



We acknowledge Aboriginal people as the First Peoples and Nations of the lands and waters we live and work upon. We pay our respects to the Elders past, present and emerging. We acknowledge and respect the deep spiritual connection and the relationship that Aboriginal and Torres Strait Islander people have to country and commit to working with the First Nations People of the SA Arid Lands as we undertake our business on this shared and sacred country.

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COVER IMAGE: Lobed Hop-bush (Dodonaea lobulata), Quorn flora reserve; overlooking Quorn township Image, Di Makotter



Jodie Gregg-Smith and Ross Sawer with the board's fiveyear Strategic Landscape Plan

Presiding Member Update

Since our last edition, we have launched our new five-year Strategic Landscape Plan, which positions the boards for a very busy and exciting future in supporting five key regional priorities.

Based on the input of community, stakeholders and partners, the priorities include a board commitment to; *Climate Resilience, Water Management, Protection and enhancement of biodiversity* and the value of *People and Partnerships* in achieving our work together.

The plan provides a clear and simple set of focus areas to address the priorities and will continue to be supported by an annual business plan that spells out the investment and staged delivery of projects and programs across all priorities.

We were delighted to welcome David Speirs, Minister for Environment and Water to Port Augusta to formally launch the plan. Thank you to members of the community who contributed to its development and the board looks forward to working with you in its successful implementation.

The board recently held its first regional meeting in Hawker where an opportunity to engage with one of the board's partnership projects, Bounceback and Beyond, on the Yappala Indigenous Protected Area was a highlight. It was a great opportunity to connect with the local ranger and the site where we recently released the endangered Flinders Ranges Purple-spotted Gudgeon. You can read about it in this edition and I hope you enjoy reading about the many projects and programs of our board of late.

Ross Sawers

General Manager Update

Greetings and welcome to the next edition of Across the Outback.

You are in for an absolute treat with the stories in this edition. The board and staff have had a typically busy time, which seems to not have slowed much despite the hiccups from time to time with lockdowns and travel restrictions.

I am very proud to be able to share more about the Grassroots and Building Pastoral Sustainability Grants the board has invested in valuable projects, trials and events. The establishment of the Cochineal Nursery at the Australian Arid Lands Botanic Gardens in partnership with the Port Augusta City Council was also a recently highlighted initiative. We have made significant progress with the Kangaroo Partnership Project and hope to soon appoint a coordinator to assist in a collaborative effort to addressing over abundant kangaroos in and beyond the SA Arid Lands region. There are some great initiatives in managing our water resources as well, so please consider if you would like to be involved in those.

The board continues to pursue funding and partners, with work afoot to invest with land management, industry and environmental partners to tackle the feral goat issues and pursuing opportunities in the region. We commit to remaining engaged with community and partners in this endeavour, noting that total grazing pressure presents one of the greatest impacts to both ecological and economic values. You can read about all of this and so much more in edition 93 of the Across the Outback.

Enjoy this edition and thank you for taking the time to learn more about your Landscape Board's work, work you invest in through your Landscape Levy.

Jodie Gregg-Smith



Western Quolls (Idnya) will be translocated to Vulkathunha-Gammon Ranges National Park (VGRNP) later this year in a move designed to further safeguard the species.

The continued growth of Idnya numbers in the Ikara-Flinders Ranges National Park (IFRNP), and its expansion to surrounding pastoral and conservation properties, has encouraged the SA Arid Lands Landscape Board to move forward with plans to further expand the species as part of its Bounceback and Beyond project.

It follows cat, fox and dog control over a 500 square-kilometre area in VGRNP and on surrounding properties throughout August in preparation for the release, giving the reintroduced species the best chance of survival.

An assessment to determine the suitability of the new site was undertaken in 2019. It looked at access to habitat patches with large hollow-bearing trees or caves or crevasses that can provide shelter from predators and climatic extremes.

Forty qualls are expected to be moved from IFRNP in early December.

The Idnya will be captured overnight using cage traps and transported by car on the same day to a new location in VGRNP for release later the same evening.

It is hoped the new population will be further supplemented in autumn 2022 and possibly again in autumn 2023.

The release site will be monitored using a combination of radio tracking of individuals, camera monitoring and cage trapping to provide information on survival, habitat use and dispersal. Ongoing threat abatement will continue, particularly targeting foxes and cats.

Idnya were reintroduced to IFRNP in 2014, using a population sourced from Western Australia. The species, which disappeared from the area as long ago as the 1880s, is an important totem animal to the Adnyamathanha people, who are supportive of the planned translocation to VGRNP.

The translocation of the Idnya is jointly funded through the SA Arid Lands Landscape Board, the Australian Government's National Landcare Program, the Department for Environment and Water and the Foundation for Australia's Most Endangered.





The SA Arid Lands Landscape Board's new Strategic Plan 2021-2026 was launched by Environment and Water Minister David Speirs during a visit to Port Augusta in September.

Under the new Landscape Act, all landscape boards have delivered concise five year plans aligned with the back to basics approach as part of the Landscape reform.

"Our historic Landscape SA reform is putting communities back at the heart of natural resources management and these Landscape Plans are a key part of this," Minister Speirs said. "I look forward to seeing Landscape Boards across the state deliver our backto-basics approach in partnership with the wider community."

Minister Speirs launched the plan at the Australian Arid Lands Botanic Garden after a tour of the garden by Friends member Christine Nayda, and a visit to the cochineal nursery constructed by the board in partnership with Port Augusta

City Council. The nursery is being used to grow the biocontrol insect cochineal to tackle cactus infestations on pastoral properties and private land across the SA Arid Lands region.

New plan will guide board's work

The SA Arid Lands Landscape Board has a new strategic plan to guide its work for the next five years.

The plan, which was adopted by the Minister for Environment and Water David Spiers late in July details the board's priorities and will guide its investment from 2021-2026.

Detailed in the plan are the board's priorities: Climate resilient region; Water management; Sustainable land management; Protecting and enhancing biodiversity; and People and partnerships.

A new plan was required to be developed with the adoption of the Landscape South Australia Act 2019 and was based on feedback the board received from community members through contributions to the former NRM Plan, planning workshops with district Landscape Groups, and feedback on the Water Allocation Plan.

It sits alongside an annual Business Plan that details expected income and expenditure for the next 12 months.

