



2017-2018

Arid Recovery Annual Report



For more information on Arid Recovery visit www.aridrecovery.org.au or call 08 8671 2402.

This document is the 21st in a series of annual reports and outlines the activities of Arid Recovery for the period from 1st July 2017 to 30th June 2018.

Arid Recovery is an independent, not-for-profit conservation initiative that has been restoring Australia's arid lands since 1997. Our success is attributed to many supporters, including the unwavering support of the local community through volunteers and the long term support of our major sponsors BHP, SA Department for Environment and Water, the University of Adelaide and our new partner Bush Heritage Australia.

Copies of this report, supplementary information and previous reports are available on the Arid Recovery website.

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Cover photo: Western Quoll

Photo: Jannico Kelk

Page 2 photo: Sunset over the First-Northern internal boundary

Photo: Nathan Beerkens



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CEO Report

KATHERINE TUFT



Two truly momentous milestones marked Arid Recovery this year. Firstly, Bush Heritage Australia joined us as a fourth partner. Already, the sponsorship and expertise from our new partner in landscape-scale conservation is empowering us to do more and think further beyond the fence. Secondly, we welcomed a new species to the Reserve - the beautiful and predatory Western Quoll.

This year saw significant stress on the fence driven by accelerating corrosion following wet conditions in the previous year and pressure from booming populations of digging animals outside, including bettongs that had exited the reserve through one-way gates. We responded by laying over 6 km of footnetting in an effort largely driven by my hard-working team with some welcome help also from Conservation Volunteers Australia. Looking to the future, we've embarked on an interdisciplinary research collaboration with Adelaide University, CSIRO and Waratah to understand soil corrosion and develop a more cost- and time-effective fence maintenance strategy.

I commend the staff and our dedicated volunteers for the tireless effort they all put into the very challenging work of removing rabbits this year and bringing our incursion issues under control. Arid Recovery is one of few rabbit-free reserves in the country and it is so important that we maintain that status.

It is such a pleasure to watch our community programs go from strength to strength and I look forward to more years of productive partnership with the Roxby Downs community.

AR Board

For more information on the people of Arid Recovery visit our website at www.aridrecovery.org.au

Steve Morton

Chair of Arid Recovery Board, Independent
Honorary Fellow, CSIRO Ecosystem Sciences

Mark Priadko

Independent
Financial management, financial and business analysis and business case consultant

Emily Perry

Representative for BHP
Head of Corporate Affairs, Olympic Dam

Andrew Corletto

Independent
Partner, Minter Ellison

Allan Holmes

Independent
Ex-CEO DEWNR

Sandy Carruthers

Representative for SA Department of Environment, Water and Natural Resources
Group Executive Director, Science and Information

Megan Lewis

Representative for the University of Adelaide
Head of School, School of Biological Sciences

Chad Menzies (to June 2017)

Representative for BHP
Lead Community, Olympic Dam

Phil Weinstein (to November 2019)

Representative for the University of Adelaide
Head of School, School of Biological Sciences

Brenton Gear (to November 2019)

Representative for SA Department of Environment, Water and Natural Resources
Regional Director, Adelaide and Mt Lofty Ranges

Scientific Advisory Panel for 2017-18

Professor Megan Lewis replaced Professor Philip Weinstein as Board representative for Adelaide University and as Chair of the Scientific Advisory Panel in late 2017. Arid Recovery welcomed Megan and thanked Phil for the energy and insight he brought to the role.

Megan is Head of School of Biological Sciences at the University of Adelaide where she teaches in remote sensing and environmental mapping and monitoring. Megan has a passion for using technology to understand vegetation ecology and extensive experience in South Australia's arid rangelands.

Megan holds a PhD in ecology from the University of NSW, two Masters degrees in Applied Science and Environmental Studies and a Bachelor degree with Honours in ecology. She sits on the Board of the Goyder Institute and contributes to technical committees in geoscience and remote sensing, and is a Member of the College of Experts at the Australian Research Council.



Panellists

- | | |
|--------------------|-------------------------------|
| Megan Lewis | Arid Recovery Board |
| Jeremy Austin | University of Adelaide |
| Peter Copley | SA DEWNR |
| Catherine Herbert | University of Sydney |
| Mike Letnic | University of New South Wales |
| Reece Pedler | SA DEWNR |
| Stephanie Williams | Ecological consultant |
| John Read | Ecological Horizons |
| Allan Holmes | Arid Recovery Board |

Arid Recovery Staff

General Manager / CEO

Katherine Tuft

Ecologist

Georgina Neave

Principal Scientist

Katherine Moseby

Office Manager

Letitia Sikora

Field and Maintenance Officer

John Crompton

Fence Maintenance Officer

Marty Kittel

Field Ecologist & Community

Coordinator

Nathan Beerkens

Reintroduction Technical Officer

Melissa Jensen

Interns

Peta Zivec

Madeleine Wilcox-Kerr

Ben Stepkovitch

Kirra Bailey

Scientific Advisory Panel

Phil Weinstein

Peter Copley

John Read

Reece Pedler

Jeremy Austin

Mike Letnic

Stephanie Williams

Catherine Herbert

Allan Holmes

UNSW Research Officer

Hannah Bannister



↑ Georgie Neave, Arid Recovery Ecologist, radiotracks one of the quolls reintroduced in 2018.

