsis macroura*), Mt Skinner, Northern Territory. Eric Vanderduys

Right: Thorny Devil (*Moloch horridus*), Stirling Station, Northern Territory. Camilla Osborn

TAKE THE SURVEY AND SHARE YOUR THOUGHTS...

Pastoralists in the SA Arid Lands region are encouraged to take a survey to help the team understand what factors might help pastoralists manage small mammal refuges, particularly through different phases in the boom/bust cycle.

The survey was sent via snail mail or email to many pastoralists in April but is also available online

at www.surveymonkey.com/s/smallmammalsurvey

Participants who include their address will receive a \$20 gift voucher to Coles or Woolworths. Hard copies are also available; contact Jane at the details above.

Thanks to those who already responded.



Dr David Peacock (centre), who initially conceived the quoll translocation project, proudly accompanied the quolls from Western Australia to the Flinders Ranges. Here, he is accompanied by Kelly Rayner and Brent Johnson (Department of Parks and Wildlife, Western Australia).



The Adnyamathanha people, including Adnyamathanha Traditional Lands Association Chairperson, Vince Coulthard welcomed the first quolls back to the region through a traditional blessing ceremony.



Rob Brandle and Katherine Moseby at the blessing ceremony.

...continued from page 01

There is cautious optimism that the quolls will breed and make their populations self-sustaining; however, some mortalities are anticipated as the animals adapt to their new habitat.

Since their release, the quolls' survival rates and well-being have been actively monitored by radio tracking individuals. Once the re-introduced quolls have established themselves in their new habitat, trapping will be undertaken to assess their condition and breeding status.

The quolls will take a while to settle in and any decision to proceed with further introductions will follow careful monitoring of the quolls' health and an evaluation of the trial's success.

The partners...

Through the 21-year *Bounceback* program, DEWNR and collaborators have been controlling foxes and goats protecting the habitat in the Flinders Ranges that is needed for the quoll's long term survival.

The Foundation for Australia's Most Endangered species (FAME) is leading the drive to raise approximately \$1.7 million over a five year period that will support the recovery of the species.

Western Australia's Department of Parks and Wildlife has donated the Western Quolls from their conservation parks.

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

DO YOU HAVE RECORDS OF WESTERN QUOLLS IN YOUR FAMILY HISTORY?

Land managers who have records of Western Quolls, or other native species, in their station diaries are encouraged to contact Dr David Peacock.

Dr Peacock and his Western Australian colleague, Dr Ian Abbott, have spent hundreds of hours collecting historical accounts of quolls or "native cats".

Many of these accounts have come from newspapers that have been digitised by Australian libraries but many others have come from old station diaries and family histories.

Their research highlights the capacity of quolls to predate rabbits, and found many interesting accounts of their interaction with cats and dogs, and their persecution by people, especially for the fur trade, with almost 19,000

skins being offered for sale at the London fur markets in 1903.

This account of a quoll (or native cat as they are sometimes called) was from George Macgillivray who was describing his travels with his Aboriginal companion Jerry in the Burke district of Queensland. It is thought that this part of his journey was around Montecollina Homestead on the Strzelecki Track.

On 23 December 1870... I noticed several crows and hawks diving and dabbling at something on the flooded ground, and turned off to see what it was.

I found it was a native cat, which they had killed, and had the head and shoulders eaten off it.

The back and hind quarters still remained so I picked it up and brought it carefully to camp, and felt rather proud to show Jerry that I could get something towards our tucker supplies.

I found that he had returned to camp and had already cooked four small hawks which he got in a nest, and two owls and a small goanna.

The latter he offered to give me for the remains of the cat, which I at once agreed to, and we very soon had partaken of a tip top breakfast.

Barrier Miner 18.xii.1929: 2

If you think you have information that can help, contact Dr Peacock david.peacock@sa.gov.au; 0417 355 498.



Western Quoll

STAY INFORMED

To receive a monthly email update on the quolls' progress please send an email to SAAridlands@sa.gov.au with the subject 'Quoll update'.