Presiding Member Ross Sawers said the board's relationships with the community and its partnerships are foundational to its priorities and in the development of a plan that is simple, clear and echoes and reflects many voices and values.

"The board values the ongoing input, influence and guidance of traditional owners as the cultural authority of the

SA Arid Lands region, alongside the communities and industries responsible for sustainable land management, protection and prosperity of the region," Mr Sawers said.

"This plan recognises the history of the region and the enduring community commitment to protect, sustain and enhance its landscapes for the benefit of future generations."

The SA Arid Lands Landscape Board now welcomes the community's ongoing involvement in implementing the plan.

The plan is available on the board's website at www.landscape.sa.gov.au/saal

New nursery to breed cactus-fighting insect

A tiny insect is being bred to tackle opuntia (cactus) infestations in the SA Arid Lands region in a new partnership between the SA Arid Lands Landscape Board and Port Augusta City Council.

A biocontrol insect, cochineal measures between 1-5mm and is a natural fighter of Opuntioid cacti infestations. Left untreated, these cacti infestations will continue to spread until they smother natural species, and in some cases pose a threat to native animals and birds.

The partnership between the board and the council has seen a cochineal breeding nursery constructed at the Australian Arid Lands Botanic Garden which will ensure strong strains of cochineal can be easily accessed by the Arid Lands community and council staff.

Presently, the cochineal can only be harvested from cactus populations in the region, which can be hundreds of kilometres away from where they might be needed.

Cochineal is very host specific and the four strains being bred at the facility are specific to five species found around

the SA Arid Lands Region: Wheel cactus (Opuntia robusta), Engelmann's cactus (Opuntia engelmannii), Devil's rope cactus (Cylindropuntia imbricata), Coral cactus (Cylindropuntia fulgida var. mamillata) and Jumping cholla (Cylindropuntia prolifera).

In the breeding nursery, infected cactus pads are added to crates of fresh pads, allowing the cochineal to spread to clean material that can then be released on cactus populations in the field.

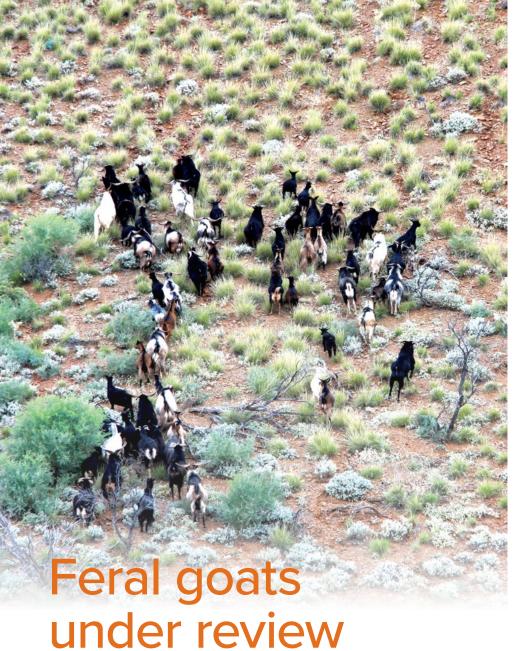
While cochineal was first released in the Flinders Ranges about 12 years ago, the board released its first variety on Coral cactus at Lake Everard in November 2017. Almost four years on, nearly all plants in the infestation are dead. Since then the board has extended its work with cochineal, recording similar results on infestations throughout the region, with 26 properties currently engaged.

SA Arid Lands Presiding Member Ross Sawers said cochineal is proving to be a key tool in tackling opuntia species throughout the region, with the work of the board staff in identifying the most effective strains for specific cactus being recognised at a national level.

"The work we are doing with the broader SA Arid Lands community is making a real impact in controlling opuntioid infestations across our region. We are really pleased to be able to partner with the Port Augusta City Council to expand the capacity to grow cochineal in a controlled environment to ensure we have easily accessible stock for council staff and community across the region."

Port Augusta City Council CEO John Banks said the cochineal breeding facility was a really good opportunity to partner with the SA Arid Lands Board which had Port Augusta added to its region in July 2020.





The SA Arid Lands Landscape Board is reviewing feral goat management in the region and is working with key stakeholders on options for future management.

Discussions are underway with potential partners including the Northern and Yorke, Eyre Peninsula and Murraylands and Riverland Landscape Boards on funding opportunities to support broader research and stakeholder input. This will also inform the board in the development of its feral goat policy.

Feral goats are a major contributor to total grazing pressure with populations able to increase by up to 75 per cent in one year in the absence of control.

They heavily impact native vegetation in areas where they are left to roam and compete with livestock for pasture and water. Goats have been estimated to cost at least \$17 million in losses to the Australian sheep industry through competition between feral goats and domestic sheep.

The feral goat is a declared animal under the Landscape South Australia Act 2019 and regulations provide direction on the level of control required. The requirement is that a landholder takes all reasonable steps to ensure goats on their property are captured and, within six weeks of capture, are either removed from the land or destroyed. Domestic and re-domesticated feral goats must be properly contained behind fences and tagged.

The high biodiversity value of the Flinders Ranges and the hilly terrain that makes confining goats difficult means the keeping of domestic goats is prohibited in the area. Exceptions can apply with a permit for those needing to keep goats for medical reasons or establish a goat depot subject to compliance with identification and fencing requirements.

If you have any questions in relation to goats on your property, please contact the SA Arid Lands Landscape Board on 8648 5307.



PASTORALISTS HEAR A NEW APPROACH TO CARBON

Carbon farming has caught the attention of landholders in the North Flinders and Port Augusta-Quorn districts, with requests to find out more about opportunities and pitfalls.

In response, the North Flinders
Landscape Group organised a Carbon
as an opportunity for Rangeland
Grazing Systems workshop to assist
landholders better understand market
drivers and increase their knowledge
to reinforce decision making in the
carbon space.

Twenty landholders attended the workshop in Hawker which was presented by Michael Eyres from Field Systems Australia and Edward Scott from the Soil and Land Company.

The presenters spoke about:

- The importance of carbon reinforced diversification for long term rangeland sustainability and drought resilience strategies;
- Development of methodologies for the rangelands;
- The importance of a whole of landscape approach; and
- Landholder considerations and opportunities in this developing sector.