Thank you to the volunteers of Arid Recovery for all their support

- | | | |
|-------------------|------------------------|-----------------------|
| Adrian Friedel | Jay Poulton | Nicholas Dawes |
| Alex Nankivell | Jodie Fereti-Tukuitoga | Nicole Montgomerie |
| Andrew Spanner | John Goudie | Peta Zivec |
| Andrew Williamson | John Vosser | Richie Connall |
| Anthony Bryson | Kaely Kreger | Richie Cornwall |
| Anum Malik | Kane Hendry | Rob Brandle |
| Ashley Stevens | Karen Doyle | Rob Strotton |
| Ben Stepkovitch | Katy Read | Samantha Bryson-Kirby |
| Chris McGoldrick | Kevin Smith | Sandy Gibb |
| Cooper Dignan | Kirra Bailey | Sarah Voumard |
| Damien Sinkinson | Kristi Lee | Scott Rogers |
| Deon Vosser | Kurtis Madigun | Sophie Wilkins |
| Don McAlpine | Lando Montgomerie | Thomas Allen |
| Emily Belton | Louise Bishop | Travis Crompton |
| Evan Lewis | Luke Brind | Travis Hague |
| Grant Aitchison | Luke Young | Trevor Sikora |
| Greg Neave | Madeleine Wilcox-Kerr | Zachary Richardson |
| Hugh McGregor | Mark Young | |
| Hugo Hopton | Matt Little | |
| Jack Ashby | Michelle Kittel | |
| Jason Keith | Millie Young | |

State of the Reserve

Significant fence maintenance works were completed this year to address strain on the perimeter fence as the preceding wet year hastened corrosion and additional pressure was placed on the fence from bettongs exiting via one-way gates. The prior wet years gave rise to an influx of feral predators around the perimeter, with a record number of feral cats removed by volunteers. These challenges also gave rise to a number of incursions inside the reserve that were a major draw on staff time.

EDUCATION CENTRE

Arid Recovery's new Education Centre was completed thanks to funding through the South Australian government's Fund My Idea program, and additional investment from BHP. The grants were used to upgrade two portable buildings donated to the Reserve from the Myall Grove Caravan Park. A local builder was engaged to prepare the structures and volunteers from Roxby Downs and further afield helped on working bees throughout the year. The centre features an air-conditioned classroom and additional bunkrooms to provide visiting school groups with a versatile space to conduct activities in. It will also allow us to comfortably host other large groups more comfortably.

The Education Centre classroom has been decorated with artworks produced through 'Go Wild' science-arts collaboration workshops funded through a grant from Inspiring South Australia.

The Education Centre was officially opened by the Hon. Eddie Hughes MP and Andrew Harris (BHP) on the 17th of April 2018.

FERAL ANIMAL CONTROL

Volunteer shooters and staff removed 203 feral cats from around the reserve over a 6 month period as young cats dispersed following a bumper breeding season sparked by rodent booms. Diet of 130 of these cats was analysed, with an average of 5 native animals found per cat stomach. This extrapolates to more than 270,000 native animals saved from becoming dinner over the course of a year.

The considerable effort by volunteers in controlling feral cats was supported by a \$5,000 community grant from SAAL NRM. We improved our toolkit of traps, lures and spotlights and were able to reward our volunteers by reimbursing their fuel costs from spotlighting the 50 km perimeter of the reserve.

'Breach traps' are a new innovation installed at eight locations on the external fence. Designed to trap cats seeking entry into the reserve, the traps are built into the fence and raised off the ground to reduce captures of reptiles.

Two deployments of injected bait baits were made in a buffer zone around the reserve to target foxes, with assistance from the Wild Dog Management team at SAAL NRM.



↑ Inside the completed classroom of the new Education Centre.

INCURSIONS

Weaknesses in corroding footnetting exposed by pressure from bettongs exiting one-way gates resulted in nine rabbit incursions into the reserve. Eight of these were removed, with an average time of 45 days between detection and removal. Tracking and targeted trapping using softjaw traps was most effective, with some success with shooting by Field and Maintenance Officer John Crompton.