IF YOU SEE A QUOLL...

The release area for the initial population of the Western Quoll was confined to the Wilpena area and it is highly unlikely that they will be visible during daylight hours.

However, if you do see one in the wild please give it some space and watch from a distance so that it does not become stressed.

It is expected that the re-introduced animals will take a while to settle in and the success of the translocated animals in making their home in the Flinders Ranges won't be known for several years.

About the Western Quoll

The Western Quoll is a small reddish-grey coloured carnivorous marsupial with white spots on its body and legs. The male has an average weight of 1300 grams and the female weighs around 900 grams. They make their homes in hollow logs, cracks and tunnels under rocks, tree hollows and other animal burrows.

They are mostly nocturnal, becoming quite active at dusk and before dawn although occasionally they may be seen during the day in forest environments or when climbing trees to forage or escape predators.

Their diet is varied but mainly consists of invertebrates, small mammals up to rabbit size, lizards and frogs.

The Western Quoll's place at the top of the native food chain may have a positive impact on reducing populations of small pest animals (mice, rats and young rabbits) if their re-introduction is successful.

Their survival will be an indicator of environmental quality as they will only endure in a healthy environment that can support a viable food chain during dry conditions.

The female Western Quoll breeds in its first year, with very few older animals breeding again, and they can raise up to six joeys in their pouch.

Young quolls are weaned in around five and a half months and their life span in the wild is mostly less than three years.

The Western Quoll is threatened mainly by habitat degradation and foxes and they occupy home ranges of around 1500 hectares for males and 400 hectares for females. Although adult females home ranges do not overlap some mothers and daughters may overlap in their home ranges.

MAKE A DONATION

Donations to support the return of the Western Quoll to the Flinders Ranges are encouraged. Visit www.fame.org.au for more information.

SEE US ON LANDLINE

ABC TV's Landline was on location in the Flinders Ranges to film the excitement of the first translocation of quolls and their arrival from Western Australia; if you missed this neat little story you can view it here www.abc.net.au/landline/content/2014/s3992629.htm



Statewide wild dog group gets underway

Geoff Power, Chair

The South Australian Wild Dog Action Group (SAWDAG) has met twice since its inaugural meeting in December 2013 and have made good progress on the development of a draft five-year *Wild Dog Strategic Plan for South Australia*.

Established by the Minister for Sustainability, Environment and Conservation the group of 12 takes a statewide view of wild dog management in South Australia, and is represented by landholders, industry, Aboriginal groups, conservation interests, and government.

The group's terms of reference are:

- To provide advice to the Minister on improvements to the management and control of wild dogs in South Australia
- To propose sustainable funding models for long-term wild dog management in South Australia
- To monitor implementation of the *National Wild Dog Action Plan*
- To develop and implement the *State Wild Dog Strategic Plan* in a manner that is consistent with the *National Wild Dog Action Plan*.

The Group has been determining priority actions to improve wild dog management in the state and examining ways in which these could potentially be resourced into the future. The draft five-year *Wild Dog Strategic Plan for South Australia* is expected to be out for wider consultation in June.

Meetings are generally held quarterly in Port Augusta.

Further information

**Geoff Power, SAWDAG Chair,
0428 581 067**

*South Australian Wild Dog Action Group,
Biosecurity SA*

SAWDAG MEMBERS

- Geoff Power (Chair)
- Janet Brook (SA Arid Lands NRM Board)
- Leonard Nutt (SA Arid Lands NRM Board)
- Bryan Smith (Eyre Peninsula NRM Board)
- Grant Chapman (Northern and Yorke NRM Board)
- Jane Kellock/Leonie Mills (South Australian Sheep Advisory Group)
- James Irwin (Dog Fence Board)
- Vicki Linton (Department of Environment, Water and Natural Resources)
- Katherine Moseby (Conservation Council SA)
- Matthew Turner (Wilderness Society SA)
- John Virtue (Biosecurity SA, PIRSA)
- TBA (Aboriginal Statewide Advisory Committee)

TECHNICAL ADVISERS

- Heather Miller (DEWNR)
- Peter Bird (Biosecurity SA, PIRSA)

Regional Wild Dog Management Plan taking shape

Land manager perspectives on wild dog control continue to be gathered for input into the draft regional *SA Arid Lands Wild Dog Management Plan*.