A barbecue dinner after the event provided an opportunity for attendees to chat with the presenters and seek answers to any further questions they had

Factsheets on carbon farming in the pastoral zone are available on our website at www.landscape.sa.gov.au/saal/land/Resources/Carbon_Farming





Managing the significant threat to the environment posed by over-abundant kangaroos is the goal of a partnership that will seek to improve the landscape and economic resilience of communities in regional South Australia.

Funded by the Landscape Priorities
Fund, Optimising kangaroo
management in South Australia – a
partnership approach to improving
landscape and economic resilience
will establish a Kangaroo Management
Partnership, bringing together key
stakeholders to explore and trial

The project has begun with a search for an independent partnership coordinator, who will play a pivotal role in partnership facilitation, stakeholder engagement and who will be the key contact for landholders interested in on-ground trials.

The project's need stemmed from record kangaroo populations across South Australian regions in 2017, which were then followed by a massive die off due to the years of drought that followed. The high kangaroo numbers contributed heavily to grazing pressure across the landscape with threats to native plant species at a time when properties had largely destocked and the landscape was unable to cope with the large numbers.

Led by the SA Arid Lands Landscape Board in partnership with landscape boards across five South Australian Landscape regions, the partnership will involve landholder, producer, kangaroo industry, conservation, First Nations, government and animal welfare organisations.

It aims to find the common ground between environmental, economic, social and cultural interests that provide a basis for collaboration and shared responsibility for kangaroo management.

Pest control improves Coongie conservation

Wetlands of international significance are being protected by controlling feral animals and invasive weed species to improve conservation outcomes for threatened plants and animals through the board's five-year Coongie Wetland Wonders project.

Since the program began in 2019, the threat from pigs and large feral herbivores in the Coongie Ramsar area has been reduced through the delivery of aerial and on-ground control works across 50,000 hectares. The threats are also better understood following the establishment of monitoring programs in the area.

Pigs threaten riparian zones through wallowing, routing and grazing of native vegetation. As an omnivorous species, they also eat native fauna including frogs, lizards, turtles and ground-nesting birds, which migrate to the area following rainfall events.

Conservation threats caused by invasive weeds are improved, with control works against Mimosa bush, Noogoora burr and Buffel grass undertaken on 12,100 hectares.

Behaviour and activity of the Dusky Hopping Mouse and Crest-tailed Mulgara (Ampurta) are better understood following surveys on 133 sites in and around the Ramsar reserve boundary. Hopping mouse activity was detected at 19.5 per cent of sites, while Ampurta were detected at 14.3 per cent of sites.

Calls detected on song meters that were thought to belong to Night Parrots were not definitive, although there is an improved understanding of Night Parrot presence in the Ramsar area through the collection of site occupancy habitat,

predator activity and land condition data. While the species historically occupied the area, the population is known to have undergone a rapid decline in the region in the late 19th and early 20th centuries. Thirteen song meters were deployed over two different periods.

Waterholes have been monitored for hydrology, fish and water quality changes, with eight additional sites added to the two that had historically been monitored. The monitoring programs have also considered the condition of the watercourses and catchments and the factors likely to affect them. This includes water resource development and land use change as well as the impact of roads, tracks and pipelines on floodplain vegetation and structure, which were ground-truthed in response to satellite data obtained through a hydrological flow and vegetation response model.

Work has also been done to improve understanding of the extent and condition of the region's natural values, through the development of a Strategic Adaptive Management approach through the Lake Eyre Basin partnership.

The Coongie Wetland Wonders project is supported by the SA Arid Lands Landscape Board, through funding from the Australian Government's National Landcare Program.







Purple-spotted fish enjoying new home

The threatened Purple-spotted gudgeon (*Mogurnda clivicola*) has passed its first test after being released at new sites in the Flinders Ranges.

Six hundred of the small, elusive, spotted fish were transported by helicopter from sites in the northern Flinders Ranges to new homes in permanent springs in the central Flinders Ranges, doubling the known number of population sites of the species and reducing its extinction risk.

The gudgeon, known as Wirta Udla Yarri to Adnyamathanha people, are endemic to Weetootla Spring in Vulkathunha-Gammon Ranges National Park. Brownish in colour, they live in rocky stream habitat maintained by springs. Fully grown they measure only 15cm.

Early monitoring indicates fish are surviving, with only a few deaths following release at one site. Repeated monitoring in late May and in June found almost 90 per cent of the fish had survived.

The benchmark for early success was considered to be the survival of more than half the fish in the first three months.

A more rigorous camera based monitoring system has been established to enable the collection of quantitative data to help document progress and compare with existing populations in the northern Flinders. The data analysis and interpretation will form part of an Honours student project from early next year.

While no fish deaths have been recorded in the past few visits, and initial monitoring is being analysed, early indications are that the fish are hiding themselves well.

"It was always an ambitious plan to move hundreds of fish by helicopter across long distances and we were really pleased with the capture and survival rates of the gudgeon. Our task now is to monitor the survival, growth and dispersal of the new populations which can be tricky with a small fish that knows how to hide," Conservation Ecologist Rob Brandle said.

"One of the greatest successes of the translocation was bringing together Aboriginal community members and organisations, volunteers, and government agencies who all had a role in making this project possible," he said

The translocation was a collaborative effort involving the SA Arid Lands Landscape Board, the Vulkathanha-Gammon Ranges National Park and Ikara-Flinders Ranges National Park Co-management Boards, the Yappala Indigenous Protected Area

Advisory Committee; the Department for Environment and Water's National Parks and Wildlife Service, the Aboriginal Lands Trust of SA, Friends of Vulkathanha-Gammon Ranges National Park and the community represented by the Viliwarinha Yura Aboriginal Corporation.

It was undertaken as part of the Bounceback and Beyond project, which aims to stabilise or improve targeted species listed as threatened under the Environment Protection and Biodiversity Conservation Act.

Bounceback and Beyond is supported by the SA Arid Lands Landscape Board, through funding from the Australian Government's National Landcare Program.



Scholz

Mound Springs collaboration achieves results

A trial site established on Billa Kalina Station is allowing the Friends of Mound Springs (FOMS) to assess the effects of grazing on a mound spring.

In collaboration with station owners Colin and Jill Greenfield, Friends members have used fencing at a spring to compare a fully fenced area with no grazing, with an area that allows controlled grazing only and another section that is fully open.