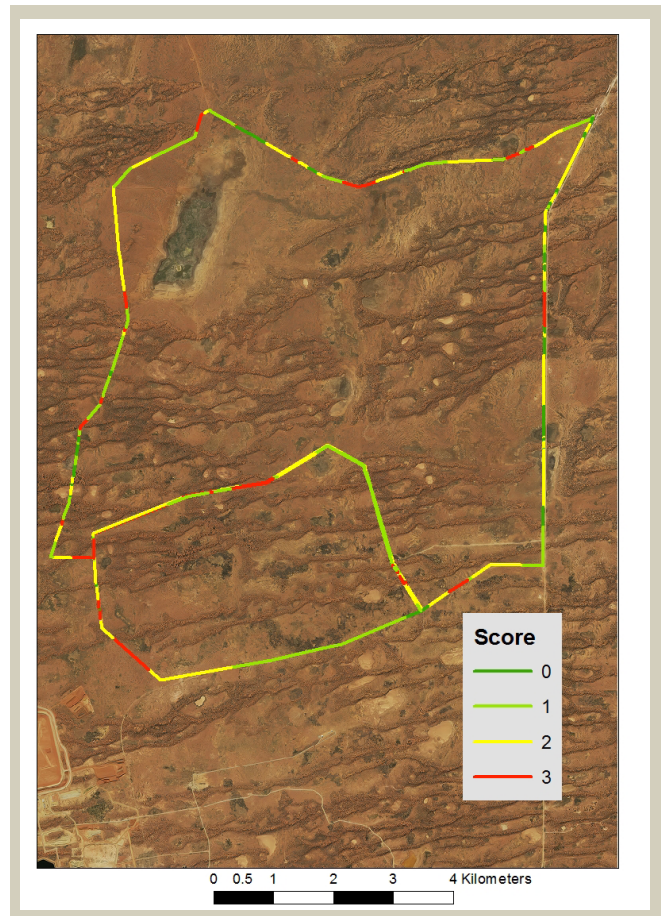
FENCE AUDIT MAPPING

The 2017-18 fence audit identified 4 km of external footnetting requiring replacement in the next 1-2 years, some of it immediately. Weak areas were in pockets of puffy soil on the western boundary, sections of dune on the western edge of the Second Expansion, parts of the eastern boundary and soft clay soil areas on the Red Lake - Northern boundary. Up to 4 km of corroded footnetting was identified on the internal boundary of the Main Enclosure.

FENCING WORKS

Large sections of corroding footnetting were replaced along the eastern and western boundaries. Over 2.4 km of external footnetting was replaced with heavy galvanised 30 mm netting. All these works were completed by staff in the absence of the Port Augusta Prison Work Camp program which we were unable to accommodate.

Major upgrades were made to internal fencing around the Main Enclosure to keep it as a refuge area for potentially vulnerable prey animals prior to the reintroduction of Western Quolls. A team from Conservation Volunteers Australia replaced 3.2 km of footnetting and replaced a 7 km length of electric hotwires to improve the voltage carried. These works were supported by a BHP Community grant.



2017-18 Arid Recovery fence audit showing the extent of rust on external footnetting and internal fencing on the Main Enclosure.



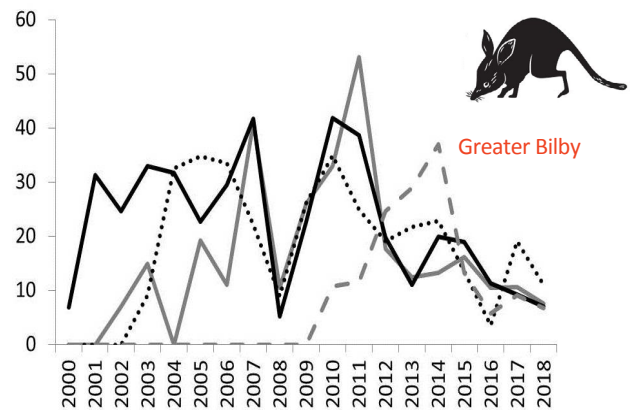
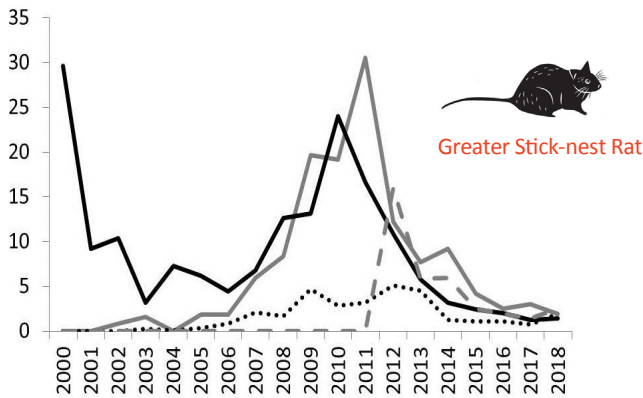
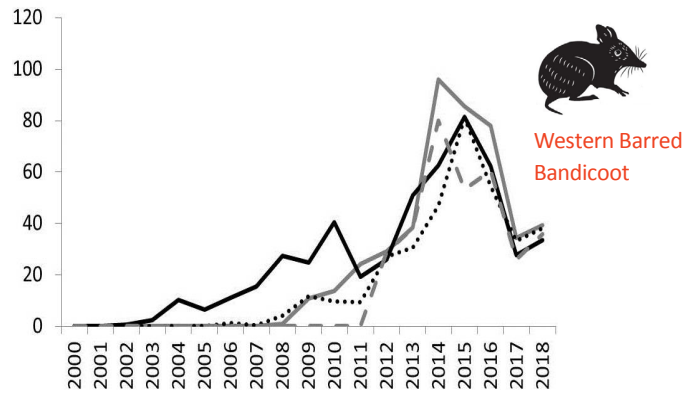
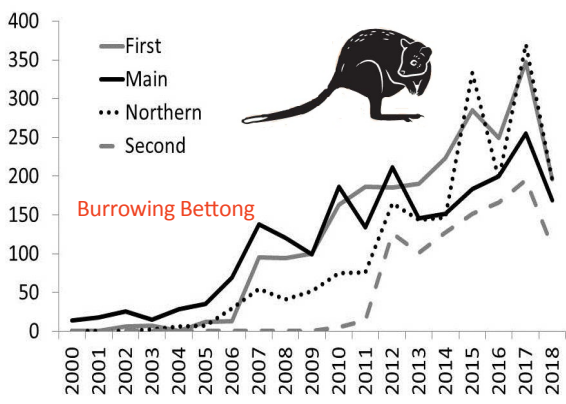
Corrosion research