The feedback is contributing to the development of the SA Arid Lands (SAAL) Natural Resources Management (NRM) Board's *Wild Dog Management Plan* for improved cattle and biodiversity outcomes north of the Dog Fence and the control program south of the Dog Fence where the wild dog is a declared pest.

Across the SA Arid Lands region the survey takes in managers of pastoral and conservation leases, parks, Aboriginal landholders, Co-management and Advisory Boards, mining companies, and tourism interests.

The survey questions have now been sent to all landholders inside the Dog Fence either through email or post.

The first draft is expected to be complete by July 2014 at which time land managers will have the opportunity to comment directly to Dingo Project Manager Heather Miller as well as through participation in district workshops scheduled for August-September.

Each NRM Group will sign off on the draft before it is sent to the SA Arid Lands Natural Resources Management Board in October.

Further information

If you haven't received a list of questions and would like to have input into the draft Plan contact Heather Miller heather.miller@sa.gov.au, 8648 5300 or 0419 835 120.

SAAL NRM Board, Natural Resources SA Arid Lands



FURTHER INFORMATION

To find out more about the region's wild dog management programs, contact the Wild Dog Management team, Natural Resources SA Arid Lands 8648 5300

What's in a plan?

Across The Outback has been reporting on three wild dog plans in the last 12 months and we thought it was timely to remind readers what each of the plans is for. Efforts are being made to ensure the regional and state plan are consistent with the national plan.

Regional plan

The *SA Arid Lands Wild Dog Management Plan* will guide Natural Resources SA Arid Lands staff and land managers to conduct wild dog management throughout the SA Arid Lands region.

It takes into account the difference in wild dog status between outside (north) and inside (south) of the Dog Fence.

The Plan is being heavily informed by surveys of land managers outside and inside the Dog Fence and by information gathered from the six year Dingo Research Project.

Expected implementation date: 2015, pending endorsement by the SAAL NRM Board

Taking the lead: Heather Miller, Dingo Project Manager, Natural Resources SA Arid Lands on behalf of the SA Arid Lands Natural Resources Management Board

Further information: Heather Miller, Dingo Project Manager 8648 5300

State plan

The *Wild Dog Strategic Plan for South Australia* provides a practical framework to guide cooperative wild dog management by government, industry and community stakeholders across SA over the period 2014-2018.

The plan aims to protect the livestock industries and public safety from the impact of wild dogs while maintaining the ecological and cultural roles of the dingo as a wildlife species outside the Dog Fence.

The plan divides the state into four management zones, each with its own series of tailored actions: inside the Dog Fence; outside the Fence, the Dog Fence and buffer zone, and the entire state.

Expected implementation date: 2014

Taking the lead: SA Wild Dog Advisory Group (SAWDAG) administered through Biosecurity SA (PIRSA)

Further information: Geoff Power, SAWDAG Chair 0428 581 067

National plan

The *National Wild Dog Action Plan* is being developed to combat the economic and personal devastation caused by wild dogs across rural Australia. Following a period of public consultation the draft Plan is now being progressed through governments seeking endorsement for the Plan from all agriculture Ministers. The final draft, which considered feedback from 68 public submissions, is available at the web address below.

Expected implementation date: May 2014

Taking the lead: Wool Producers Australia

Further information: www.woolproducers.com.au/national-wild-dogs-action-plan

COST-BENEFIT OF DOG IMPACTS

New research indicates significant potential returns on investments made in wild dog management strategies.

Conducted by the Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES), the research combined the market impact of wild dog attacks with non-market (social and environmental) costs to develop a holistic cost-benefit analysis of their effect on Australian agriculture businesses and communities should management strategies not be applied.