Cameras were installed as part of the research program, and data will be analysed as part of the comparative assessment.

A number of programs have been undertaken since the 1980s to document the characteristics and values of the springs and to improve their management and conservation status. A June working bee, involving FOMS volunteers, Arabana Rangers and SA Arid Lands Landscape Board staff, continued the work on springs in the Kati Thanda – Lake Eyre area.

At Strangways Springs and Freeling Springs, the site of the Peake Overland Telegraph ruins, Arabana Rangers, Sam Stuart, Liz Sindely and Keegan Solomon helped FOMS volunteers maintain walking trails established in 2011. A bench seat was installed on the Strangways walk in memory of late FOMS helper Bill Giles. New bollards were also installed at the Peake carpark to manage vehicle movement.

It followed the fencing of Levi Springs on The Peake pastoral lease by FOMS in 2019 to protect priority mound springs from disturbance by stock and feral animals. It was completed in consultation with the Williams Cattle Company, Arabana Aboriginal Corporation, the Department for Environment and Water and SA Arid Lands Landscape Board.



In the latest working bee, FOMS and the Arabana Rangers applied some finishing touches to the 2.3km of fencing and undertook vegetation monitoring at photo-points established in 2019. It showed that the spring vegetation had recovered strongly following exclusion of stock and feral herbivores.

FOMS and the Arabana Rangers also checked a number of springs fenced in the 1980s on The Peake and Nilpinna pastoral leases. Minor fence maintenance and vegetation monitoring were undertaken and the contrast between protected springs and nearby unprotected spring wetlands was quite marked.

Notably the common reed, *Phragmites australis*, a rapid coloniser of the spring wetlands once grazing was removed, is now starting to diminish its dominance after 30 years of stock and feral herbivore exclusion, with areas of open water reappearing in the space where the *Phragmites* once occurred.

FOMS Secretary Simon Lewis said the working bee was a very good example of a productive collaboration aimed at improved conservation of mound springs – involving a mixture of research, monitoring and on-ground protective works.

"FOMS has appreciated the ongoing support of the SA Arid Lands Landscape Board and the Department for Environment and Water and it has been a privilege to be closely associated with the Arabana Ranger Program."



Great Artesian Basin project saves water

Each year, more than one thousand mega litres of water have been saved since the Improving Great Artesian Basin Drought Resilience (IGABDR) program, which co-funds water saving measures, began three years ago.

Pastoralists in SA reliant on the Great Artesian Basin are among landholders with 13 completed water infrastructure projects returning an estimated 1,240 ML in annual water savings.

Projects completed to-date have included: repair, decommission and re-drill of wells with uncontrolled flow; replacement of failing and leaking headworks, pipes, tanks and troughs; and installation of new infrastructure to make a water-tight distribution.

Innovative flow control projects that manage tank and trough levels preventing overflow have also been funded under the program.

Among landholders in the SA Arid Lands that have completed works as part of the program are Sharon and Graham Betts of Mungerannie Station, and Tony and Jackie Williams from Mount Barry.

The owner of Mungerannie Station, Sharon said the program has been a big advantage to her family and to the artesian basin.

"This has enabled us to prevent the wastage of the water that was not being harnessed to be controlled, and also has given our stock good clean drinking water," she said.

"Being able to replace aging pipe work will also help with wastage control as the old pipe was forever splitting and therefore wasn't controlled. Also, having a grant that spreads over a good number of years is an advantage."

Tony and Jackie Williams from Williams Cattle Company, acknowledged the federal government initiative in conserving GAB water by assisting with 50 per cent of the funding towards installing automatic shut off systems on solar bore pumps, and decommissioning failed artesian wells and the drilling of replacement GAB wells.

A further 11 infrastructure projects in South Australia are approved and currently inprogress or planned for completion before the program ends mid-2024.

Owners of GAB wells and surface infrastructure in need of repair or replacement are encouraged to submit an expression of interest as soon as possible to check project eligibility and secure funding.

Find out more about the program at www.landscape.sa.gov.au/saal/water/ Improving_Great_Artesian_Basin_ Drought_Resilience or contact Aaron Smith on 8463 7916 or aaron.smith3@sa.gov.au



Installation of water-tight distribution to eliminate wasted flow at Elizabeth's Bore at Mount Barry

Decommission and replacement of failing well at Nilpinna



ACCOUNTING FOR GROUNDWATER

A community advisory group will be established to determine options for water accounting across the Far North Prescribed Wells Area.

Expressions of interest were called for membership of the advisory group to support the Accounting for groundwater take in the Far North Prescribed Wells Area project.

The advisory group will provide advice regarding potential water accounting projects, contribute to project assessment and assist in overseeing trials. It will include representatives from community, the Department for Environment and Water and the SA Arid Lands Landscape Board.

This project has been established by the board and the department to investigate various groundwater metering, measuring and accounting options to assist in the development of an appropriate Water Accounting Implementation Plan.

The investigation will include trials to provide the evidence supporting the suitability of groundwater accounting measuring and metering options. Trials will: test water accounting methods for practicality, reliability, accuracy and cost; provide practical information on installation and maintenance costs; and aim to have secondary benefit e.g. water point management.

More information about opportunities for people to participate in the trials will be shared over the coming months.

To discuss the advisory group and project further contact Aaron Smith via email at aaron.smith3@sa.gov.au or by phone on 0417 643 956 or Melissa Horgan via email at melissa.horgan@sa.gov.au or by phone on 0409 896 402.

LANDSCAPE GROUP NEWS

KINGOONYA

Members of the Kingoonya Landscape Group met in Roxby Downs in August and welcomed four new members who come from diverse backgrounds and skill sets.

James Barry, David Hunter and Tina Law have been joined by new members Ronel Jit, Eloise Matthias, Leila Day and Conan Fahey.

Collectively the group has great representation of what the district has to offer and ideas for new projects are already starting to flow. Some focus points will be cactus control, cats and other pest animals.

Plans are already underway for community workshops on plant identification: and research opportunities to study the total grazing pressure of kangaroos will be followed up.

The group will continue to work on plans for a joint group meeting with Gawler Ranges Landscape Group to foster some cross district collaboration and knowledge sharing opportunities. It is hoped this meeting will happen in June 2022 at Hiltaba.