Our experience maintaining the fence at Arid Recovery over 20 years has demonstrated that the soils in this region are highly corrosive, with rapidly developing rust requiring fence sections in contact with the ground to be replaced frequently at considerable expense and effort. This research will culminate in a more cost-effective fence maintenance strategy for us and other land managers into the future.

A new collaboration with the University of Adelaide's Acid Sulfate Soils Centre, CSIRO and Waratah is now seeking to understand what soil properties drive corrosion and which fence materials are best suited to withstanding rust in this environment. With seed funding from Waratah, student Andrea Stiglingh collected soil samples and profiled corrosion of the fence with Kath Tuft at 1 km intervals around the fence perimeter. Chemical and physical analyses of soil samples are used to profile highly corrosive areas. In the coming year Waratah will produce samples of a range of materials to test for corrosion resistance.

MONITORING REPORT

TRACK COUNTS FOR REINTRODUCED SPECIES



Re-introduced species monitoring

Track count monitoring of the four reintroduced mammal species was conducted in the four southern compartments of the reserve in four sessions.

BURROWING BETTONGS

Bettong track counts peaked in July and then started to fall as one-way gates started to become effective at relieving pressure within the reserve. Bettong management is addressed in detail on page 9. Bettong density was estimated from capture-mark-recapture survey in the Main Enclosure at 0.54 per ha (749 individuals). Bettongs continue to co-exist with feral cats in Red Lake and were translocated into the Dingo Pen in a prey naivety study this year.

WESTERN BARRED BANDICOOTS

Western Barred Bandicoots remain the second most abundant reintroduced species in the Reserve despite some minor drops in activity this year.

GREATER STICK-NEST RATS

Greater Stick-nest Rat track indices are low but stable in all compartments. Neither track counts nor nest activity surveys indicated any impacts of the western quoll reintroduction on stick-nest rats at this early stage.

GREATER BILBIES

Greater Bilby track counts show a decline across the Reserve from peaks driven by rainfall over 2016-17. Their populations are known to fluctuate considerably according to conditions.

Ecologist: Georgie Neave

Georgie joined the Arid Recovery team as full-time Ecologist in September 2017. She replaced Dr Aaron Fenner who completed his South Australian Rangelands Alliance role in June, a joint position with Bush Heritage Australia.

Georgie has expertise in vegetation ecology and feral predator management and is enjoying the daily hands-on conservation challenges at Arid Recovery.



In situ fauna and flora



Central netted dragon, eastern two-toed slider, beaked gecko and spinifex hopping mouse captured during annual trapping. Photos: Ryan Francis

NATIVE SMALL VERTEBRATES

Small mammals and reptiles were captured at 19 swale sites during annual trapping in March. Mammals were 18 times more abundant inside the reserve compared to outside, whilst there was little difference in reptile abundance (1.1 times as many inside compared to outside).

Seven species of mammals were caught, including Spinifex Hopping Mice, Plains Mice, Stripe-faced Dunnart, Fat-tailed Dunnart, Western Barred Bandicoot, Giles' Planigale and House Mouse. Dragons, skinks and geckoes made up most of the 26 reptile species caught, the most common being the Royal Ctenotus.

VEGETATION

Quadrat sampling was completed for focal species including grasses and *Enchylaena tomentosa* (ruby saltbush). New quadrat locations were established in Red Lake and Dingo Pen to expand sampling to these areas.

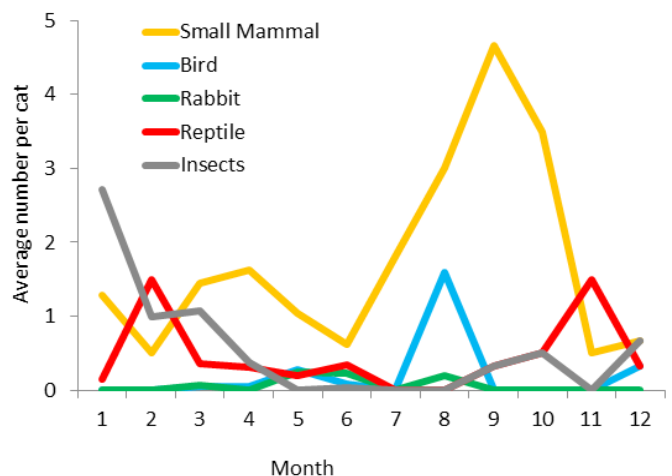
Seedling damage sampling continued in 2017-18 but will be discontinued as an annual measure. It was originally established as an early warning indicator of bettong overbrowsing but bettong track count has been found to be a more reliable, rapid and repeatable indicator to act as a trigger for management.