Three case-study areas – in eastern Victoria, South Australian Arid Lands and south-west Queensland – evaluated the returns that wild dog management strategies must deliver in order to remain cost effective.

The research was released in April in the report, *An integrated assessment of the impact of wild dogs in Australia*. The full report is available here: data.daff.gov.au/data/warehouse/9aai/2014/AssessWildDogs/AssessWildDogs20140428v1.0.0.pdf



Protecting the Great Artesian Basin Springs

Blanche Cup

The release of seven Great Artesian Basin (GAB) project reports in March 2013, marked a milestone in our understanding of the south-western GAB, including the extent and nature of the water resource and the operation of its artesian springs. A new four-year project will now investigate some of the key environmental issues identified in that research and apply management practices.

Focused on the Dalhousie and Lake Eyre spring super-groups, the expertise of regional staff, community and Aboriginal knowledge will be used to develop and implement management actions to restore and maintain spring habitat critical for survival of this endangered ecological community.

Proving that 'good science informs good management', the work will also protect spring environments from threats exacerbated by increased water demands and climate change.

This will include managing the increased abundance of Common Reed (*Phragmites australis*) in some areas to restore its natural balance with other spring vegetation and return open water habitats.

While Common Reed has existed at GAB springs for many thousands of years and should be viewed as a native species, it has become out of balance in some areas due largely to the suppression of traditional management practices and the introduction of cattle and sheep grazing.

In areas where grazing has been removed, the Common Reed is found to proliferate with limited competition and high nutrient loads which can result in springs drying out. Work will be undertaken to investigate what role aboriginal Traditional Ecological Knowledge (TEK), particularly fire management practices could play in managing the species into the future.

For both the Dalhousie and Lake Eyre spring super-groups, funding is being provided to the relevant native title groups and Witjira National Park Co-Management Board for on-ground works and TEK collection and management.

The project will also undertake grazing trials on springs in areas still actively grazed to mitigate damage from cattle and to assess these practices in real world conditions.

Within the Witjira National Park, Date Palm (*Phoenix dactylifera*) management on Dalhousie springs will continue – to date this is conservatively estimated to have returned between 360-470 megalitres per year in environmental flows to this system. In the same area, a survey will examine the changes in fish communities over time as surface water habitat has reduced in the absence of traditional burning practices and the removal of cattle grazing when the park was formed.

Investigation and control of the introduced Annual Beard Grass (*Polypogon monspeliensis*) will also be undertaken to protect the water dependent ecosystems of the GAB springs.

This recently discovered weed chokes up shallow open water habitat, excluding other sedges and replacing habitat for endemic fish and macro-invertebrates.

WHAT ARE MOUND SPRINGS?

Scattered around the margins of the Great Artesian Basin (GAB) are clusters of ancient natural springs.

The springs have been discharging GAB water for at least one million years during which the climate has changed dramatically around them.

They occur in the driest parts of Australia and provide oases for unique aquatic flora and fauna.

The ecological communities are totally dependent on natural GAB discharge and are listed as endangered under the *Australian Environment Protection and Biodiversity Conservation Act 1999*.

Further information

Contact Travis Gotch, Senior Water Projects Officer, 8648 5300 or travis.gotch@sa.gov.au

SAAL NRM Board, Natural Resources SA Arid Lands, University of Adelaide, Friends of Mound Springs, Witjira National Park Co-management Board, Arabana Parks Advisory Committee, Australian Government

GET INVOLVED

If you can provide information regarding the management of Common Reed, either in a pastoral context or from a traditional management practice, contact Travis Gotch 8648 5300.



Gum Creek Station land swap

Gum Creek Station donated approximately 423 hectares of land with high conservation value to Flinders Ranges National Park earlier this year – and in return received 411 hectares of Park land with degraded conservation values for use within the Station.

The land exchange was completed after lengthy but dedicated negotiations that required the resolution of both Houses of Parliament and a proclamation by the Governor of South Australia in order to alter the boundaries of the National Park.