Hamish Longbottom is the newlyappointed Community Landscape Officer (CLO) for the Kingoonya district and also serves as the CLO for the Marla Oodnadatta district.

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PHOTO: Kingoonya Landscape Group welcomed new members at its last meeting, from left, Hamish Longbottom, Eloise Matthias, Presiding Member Ross Sawers, Leila Day, Ronel Jit, Jasmine Maftei and Conan Fahey



GAWLER RANGES

Gawler Ranges Landscape Group welcomed new members Amanda Michael and Giles Standish to the meeting in late July.

Recent group meetings included an ongoing discussion about cat control around Iron Knob and the use of cochineal as a successful control agent to combat cactus throughout the district; A SAPOL representative spoke to members about rural security on pastoral properties and the Department of Infrastructure and Transport provided a road maintenance update.

The shared meeting with the Kingoonya group has been rescheduled after being postponed for a second time due to rain, and will be held in June 2022 at Hiltaba, Members are also planning a Neville Bonney Bush Foods workshop in November at the Australian Arid Lands Botanic Garden and a Sticky Beak Day at Secret Rocks

Community Landscape Officer Chris Fulton supported the Nature Foundation Kids on Country program as well as School of the Air projects that included a Citizen Science Scat project and a workshop with Animals Anonymous during an in-school week earlier this year.

Wild dog bait injection services were provided to Gawler Ranges properties in September and a Trapper Workshop proposed for late August was postponed due to COVID border closures. The district will be notified when another date has been locked in.

Chris Fulton: 0477 307 038 Christopher.fulton@sa.gov.au

PHOTO: At a Gawler Ranges Landscape Group meeting in September were James Kerr. Lesley Koch, David Turner, Denise Sharp and Kate Greenfield. David is not currently a group member, but does attend all group meetings

MARREE-INNAMINCKA

The Marree-Innamincka Landscape Group has welcomed Charlie Eager as its new Community Landscape Officer, replacing Lucy Morphett who is on maternity leave.

Since starting at the end of March, Charlie has been visiting landholders and community members across the region and helping the Landscape Group run three group meetings.

The meetings have included constructive updates and conversations around new regulations on wild dog control in the region, the progress of the Water Allocation Plan and the planning and recent delivery of a series of workshops at the Marree Pastoral Bootcamp held on 13 August.

Charlie worked with Nature Foundation with its Kids on Country program held at Witchelina Nature Reserve. The program brings Aboriginal school students from across SA to

experience and engage with the natural assets and stories of the outback pastoral zone.

The group welcomed new member Lisa Edwards at its August meeting, She joins Lyn Litchfield, Josh Haynes, Frank Warren, Jayne-Marie Barnes and Mark Mayfield on the Marree-Innamincka group.

Charlie Eager: 0437 795 792 Charlie.eager@sa.gov.au

PHOTO: Ellen Litchfield, Joyleen Booth, Janet Walton, Anne Dawes and Lyn Litchfield enjoy a discussion and tasting of native bush foods from Native Food Company Warndu (Rebecca Sullivan) at the Marree Pastoral **Bootcamp**

MARLA OODNADATTA

Marla Oodnadatta Landscape Group members were given an update on the dog fence buffer zone and planned dates for spring bait injection services at their meeting in August.

New member Shontelle Lennon joins Jackie Williams, Francesca Fennell, Caroline Thomas, Cameron Williams, Christine Lennon and Greg Warren as the district's group members.

Francesca provided an overview of the Property Management Planning (PMP) program at Wintinna and told the group it was one of the best things they had done. The positive experience and outcomes have resulted in another district property participating in round two of the program.

A community event Cricket & Conversations will be hosted by the group in late October. To be held in Coober Pedy, the event will provide an opportunity for local pastoralists to learn more about new technology and assessing and improving the social licence of SA arid lands beef production. Equally important will be the opportunity for community members to get together again and support local businesses in Coober Pedy.

Hamish Longbottom 0408 807 498 hamish.longbottom@sa.gov.au

PHOTO: Marla Oodnadatta Landscape Group will host a Cricket and Conversations event in Coober Pedy in October. Pictured are cricketers from the 2019 event

NORTH FLINDERS

The North Flinders Landscape Group welcomed three new members at its September meeting.

Mopsy Daniels (Hawker), Gini Lee (Oratunga) and Tracy Neldner (OCA – Leigh Creek) joined existing members Ian Ferguson, Lesley Nicholls, Norton Warnest, Ngatina Sylvanius and Reg Wilton as the district's representatives to the SA Arid Lands Landscape Board.

As a group they discussed previous priorities and began developing an action plan for the group to guide their focus for the next one to two years.

At the June meeting, held in Blinman, group members were updated on the Flinders Ranges World Heritage bid, discussed tourism impacts and cactus control in the district. A carbon farming workshop held in Hawker in late August gave attendees a chance to learn about current and future opportunities in the carbon market, the importance of carbon diversification and how to make the most of it. It was presented by Michael Eyres and Edward Scott and was followed by a barbecue.

Matthew Westover, 0438 816 210 Matthew.westover@sa.gov.au

PHOTO: North Flinders members at the September meeting were (from left) Ian Ferguson, engagement officer Matt Westover, Glenys Aird, Ngatina Sylvanius, Gini Lee, Mopsy Daniels, Tracy Neldner and Reg Wilton



NORTH EAST PASTORAL

The North East Pastoral Landscape Group welcomed new members Wayne Burford, Mark Duncan-Tiver, Mick Goldsworthy and Tim Taplin when it met in Yunta last month. They join Richard Williams, Nick Rasheed and Terence Coulthard on the group, which now has a full complement of members.

Upcoming projects in the district include a grader and landscape two-day workshop at Boolcoomatta, with focus on roads and tracks planning, alignment and maintenance, as well as site remediation and rehabilitation. This will be a joint workshop between the Department for Environment and Water, the North East Pastoral Landscape Group and Bush Heritage.

An Opuntia control project is also underway to continue mapping and treating infestations with cochineal.

Grassroots Grants were awarded to Boolcoomatta to develop a

Plant ID tool for the district, and the University of Adelaide to study the effects of environmental extremes on Yellow-footed Rock-wallabies. Nick and Penny Rasheed of Koonamore have been successful in entering the Property Management Planning project, offered as part of the Board's Building Pastoral Sustainability Program.