← Mel Jensen and volunteer Chris Madden checking pitfall traps.

FERAL PREDATORS

The feral cat dissection database now holds over 2000 records. Small mammals dominated the diets of the 130 cats dissected in the first six months of 2017, with a peak of 4.5 mammals per stomach analysed in September. Prior to the rodent boom and glut of small mammals appearing in cat stomachs, cats were eating more reptiles and insects. Juvenile cats caught during the March dispersal period were overwhelmingly recorded eating insects.



↑ Diet of feral cats in 2017. The category and average number of prey animals found per cat stomach dissected is shown by month.

Bettong management

Burrowing bettongs were introduced to the Arid Recovery Reserve in 2000 when 30 animals were translocated from islands off Western Australia. Since then, the population boomed to close to 8,000 animals, at a density of 1.09 per ha. During these 17 years, there was no indication that the bettong population was density dependent, as the rate of increase was not related to rainfall, body condition or reproductive output.

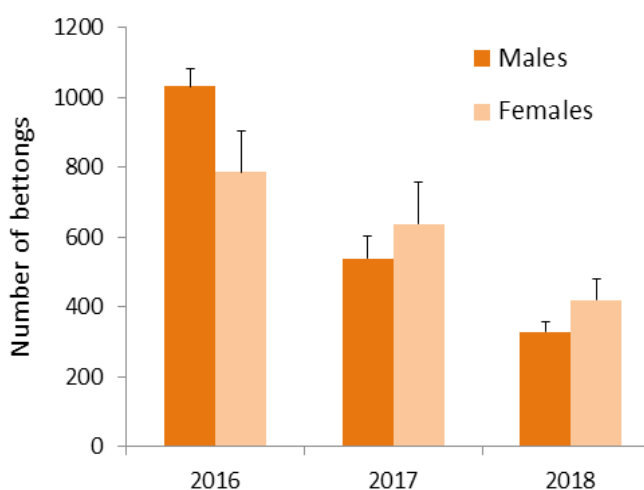
Our monitoring observed increasing browsing damage to palatable plant species including ruby saltbush (*Enchylaena tomentosa*) and native plum (*Santalum lanceolatum*) as bettong density increased. The activity of stick-nest rats was observed to decline as bettongs increased, while reintroduced species not reliant on herbage such as bandicoots and bilbies were unaffected.

Concern over the impact of overabundant bettongs on the condition of vegetation and sustainability of populations of other fauna species within the Reserve led to development of an adaptive management plan for bettongs. The plan scoped the available options for reducing the population, including lethal control, translocation, facilitated dispersal, reproductive control and regulation by predators. The plan also set thresholds to trigger actions.

While some of these options were explored through further discussion and research, facilitated dispersal through one-way gates was ready to implement immediately thanks to earlier trials. Twenty one-way gates were installed around the eastern, western and southern boundaries of the Reserve. Additional feral predator control in shooting, trapping and baiting was undertaken prior to and during the gates being open.

University of Melbourne Masters student Jessie Moyses set up camera traps to record exits through the gates and counted track activity on dunes outside each gate to test whether availability of shelter and supplementary food improved the persistence time of bettongs outside the Reserve. Jessie recorded 1,572 bettongs exiting gates between September 2017 and May 2018, and no non-target species exiting. Supplementary food did increase activity of bettongs, although they failed to establish in the longer term. A further 50 bettongs were translocated into the Dingo Pen as part of prey naivety research.

These measures, and a reduction in breeding with the onset of drought, have resulted in reductions in the bettong population to 0.54 per ha in May 2018. With early signs that western quolls readily prey on adult bettongs, there is hope that quoll predation has the potential to regulate bettong populations in future. We continue to monitor bettong activity.



Population estimate of bettongs in the Main Enclosure 2016 - 2018 split into males and females with standard error shown.

Contraceptive Trial

University of Sydney PhD student Holly Cope commenced a trial of contraceptive implants, the first to be used any bettong species. Holly captured bettongs in the First Expansion, injecting implants into half the females and leaving the remainder as controls. She will return every 2 to 3 months to recatch and assess bettongs for signs of breeding, weight gain and general condition. While the expense per implant suggests they may not be a viable solution to overabundance at Arid Recovery at present, the proof of concept may be valuable in future and to managers of smaller populations. Holly is supervised by Dr Catherine Herbert. Holly's work was featured on *Totally Wild*.



Quoll reintroduction

Western quolls were returned to the arid zone for the first time in nearly 100 years in May 2018 when eight females and four males were released into the Reserve. Ten animals were sourced from south-west Western Australia with assistance from the Department of Biodiversity, Conservation and Attractions. A further two males were translocated from the reintroduced population in the Ikara-Flinders Ranges National Park.