This latest addition of land is situated in the north-west of the Park, near the Aroona campground, and will now be protected under the *National Parks and Wildlife Act 1972* and managed by the Flinders Ranges Co-management Board.

The land maintains significant and intact biodiversity including habitat for the vulnerable Yellow-footed Rock-wallaby.

The land swap occurred as part of the State Government's protected area strategy 'Conserving Nature' which provides for the establishment of protected areas for all South Australians.

One approach is to consolidate parks by strategic additions achieved through various means and from time

to time by the generosity of individuals who live on the land and have cared for the land and its natural values.

The Gum Creek exchange was celebrated at an event at the old Wilpena Station woolshed in March and included members of the McIntosh family, representatives of the Flinders Ranges Co-management Board and Natural Resources SA Arid Lands, as well as neighbouring landholders.

Gum Creek Station has been home to seven generations of the McIntosh family, dating back to 1789, when current landholder, Bill McIntosh's Great Great Grandfather, Christopher Gill, first took up 354 acres in the region.

Today the family is committed to forming a sustainable balance between high quality tourism, conservation and prime lamb production.

Gum Creek Station, Flinders Ranges National Park Co-management Board, Natural Resources SA Arid Lands

Simpson Desert Tri-state meetings resume

The Simpson Desert Tri-state meeting was reconvened in early April after an interval of 16 years.

Seventeen people attended the three-day Mt Dare meeting which brought together the three state jurisdictions, Natural Resources SA Arid Lands, Queensland National Parks & Wildlife Service and the Northern Territory Central Land Council.

Other stakeholder and interest groups also attended including Traditional Owners, Lake Eyre Yacht Club, Friends of the Simpson Desert Parks, 4WDSA, Arid Lands Environment Centre, Westprint, Mt Dare, CSIRO and the Wilderness Society.

Cross jurisdictional discussions occur opportunistically about day-to-day issues, and in the past have included the Simpson Desert annual summer closure, camel control and Athel Pine control.

This meeting however, allowed for more strategic discussions and stimulated different groups to be involved in conversations about current Simpson Desert

issues and potential ways to address some of these.

There were many positive outcomes and spin-offs from the meeting.

Some of the early outcomes include a commitment to progress to consistent camping zones along tracks and consistent dune monitoring to assess impacts of traffic across the three states.

The two days of discussions culminated in a day tour through the Witjira National Park Homelands area, led by Cultural Range Dean Ah Chee, and a commitment to meet annually.

The resurrection of the tri-state meeting was an outcome of discussions at the Lake Eyre Basin (LEB) Conference last year in Port Augusta and this year's meeting was organised and facilitated by members of the LEB Community Advisory Committee and LEB Scientific Advisory Panel.

Lake Eyre Basin Community Advisory Committee, Lake Eyre Basin Scientific Advisory Panel, Natural Resources SA Arid Lands, Queensland National Parks & Wildlife Service, Northern Territory Central Land Council





Arid Recovery's feral cat month is re-badged

Arid Recovery has rebadged feral cat month to be part of their annual Bettong Festival or 'Boodie-fest' to encourage cat lovers to share their love with native species too.

Inspired by her attendance at a feral cat symposium during the 26th Vertebrate Pest Conference in Hawaii in March, General Manager, Kylie Piper, reflected that setting up a theme of "cats being evil" will often miss the mark because a lot of people love their cats.

'People can't love what they don't know about, so Arid Recovery's goal is to highlight some of the unique animals in the arid zone in order to gain support for feral animal control.'

The Burrowing Bettong (*Bettongia lesueur*), also known as the 'Boodie', was once one of the most widespread of all Australian mammals but is now listed as vulnerable under the *Environment Protection and Biodiversity Conservation (EPBC) Act*. Wild populations are now confined to islands off the coast of Western Australia while on mainland Australia, the species only survives in captivity. The disappearance of the Burrowing Bettong in Australia coincided with the widespread establishment of the fox and the cat. In 1999, Arid Recovery released 29 Bettongs into the Reserve and since that time the population has boomed.