Upcoming site visits will provide an opportunity for land managers to be further involved in managing the district's natural resource management issues.

Di Makotter, 0408 944 751 dianna.makotter@sa.gov.au

PHOTO: At the last North East Pastoral Landscape Group meeting were, from left, Mick Goldsworthy, Grant Breeding, Di Makotter, Mark Duncan-Tiver, Nick Rasheed, Richard Williams, Tim Taplin and Peter Watkins

PORT AUGUSTA-QUORN

Six new Landscape Group members have been appointed for the Port Augusta-Quorn (PA-Q) district

The PA-Q Landscape Group includes Kym Thomas (Chairperson Nukunu Wapma Thura Aboriginal Corporation), Renata Hackett (Quorn resident), Melissa Clifton (Port Augusta Coastcare), Steve Marafiote (CEO Sundrop Farms), Richie Paynter (Quorn agriculturalist), Francene O'Connor (Port Augusta City Council).

The group met for the first time in August to discuss key priorities for the district, which will be used to develop a district plan over the next few months.

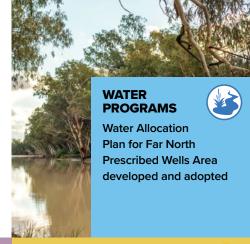
Recent activities delivered in the district include a tour of environmental restoration activities at Port Augusta Power Station Ash Dam with Succession Ecology, the creation of a Cactus Control factsheet and Science Week events with Bugs n Slugs, Animals Anonymous and plant propagation with Andrea Tschirner across seven schools.

In September AUSMAP microplastic monitoring training was held and river red gum monitoring took place along Saltia Creek.

Hannah Ling: 0409 753 495 Hannah.ling@sa.gov.au

PHOTO: A tour of environmental restoration activities at Port Augusta Power Station Ash Dam with Glen Christie from Succession Ecology was hosted by Port Augusta-Quorn Landscape Group

OUR ACHIEVEMENTS 2020-2021



OUR REGION

 $Covers > 525,000 \text{ km}^2$ or 52,500,000 ha

POPULATION

Approximately 24,000 people

OUR BUDGET

In 2020/21, \$2.7\ldots levy income attracted \$2.6 co-investment With a budget of $$5_3$, and 26 staff we delivered...

VOLUNTEERS

volunteer groups supported

volunteers

3.896 volunteer hours valued at \$175,710

BUILDING PASTORAL SUSTAINABILITY

pastoral businesses supported to develop Property Management Plans to improve their capacity to adapt to climate variability



CLIMATE RESILIENT REGION



WATER MANAGEMENT



SUSTAINABLE LAND MANAGEMENT



PROTECTING AND ENHANCING **BIODIVERSITY**



WATER-AFFECTING ACTIVITIES (WAA)

WAA Permit issued

Policy adopted

WAA issues

Water Affecting Activities Control

WAA enquiries including reviews of

proposals with potential water-affecting

compliance investigations to assess

PEOPLE AND PARTNERSHIPS

BOUNCEBACK AND BEYOND

new populations of the threatened fish Flinders Ranges Purple-spotted Gudgeon established in the Flinders Ranges



ACROSS THE OUTBACK

1.806 recipients

BOUNCEBACK AND BEYOND

Goat control across 60.000 ha, across properties



PASTORAL

landholder grants supporting onground trials totalling \$60.000





LANDSCAPE **GROUPS**

community planning workshops to shape the new SA Arid Lands Landscape Board's Regional Landscape Plan

BOUNCEBACK AND BEYOND

Fox control across 863,000 ha (involving 553 km aerial bait lines, 43 000 baits, across 222 properties

AERIAL BAITING



In partnership with **PIRSA**

155,662 baits distributed across

COONGIE WETLAND **WONDERS** (RAMSAR)

Surveys of 2 threatened native animals and fish diversity

Survey of vegetation response to altered water flows

WATER PROGRAMS

294 GAB wells inspected across 40 properties



102 properties

FACEBOOK

3.844 Facebook followers

> 24 posts reaching 40 000 people





GRASSROOTS GRANTS

Is local projects that control weeds; reintroduce numbats and western barred bandicoots; develop a botanic garden in Copley; monitor water quality, fish populations and Yellow-footed Rock-wallabies; develop a native grass trial site; purchase a Biteback freezer; eradicate Pepper Trees; complete soil conservation works; survey the threatened Thick-billed Grasswren; and develop a book outlining common plants and their traditional and contemporary plant uses.



STATIONS

the region

Maintenance of weather stations across



BOUNCEBACK AND BEYOND

Gammon Ranges

Pest activity (foxes, cats, goats, rabbits) surveyed in the Flinders and

WATER **PROGRAMS**

15 year Strategic Management Plan for the Great Artesian Basin launched

BUILDING **PASTORAL SUSTAINABILIT**

training workshops - business strategies, animal nutrition, financial management, RCS grazing clinic

WATER PROGRAMS

Unbundling of water licences



CACTUS CONTROL

property visits properties participating in cactus

new releases of Cochineal biological control agent

control program

BOUNCEBACK AND BEYOND

participating properties across the Flinders, Gawler and **Olary Ranges**

COMMUNITY **EVENTS**

39 events including

> 🔝 land manager capacity building workshops

field days

school/youth events

791 event participants



COONGIE **WETLAND WONDERS** (RAMSAR)

ha of Mimosa bush controlled



ABORIGINAL PARTNERSHIPS

Indigenous Protected Areas support for programs



COONGIE WETLAND **WONDERS** (RAMSAR)

ha of feral pig control (trapping)

Surveys of large feral herbivores and pig impacts in Coongie Ramsar area



IGABDR

In partnership with DEW, delivered 11 projects to improve efficiency of GAB water completed with an estimated 7 5 megalitres of water savings per year



BOUNCEBACK

AND BEYOND

Gammon Ranges)

surveys of threatened native animals (including Malleefowl in the Gawler Ranges, Western Quoll in the Flinders Ranges, and Flinders Ranges Purplespotted Gudgeon in the



adaptive management planning for Coongie

workshop – strategic Ramsar site

ONLINE

TRAINING webinars as part of a summer series

grant writing workshop



WILD DOG

ground baiting

366 baits distributed across 159 participating properties



LANDSCAPE GROUPS

Ranges

BOUNCEBACK

AND BEYOND

Cat control across 60.000 ha in the **Gammon and Flinders**

Landscape Group meetings across Landscape Groups

New Port Augusta-Quorn Landscape Group established



PROGRAM BITEBACK

injection services













field days - North East Pastoral field day (Manna Hill) and Managing **Pastoral Country Forum** (Coober Pedy)

GRASSRO GRANTS

Grassroots Grants funds 14 local projects

Tackling weeds at Iron Knob, monitoring Yellow-footed **Rock-wallaby populations with** the Nipapanha Indigenous rangers and development of two different native plant guides were among projects funded by the SA Arid Lands Landscape Board in its latest **Grassroots Grants round.**

Fourteen projects from around the SA Arid Lands region received almost \$100,000 in funding in a competitive grants round that attracted a diverse range of applications from every corner of the region.