The full quoll reintroduction followed a successful trial in 2015-16 and served three goals. First, to re-establish a top order mammalian predator in the Reserve ecosystem, with the potential to regulate prey populations like the burgeoning bettongs and small mammals. Secondly to improve the anti-predator responses of threatened species. This concept has been demonstrated in our Red Lake compartment where bettongs and bilbies co-exist with a managed population of feral cats and are developing improved survival behaviours as a result. We hope to replicate this effect using a native predator. Finally, Arid Recovery will contribute to the national conservation of Western Quolls as the first predator-free haven to protect this species. While the Reserve may be too small to support a genetically viable population in the long-term, we will work with other organisations to conduct genetic swaps.

Melissa Jensen joined the team as ‘midwife’ to lead the monitoring as quolls settled into their new home, studying their movements, diet and breeding success. Quolls settled in well, keeping the team busy with their large movements as they explored the Reserve and established home ranges. One quoll dispersed out of the Reserve early on and was rapidly predated on outside the fence. Two other quolls went missing, possibly dispersing out of range of aerial tracking flights. Within 3 months of reintroduction, five of the eight females were carrying a total of 29 pouch young between them.



Male quoll, →
Coorlay, exits
his burrow.
Photo by Jan-
nico Kelk

Quolls were recorded consuming a diverse range of prey species, including small mammals, bandicoots and bettongs. A number of confirmed predation events of bettongs were recorded, where the incident could be seen written in the sand. This demonstrated that even the small-bodied female quolls could successfully hunt and kill adult bettongs. One female quoll was even recorded hunting and killing a bettong slightly larger than her. These findings were a revelation as it was previously thought that only the larger male quolls might occasionally prey on adult bettongs, and that most bettong fur detected in scats was likely from juvenile bettongs or scavenged from carcasses.



Kowari potential

Kowaris were identified as an important species to consider for reintroduction to Arid Recovery because of their tenuous status in the wild, their role as micro-predators, and the potential for the Reserve to act as a stepping stone where kowaris could be bred up to be supplemented or reintroduced to wild populations.

Nathan Beerkens scoped the suitability of the Reserve’s habitat and prey resources during his internship, identifying suitable gibber and sand mound habitats in the Northern Expansion.

Nathan and Kath joined Rob Brandle and Cat Lynch on a SAAL NRM survey of the remaining wild kowari populations on Clifton Hills and Pandie Pandie stations in May 2018. Kowaris were found in low density at these locations, but failed to be detected at some previously occupied sites.

Research report

Arid Recovery collaborated on two field projects through the National Environmental Science Programme's Threatened Species Recovery Hub and contributed to three workshops and metadata reviews. NESP postdoc Hugh McGregor completed fieldwork on prey switching, looking at how feral cats change their hunting behaviour when a major food source is removed suddenly and assessed the risk to native prey. A rapid reduction in rabbits akin to calicivirus release was simulated using a professional shooter. Hugh measured cat activity and movements before and after, including hunting behaviour from video-collars. He found that while some cats switched to eating native small mammals, others were unable to change and either lost condition markedly or dispersed out of the test area. We also supported postdoc Natalie Briscoe measuring the thermophysiological extremes feral cats are exposed to in the arid zone, identifying the importance of water availability and burrows to cats.

University of NSW PhD student Charlotte Mills continued her project on how reintroduced mammals change seed banks and vegetation composition by analysing vegetation in experimental fenced plots. We hosted University of Melbourne PhD student Rebecca Groeneweg who tested camera trap arrays as an alternative monitoring method for bettongs and western barred bandicoots.

Natasha Tay, a PhD student at Murdoch University, visited to study how prey animals like bettongs and bandicoots escape from predators by measuring their locomotion and anatomy. She did this by applying fluorescent powder to animal's feet, then releasing them through a race and using ultraviolet light to measure the distance between hops and bounds.



↑ Charlotte Mills, using a drone to photograph vegetation plots.

Prey naivety project

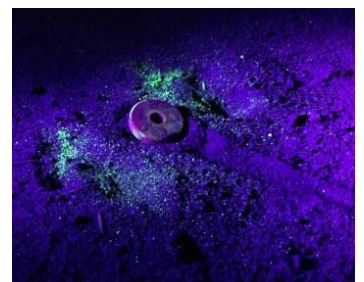
With improved anti-predator behaviours demonstrated for bettongs exposed to cats, the Tackling Prey Naivety project moved into a testing phase to see what this means for survival.

PhD student Ally Ross measured differences in behaviour of bilbies that had been exposed to cats versus those that had not and found that cat-exposed bilbies were warier and spent more time under cover. In an exciting result, cat-exposed bilbies were significantly more likely to survive after translocation into the Dingo Pen (where cats were present).

The same experiment was repeated for bettongs, with 25 naive bettongs from Main, and 25 'cat-savvy' bettongs from Red Lake released into Dingo Pen. No survival difference was found for bettongs however. There are plans for further tests in open landscapes at Bon Bon Station Reserve.



Bettong footprints marked with fluorescent powder in PhD student Natasha Tay's work on escape locomotion.