The Boodie-fest will run until the end of July and include opportunities for volunteers to assist with bettong trapping and kids activities.

Further Information

Contact Perri Carter 8671 8282 or info@aridrecovery.org.au



Felicity Hatton

FERAL ANIMALS CAUGHT – ON CAMERA!

Can you beat this photo? The Invasive Animals Cooperative Research Centre (IA CRC) again invites submissions to its annual photo competition.

Now in its third year, the competition highlights the importance of managing pest animals across Australia.

Last year's winning image was of a fox honing in on the carcass of a kangaroo as a Wedge-tailed Eagle takes off.

The winners were selected from over 390 entries and a selection of the best feral photos have been combined in a free calendar illustrating the interactions in rural

and urban environments between pest animals, native species, livestock, pets and people.

If you have a great feral photo of your own, the 2014 competition officially opens on 1 June. To view the full selection of 2013 feral photo winners or to download an entry form for the 2014 competition visit www.invasiveanimals.com/feral-photos.

Further Information

Contact Jessica Marsh
Invasive Animals CRC, 02 6391 3907
or Jessica.marsh@dpi.nsw.gov.au



Burrowing Bettong



Outback South Australia – Join the conversation

Do you have a big idea (or many ideas!) to make outback South Australia a better place to live, work or visit?

Then the Outback Communities Authority (OCA) invites you to join the conversation on their new online community forum, 'oneOutback'. Even if you don't think you have a big idea of your own, you could help grow other ideas by joining in.

The 'oneOutback' forum provides a way to explore the opportunities for outback South Australia to thrive and prosper. Talking about clever ways to use investment and knowledge to improve the lives of outback people can inform the OCA's plan to attract government and private sector funding.

If you have any connection to the outback, join the conversation, share your thoughts and inform the plan.

Jump online at www.saplan.org.au/yoursay/oneoutback/ or through the OCA's website at www.oa.sa.gov.au

Further Information

Contact Outback Communities Authority
1800 640 542 or 8648 5970
or oca@sa.gov.au

Outback Communities Authority

SOUTH AUSTRALIAN ISOLATED CHILDREN'S PARENTS' ASSOCIATION MEETS IN PORT AUGUSTA

The 2014 Isolated Children's Parents' Association of South Australia (ICPA) held its annual State Conference at the Standpipe Hotel in Port Augusta, on 21 February 2014.

Hosted by the Port Augusta and Marree Air branches, and opened by original ICPA member Don Nicholson, the conference was well attended by many members of the seven South Australian branches.

Carrying the theme of Evolution in Education, guest speaker Lyn Litchfield spoke of her experiences with the Equine Therapy Program and Vanessa Kirkham spoke of e-mentoring and to match people with common goals or interests to help them achieve their best in life, (regardless of their location) through online engagement.

Michelle Reynolds and Damia Ettakadumi spoke enthusiastically about the exciting science of the Ediacaran period of geological history in the Flinders Ranges.

The theme also discussed how technology has evolved to support isolated children's learning; the need to ensure access to reliable Internet was discussed and reflected in many of the motions passed by the ICPA.

The ICPA Federal Conference will be held in early August 2014 in Launceston, Tasmania; a number of South Australian members will be participating as delegates and observers to advocate for our State and to support all isolated children in Australia to have equity of access to education.

GAMBLING HELPLINE

If gambling is causing you or someone you know a problem, distance is no barrier to getting help.

The 1800 858 858 problem gambling helpline offers 24 hour, 7 days a week free confidential counselling, support and information.

Or visit www.gamblinghelponline.org.au for online or email counselling, self-help or to assess the situation.

You can also visit www.problemgambling.sa.gov.au, offering information, advice and support services in SA. If you need an interpreter, one will be organised for you.

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 2014 edition

Content due by COB
13 June 2014

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



Wool press back where it belongs

An old wool press at Witchelina Nature Reserve has been restored to its former glory thanks to a group of enthusiastic volunteers – and a lot of muscle.