Other funded projects were: the Quorn Bush Tucker Walk expansion, the development of Aboriginal Walking trails, revegetation of Warren Gorge, reprinting of Mound Springs brochures, an upgrade of the Quorn Port Augusta Coastcare Group, weed control at Merna Mora Station, Copley Botanic Garden Stage 2 works and an extension of thermal technology trails on Hiltaba and Witchelina nature

Presiding Member Ross Sawers said having a fully subscribed Grassroots Grants round was proof the grants

"I look forward to seeing the difference the funding will make to support local landholders and communities deliver outcomes across the diversity of successful projects from within the many districts of the SA Arid Lands



Regeneration continues around Quorn

A native perennial grass orchard and native bush food garden has been established in Quorn using funds from the 2020 Grassroots Grant round.

Known as the Thutha Patch, the grass orchard was established by the Flinders Ranges Council in partnership with the Quorn Community Landcare Group. The native bush food garden was developed in collaboration with the Nukunu Wapma Thura Aboriginal Corporation.

Both projects were supported by local volunteers, who contributed many hours to build the garden and orchard. The recent winter rains were the ideal follow up and the plants are growing well.

Three new Grassroots Grants awarded to the Flinders Ranges Council in the current Grassroots grant round will continue regeneration projects around Quorn.

The first will support more plantings at the Bush Food Garden and riparian restoration of the nearby Pithiowie (Pinkerton) Creek, as well as interpretive signage to detail the plants' cultural, ecological and agricultural properties.

Down the road a little, a second Grassroots Grant will support educational signage at the Quorn Native Flora Reserve. Previously a quarry site, the area now has at least 44 native plant species, including Sandalwood (Santalum spicatum) that is rarely seen elsewhere. The grant will also fund the removal of non-native trees at the site entrance and their replacement with local native species.

The third Grassroots Grant involves revegetation of 1000 native seedlings at Warren Gorge to rehabilitate eroded areas and provide habitat for native species such as the local Yellow-footed Rock-wallaby. Interpretive signage will offer visitors information into the ecological, cultural and historic significance of the area.



Grasswren survey extends to pastoral properties

A survey of the nationally threatened Thick-billed Grasswren (*Amytornis modestus raglessi*) at Witchelina Nature Reserve is part of a project to understand the population dynamics of the Grasswren subspecies that has declined in numbers on the property over the past decade.

The survey was jointly funded by a Grassroots Grant and a Small Environment Grant from the Wettenhall Environment Trust.

Thick-billed Grasswrens are notoriously cryptic little birds. They are experts at sneaking around the Chenopod shrublands they inhabit, preferring to remain undetected. As a nationally threatened species, surveys like this are important to better understand how the species is faring.

The surveyors sampled 37 sites at Witchelina Nature Reserve and Thick-billed Grasswrens were observed at 26.

The project is also investigating whether Grasswren populations have undergone similar declines on neighbouring pastoral stations, and if so, determine the causes. Data from this project will assist in developing and implementing effective conservation management strategies to build resilient Grasswren populations and to improve their long-term survival.

As the co-owner of one of Witchelina Nature Reserve's neighbouring properties,

Lyn Litchfield played an important role in the survey. Lyn and husband Gordon's property, Wilpoorinna Station, and neighbouring Mt Lyndhurst and Mundowdna stations, all owned by the Litchfield Pastoral Company, and Witchelina Nature Reserve, make up a large part of the limited range of the local Thick-billed Grasswren subspecies.

For 20 years, Lyn has looked out for Grasswrens on Wilpoorinna after close friends, Nature Foundation Rotational Managers Barry and Maureen Wright encouraged her to get involved with BirdLife's Atlas of Australian Birds, which collects data from birdwatchers to determine the distribution and abundance of species. Since then she has hosted visitors with a similar interest and her love for birdwatching has grown.

Lyn provided assistance to the team of volunteer experts from BirdsSA when they visited in May to conduct the autumn survey. As well as facilitating access to the properties Lyn assisted the team in finding new sites to survey through her local

knowledge and was an active member of the survey team.

"Lyn soon became a real Grasswren expert," survey leader Graham Carpenter said.

The visit by the bird survey team was a win-win situation.

"The highlight of having the team here was their company," Lyn said.

"It was great sitting around and chatting to them, hearing about how they count the birds, their other experiences of birdwatching and what exciting birds they'd seen.

"And seeing the photographs they took of the birds was great too, because in nature you see them at a distance – I try not to disturb them so I see them through binoculars, but with the photos you could blow them up to twice the size of a wren and you could see all the little feathers."

FUNDING AVAILABLE FOR SMART FARMS

The final round of the National Landcare Program's Smart Farms Small Grants is now open and calling for applications for soil extension activities.

Grants are available for between \$100,000 to \$250,000 per activity and are available to fund projects that help improve the protection, resilience and productive capacity of soils.

Soil extension activities will support farmers and land managers to understand the benefits of soil testing and take practical action to improve the management of their soil and land. This may include working with farmers and land managers to participate in the **National Soil Monitoring and Incentives** Pilot Program, help them interpret results and to take action to improve their soil health.

Smart Farms Small Grants: Soil Extension Activities will support the Smart Farms Small Grants program outcomes as well as the National Soil Strategy objectives.

The application form can be accessed at www.communitygrants.gov.au/ grants/smart-farms-small-grants

Applications close on Tuesday 12 October 2021.