Seven scientific papers and one thesis were produced from Arid Recovery Research in 2017-18. A highlight was a publication from the prey naivety project demonstrating that susceptible prey like bettongs and bilbies can co-exist with feral cats under some conditions, paving the way for a better understanding of how the success of reintroductions in open landscapes can be improved. Work on the impacts of overabundant bettongs within fenced reserves and the results of a genetic audit of reintroduced species were also published.

Community

INTERNSHIPS

Arid Recovery supported four interns in the second year of the reinstated program in 2017-18. Internships are aimed at building real-world skills in recent graduates through immersion in our small conservation NGO, and include activities from ecological monitoring and research, through land management, community outreach and administration.

In 2017, Peta Zivec contributed to vegetation surveys and track count monitoring. Madeleine Wilcox-Kerr undertook an independent project mapping burrows of plains mice and hopping mice across different habitats. She also made a great contribution to our community programs, assisting Nathan at events and airing on RoxFM. Ben Stepkovitch and Kirra Bailey joined us for 3 months on 2018, starting with the intensive small vertebrate trapping survey and culminating in the reintroduction of Western Quolls.

STICKIE SEPTEMBER

We celebrated Greater Stick-nest Rats throughout the month of September, coining the hashtag #StickieSeptember. Sharing the marvel of these unusual native rodents was a great joy. We produced a host of social media content, a video and three blogs raising the profile of 'stickies', sharing their nest architecture wonders and asking whether a species name affects how much people care about it. Legendary cinematographer Don McAlpine contributed footage he recorded of stick-nest rats from visits to Arid Recovery with his low-light camera gear throughout the year. Supporters contributed a record number of donations to help conserve stick-nest rats.

↓ Madeleine Wilcox-Kerr on a sunset tour.

Kirra Bailey and Ben Stepkovitch get ready for bandicoot catching. ↗



↑ Minyma ladies work with Roxby Downs Area School students to paint a canvas representing the desert landscape.

ROXFM RADIO SHOW

A new program on local radio station RoxFM "Conservation Conversation" sees Nathan and an intern answering kids questions.

GO WILD - SCIENCE-ARTS WORKSHOPS

We held workshops throughout the year merging art with science with funding through a grant from Inspiring South Australia. Travis Hague led a workshop on using a simple smartphone to take amazing photos of the natural world. There were also workshops in leathercraft, using watercolours and one on indigenous art where the local Minyma ladies gathered with children from the Roxby Downs Area School to make an artwork representing our desert landscape.

ROTARY CLUBS

Our friends from the Rotary Club of Frankston returned to Arid Recovery in May to build a deck on the new Education Centre. We have also begun partnering with the Roxby Downs Rotary Club to host starlight dinners at the Reserve. Roxby Rotary do an amazing job producing delicious camp oven meals on the campfire and enjoy connecting with the many guests that come to visit.



COMMUNITY



↑ Toasting marshmallows at Dads & Kids event. *Photo: Sarah Curtis*

TOURS

We continued to host both the Olympic Dam Discovery Tour and Sunset Tour. The Discovery Tour, combining a bus tour of the Olympic Dam mine with a visit to the Arid Recovery Reserve, with running commentary by BHP and Arid Recovery staff continued to be popular and ran every Wednesday between April and October. The Sunset Tour, combining a natural history walk at sunset with animal spotlighting after dark was also popular and ran upon request, with group sizes ranging from solo visitors up to groups of 12. It is a pleasure to partner with the Roxby Visitor Information Centre who take bookings and promote the tours.

EDUCATION

102 students attended school visits hosted at the reserve, including Wiltja Indigenous College, University of Adelaide Law School and local schools from Roxby Downs, Andamooka and Coober Pedy. We visited Roxby Downs Area School and Kindergarten too for snake awareness sessions. We also hosted the second year of the Animal Identification course for the University of Adelaide's Wildlife Conservation students.

SCIENCE HUB

We continued to host Inspiring South Australia's Far North Science Hub, a collaborative initiative between industry, government and education groups to communicate science to a wide audience, which we received funding for in early 2016. The Hub's events engaged 1,673 people and included the "Bilby Burrow", "Roxby's Mad Scientists", a Native Bee Day, School of the Air Workshop, Public Outreach Astronomy, and a workshops in the Flinders Ranges, Woomera and Glendambo.

EVENTS

We partnered with Time for Wellbeing and Strengthening Our Families (local BHP community partnerships) to hold Dads & Kids evenings at the Reserve for the first time. Families went searching for things in nature on a scavenger hunt, took silly selfies on camera traps, ran time trials to test runners' speeds against different animals and finished with a BBQ and campfire. These were such a success that each event was full and we'll be doing more for sure.

Arid Recovery was also a regular feature at the Roxby Downs market day and contributed a float to the Christmas pageant.

Statistics

941

tour guests

5,834

people attending events

967

hours volunteered

102

students on education visits

74

media articles, newsletters, blogs

6,768

Facebook followers

75,525

people engaged via Facebook

230,400

website visitors

2017-18 Financial Report

INTERPRETATION

Bush Heritage Australia joined as a Member of Arid Recovery in 2018, increasing sponsorship contributions accordingly. Income was reduced from 2017 primarily due to a reduction in research income linked to cessation of projects. This was made up for somewhat by an increase in grant funding. Income from tours and events continued to make a solid contribution to the budget.