Eight Nature Foundation SA members and friends spent a week in December at Witchelina Nature Reserve reassembling the Forwood Down wool press.

Aside from sheer brute strength, the job required scaffolding, cables and ladders and, finally, a Nissan Patrol to help wrench it upright to its new position on a stony rise at the Witchelina homestead.

Made prior to 1900 and named after the foundry that made it, the Forwood Downs wool press stands at an impressive six metres. Team member Barry Wright took a 'wild guess' and estimated it to weigh about three tonnes.

In 1978 the press was removed from its original position at Mt Nor West woolshed by the Booleroo Historical Society for display in their museum. It never was displayed, however, and instead lay rusting in a paddock for 35 years until it was brought back to Witchelina last year for restoration.

In its hey-day prior to 1900, up to 50,000 sheep were shorn annually at the Mt Nor West woolshed. Each year, at shearing time around 150 contract horsemen were brought to the property to muster sheep and were housed in the property's eight outstations.

Four of these outstations are still in good condition and liveable with one to be still restored. The woolshed itself is now a ruin but is on the 4WD track on Witchelina and can be viewed and explored by the public at their leisure.

The wool press is one of a number of heritage items that are on display on the property. And, according to Barry, "as people drive up to the homestead they cannot help but to be impressed by the commanding edifice in front of them."

Witchelina was bought by the Nature Foundation in 2010 which now manages the station for conservation.

Thanks to Nature Foundation SA members Chris Reed and Maureen and Barry Wright for sending this information to Across The Outback

ANNUAL KANGAROO SURVEY SET TO START

South Australia's aerial kangaroo survey has been conducted every year since 1978 and is one of Australia's longest-running aerial wildlife surveys. The 2014 round of surveying is set to begin on 16 June.

The survey takes place south of the Dog Fence and collects data specifically regarding kangaroos but also notes populations of other animals such as goats, emus, pigs, donkeys and camels. This year, the survey will also include some flight lines over Eyre Peninsula and some additional lines will be flown again in the eastern districts of South Australia (north of Renmark, south and east of Peterborough and to the east of Burra).

The Department of Environment, Water and Natural Resources will use their Cessna 206 to conduct the survey as they have in previous years.

The survey will commence on 16 June in the east of the state then move north and west at which time land managers may see a small plane flying east – west transects at a height of 250 feet – this is the most efficient way of counting kangaroos.

The survey will extend into mid-July and is weather dependent.

Further information

**Kangaroo Management Team
Natural Resources SA Arid Lands
8648 5300**



Counting kangaroos



For advice or to report animal health issues on your property contact Trent Scholz, PIRSA Animal Health Officer 8648 5166 or 0427 970 453

SETTING UP AN NLIS ACCOUNT

An account can be set up by anyone with a Property Identification Code (PIC), is free to establish and has no ongoing direct costs.

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.

WHAT IS THE NLIS?

The National Livestock Identification System (NLIS) is Australia's system for identification and traceability of livestock. It was introduced in 1999 and has expanded since then, to record the movement of cattle, sheep and goats. The NLIS enables livestock to be tracked for food safety, disease control and market access purposes from their property of birth to their slaughter.

MOVING CATTLE?

Moving cattle into the 'Beef Protected Area' in South Australia, has a range of additional conditions that you are obliged to follow. Visit www.pir.sa.gov.au/biosecuritysa and follow the links to the animal health/livestock movement pages for more information.

Using an NLIS account to manage livestock movements

Land managers in the SA Arid Lands region are reminded that there are some practical benefits to setting up your own account on the National Livestock Identification System (NLIS) to record livestock movements onto and off of your property.

Aside from managing your own record-keeping, there are a number of other benefits.

Ensure your legal requirements are met

As the receiver of the stock you are responsible for ensuring the transfer is recorded on the database. Even if you do not do property to property transfers of livestock, if you bring animals onto your property you are responsible for ensuring they are transferred on the database.

If you rely on a saleyard, an agent or another person to do the transfer for you, having an account allows you to check that the transfer has been recorded.

Get cattle carcass feedback

An account gives you access to some cattle carcass feedback information if you were the breeder of the animal, or if you were the last owner before slaughter, and even information if you sold the cattle through the saleyard.

Locate stray animals

An NLIS account will allow you to receive email notifications if an animal registered to your PIC is transferred off with a different PIC of consignment. It is therefore very useful in locating stray animals.

Improve records and eligibility for accreditation schemes

If you are considering participation in the European Union cattle accreditation scheme or the pasture-fed cattle accreditation scheme, having an account will assist in record keeping requirements and help show eligibility for these programs.

Further information

Contact Trent Scholz, PIRSA Animal Health Officer 8648 5166 or 0427 970 453

Biosecurity SA (Animal Health)



McCormack's leave an environmental legacy

A 2720 hectare area of native vegetation on Roxby Downs Station was dedicated by station owners BHP Billiton to Marie and Leo McCormack on 26 February. Marie and Leo left station life after 40 years living and working on the property, but as Reece Pedler and John Read write, McCormack Reserve is not the only legacy they left the environment.

McCormack Reserve is a diverse area of vegetation comprising good quality chenopod shrubland with an overstorey of Western Myall and Mulga.

Under Marie and Leo's management, this part of Roxby Downs Station – formerly known as Sister's Ram Paddock – was rehabilitated from overgrazing after it was purchased by Western Mining Corporation and destocked in 1997.

Its value was recognised by the Pastoral Unit (then the Pastoral Land Management Group) in 2000 when it was selected as a local reference site.

McCormack Reserve supports a Melaleuca-lined lignum swamp, a rocky ridge and stands of both quandong and *Acacia burkitii* which are regionally uncommon.

The dedication of McCormack Reserve to Marie and Leo marks a long history returning degraded country to health.

In the late 1990s Roxby Downs and neighbouring Purple Downs and Andamooka Stations were sold to Western Mining Corporation and Marie and Leo became the managers of all three properties.

Under their watch, the properties were largely destocked and Marie and Leo witnessed major regeneration of the perennial vegetation with many areas now recovering from degradation caused by overgrazing.

The pair religiously took vegetation monitoring photopoints to track recovery of their land, with duplicates sent to the Pastoral Unit to create a rare long-term record of change.

During their time at Roxby they witnessed the boom and bust of the arid environment, from droughts and dust storms, to wet years with flats carpeted



in Sturt's Desert Peas and the sandhills smothered by poached egg daisies and grasses.

In their time they saw three major floods, which filled the local ephemeral lakes of the Arcoona Tableland (one in 1989 even inundated the original Roxby Downs Homestead up to the tops of the verandah posts!)

Leo assisted with the formation and expansion of the Arid Recovery Reserve, largely on Roxby Downs Station and assisted for many years with counts of feral animals to assist with regional monitoring and assessment of control methods.

Marie and Leo have recently bought a caravan and will spend the foreseeable future on the road, travelling around Australia and no doubt causing a nuisance to other road users! We wish them all the best!

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.

This edition edited by Meg Barker and Jenny Barker.

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



**Government of
South Australia**

Marie and Leo moved to Roxby from Iron Knob in 1974 with their two young sons Ashley and Peter and began work for the Alison family.

Woomera, about 60 kilometres to the south, was the boom town at the time, with the kids on School of the Air and then eventually boarding at Woomera during the week.

But, after the discovery of a rich orebody in the north-east corner of the station, Olympic Dam Mine was developed and the Roxby Downs township, just 20 kilometres north-east of the homestead, was born.

The McCormack's quickly became an integral part of this growing community, and are remembered for their dedication to fundraising for the Royal Flying Doctors Roxby Downs Auxiliary through regular local events such as the annual Golf Day and Auction, Irish Christmas, Boogie in the Bush, raffles and donation tins around the town.

In recent years, the pair were employed by BHP Billiton after the Olympic Dam Mine was bought by the company in 2005, with management handed over to their current employer, ODT Australis in 2009.