Expenditure in 2018 was reduced from 2015, with savings made in administration and wages. This allowed for flexibility in covering some research costs and continuation of increased investment in feral animal control around the Reserve.

Balance sheet

ASSETS		
CURRENT ASSETS	2018	2017
Cash and cash equivalents	\$229,429	\$154,625
Trade and other receivables	\$17,297	\$511,502
Inventories	\$30,857	\$14,349
TOTAL EQUITY	\$277,583	\$680,476
NON-CURRENT ASSETS		
Plant, property and equipment	\$422,016	\$406,999
TOTAL NON-CURRENT ASSETS	\$422,016	\$406,999
TOTAL ASSETS	\$699,599	\$1,087,475
LIABILITIES		
CURRENT LIABILITIES		
Trade and other payables	\$18,332	\$42,341
Income in advance	\$44,420	\$435,000
Provisions	\$23,899	\$26,862
Credit card	-	(\$973)
Lease liability	\$11,529	\$10,924
TOTAL CURRENT LIABILITIES	\$98,180	\$514,154
Lease liability - non-current	\$3,983	\$15,512
TOTAL NON-CURRENT LIABILITIES	\$3,983	\$15,512
TOTAL CURRENT LIABILITIES	\$102,163	\$529,666
TOTAL NET ASSETS	\$597,436	\$557,809
TRUST FUNDS		
Retained earnings	\$597,436	\$557,809
TOTAL EQUITY	\$597,436	\$557,809

FULL FINANCIAL AND AUDIT REPORT

Arid Recovery's accounts were audited by MRL Group auditors. The full audited financial report can be found on the Arid Recovery website at www.aridrecovery.org.au.



Income and Expenses

REVENUE	2018	2017
Sponsorship contributions	\$490,064	\$444,987
Research income	\$7,811	\$117,835
Fundraising	\$12,476	\$9,633
Grant income	\$73,811	\$28,870
Donations	\$28,927	\$39,290
Tours and events	\$19,070	\$17,554
Other income	\$41,323	\$10,338
Total income	\$666,213	\$729,395
OPERATING EXPENSES		
Administration	(\$42,705)	(\$59,908)
Depreciation	(\$54,568)	(\$55,386)
Wages and Salaries	(\$385,278)	(\$460,868)
Motor vehicles	(\$34,015)	(\$29,516)
Research	(\$39,047)	(\$11,851)
Reserve maintenance	(\$11,681)	(\$31,221)
Fencing materials	(\$31,701)	(\$64,616)
Flora and fauna management	(\$20,847)	(\$22,054)
Volunteer and community	(\$5,070)	(\$1,669)
Other expenses	(\$2,106)	(\$10,157)
Merchandise	(\$6,883)	(\$3,091)
Write off	(\$22)	(\$21,697)
Total expenditure	(\$633,923)	(\$772,034)
NET PROFIT / (LOSS)	\$39,627	(\$103,527)

SUPPORTERS

What better way to contribute to Arid Recovery than sponsoring the greater stick-nest rat.

Adopt a stick-nest rat

Your sponsorship includes:

- Certificate of sponsorship
- 12 month membership to Arid Recovery
- Regular updates on 'stickie' conservation
- Our heartfelt thanks for your support of this marvelous and little-known Australian rodent.

📍 Adopt a Stickie at www.aridrecovery.org.au/adopt

Donate

Donate online or over the phone to assist the work of Arid Recovery.

Volunteer

Join us for a working bee or assist around the office, there are many opportunities to volunteer with the staff of Arid Recovery.

Adopt

Adopt a desert animal to support Arid Recovery's ongoing conservation work.

Sponsor

Contact the Arid Recovery office if you or your organisation would like to become a sponsor.



↑ *Swainsona stipularis* in bloom. Photo: Georgie Neave

Thank you to the sponsors and supporters of Arid Recovery



Government of South Australia
Department of Environment,
Water and Natural Resources



Arid Recovery is a conservation initiative supported by BHP, the SA Department of Environment, Water and Natural Resources, the University of Adelaide, Bush Heritage Australia and the local community.

Thanks to the many businesses who continue to support the work of Arid Recovery:

Alliance Airlines	Conservation Volunteers	Inspiring South Australia	Roxby Downs Motor Inn	Roxby LPO
Andamooka Yacht Club	Australia (CVA)	Monadelphous Engineering	RoxbyLink	RoxFM
Arid Lands Botanic Garden	Delicious by Elke	The Monitor Newspaper	Roxby Club	SAAL NRM Board
Bianco	Frankston Rotary Club	MRL Group	Roxby Fabrication & Engineering	Sodexo
Blackwoods	Global Leadership Foundation	National Science Week	Roxby Pest Management	Spotless
BSH	Greyhound Australia	Port Augusta Prison	Roxby Traders	Woolworths
Coates Hire	Holcim, Lavricks Engineering	Roxby Downs Area School		