COVID-19 (CORONAVIRUS) **RESPONSE**

Please be advised that due to the changing nature of the COVID-19 health response, SA Arid Lands Landscape Board will continue to actively monitor the health directives. and recommendations set out by Government, and will seek information from official sources to ensure that each of our events are delivered in a safe and responsible manner.



Field day planned for December

If the SA Arid Lands Pastoral Field Day is not yet marked on your calendar, then now is the time to book it in.

Planning is well underway for the rescheduled December 2 & 3 event which has been twice postponed due to COVID restrictions. The event will be held at Central Oval in Port Augusta and have Innovation, Adaptation and Diversification

The two-day program will offer speakers delivering on topics including animal nutrition, succession planning, mental wellbeing, grazing and the value of native grasses, mineral supplementation, landscape hydration, climate outlook, carbon, tourism diversification, telemetery and business planning.

As well as the two-day speaker program, Livestock SA will host a dinner at the end of the first day and the School of the Air Wool Show will finish the event on day two. Up to 50 stall holders are expected to be present on both days and children will be catered for with Arid Recovery, Julian Craig's snakes, Animals Anonymous and Bugs and Slugs providing a full-day of activities on day one.

Due to the uncertainty relating to ongoing border closures, contingency plans are in place to ensure all presentations will go ahead with most presenters from SA and those interstate able to present online if required.

If you are interested in booking a stall, register at www.trybooking.com/BSZXR

Tickets for the event will be free and must be booked online. Only those registered prior to the event will be able to attend due to COVID requirements. Tickets will be available to book from 25 October on our website at www.landscape.sa.gov.au/ saal/get-involved/events

KEEP UP-TO-DATE

All up-to-date details on the events and services being offered by the SA Arid Lands Landscape Board are available on our website at landscape. sa.gov.au/saal/get-involved/events

SA ARID LANDS LANDSCAPE CALENDAR OF EVENTS

4 OCTOBER

Camera collection Vulkathunaha-**Gammon Ranges National Park**

7 OCTOBER

Gawler Ranges bait injection services

11 OCTOBER

Feral herbivore monitoring Olary Ranges

12 OCTOBER

Port Augusta-Quorn Landscape Group meeting #2

12-15 OCTOBER

North East bait injection services

22 OCTOBER

Cricket and Conversations **Coober Pedy**

DATE TBC

Pest and threatened herbivore montoring, Coongie Lakes

27-28 OCTOBER

SAAL Board meeting #9

NOVEMBER

DATE TBC Malleefowl monitoring, **Gawler Ranges**

12 NOVEMBER

Neville Bonney workshops

19 NOVEMBER

North East Pastoral Landscape Group meeting

2-3 DECEMBER

SA Arid Lands Pastoral Field Day

14 DECEMBER

North Flinders Landscape Group meeting #63 **Gawler Ranges**

Landscape Group meeting #58

15-16 DECEMBER

SAAL Board meeting #10

DECEMBER DATE TBC

Marree-Innamincka group meeting and planning day



'A day's work is never done' is true for anyone living on a pastoral property, particularly women.

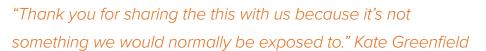
Often, women are the unofficial business office managers, teachers, and chefs which joins their long list of jobs around the homestead and property. In addition they are active on numerous committees such as the Isolated Children's Parents Association (ICPA), which lobbies for a fair access to education for outback kids.

In support of the many roles women play across the region, the SA Arid Lands Landscape Board hosted a day of professional development and networking to build skills to assist in the running of pastoral businesses, which are also relevant to all aspects of life.

The 'Outback Ladies Day' was held in Quorn on 23 September and provided attendees with the chance to understand different leadership styles, reflect on their approach, as well as understand how they can build their influence to achieve results. Along with the 'Leadership and Influence' session delivered by Jeanette Gellard from Innovative Influences, the group toured Quorn's new Native Grass and Bush Food Garden. The tour was led by Andrea Tschirner, the board's new Regional Agriculture Landcare Facilitator, and a driving force behind the garden's development.

The group looked at a range of bush foods in the garden which present an opportunity for diversification for some properties in the SA Arid Lands region. Andrea discussed the uses of the bush foods both as medicine and food, and the group finished the day with a tea brewed from a range of the native ingredients including native mint and lemongrass.

The Outback Ladies Day is offered as part of the Building Pastoral Sustainability project, which is supported by the SA Arid Lands Landscape Board, through funding from the Australian Government's National Landcare Program.





Left: Native Curry Plant (Cassinia laevis) that can be ground to a paste and used to relieve sore muscles.

Right: Kate Greenfield and Mija Reynolds enjoying a lemongrass and mint tea at the end of the day



Lyndavale cattle investigate the walk-over weighing system, trialled on the property through Pastoral Sustainability Grant funds



A Walk-Over Weighing (WOW) device is providing real-time data used to monitor cattle performance and guide management decisions on De Rose Hill Station.

Lyndavale Cattle Company was awarded a Pastoral Sustainability Grant in the first round, through the SAAL Board's Building Pastoral Sustainability project. It received more than \$28,000 to trial the WOW system prototype on the Far North property.

Despite some early teething problems and modifications needed in the development and installation process, the system is now up and running.

Lyndavale Cattle Company manager Bennett Staines said initially the WOW was placed in a yard with heavy steers weighing about 700kg, and the system was met with resistance.

"Though we were keen to see heavy steers at turn-off weights going over the scales from the outset, in hindsight we think this was a mistake. Introducing something new like this can be a steep learning curve for older, heavier cattle," Bennett said.

The WOW system was moved to an area where younger steers were watering. It took only a few days for the animals to be comfortable walking over.

"We expect this is a process of adjustment and education for the cattle and we know now that we will need to educate the cattle from a younger age," he said.

However, with the plan to use the system in an area with heavier steers, the property is investigating the use of dummy platforms in other locations so, in time the cattle won't think twice about walking over it.

The platform is linked to a Datamars system that allows Bennett to see a per kilo per day level of detail with a reasonable degree of accuracy. In late August, his steers were increasing weight at a rate of .83 kilograms per day.

He said the WOW system would be most beneficial coming into a summer when expected rainfall was not promising - and early weights could be recorded that will allow quick decisions to be made to truck or move cattle based on the daily weight gain graph.

"In dry times, we will see when the cattle are not putting on weight and we can decide quickly to turn them off at 550kg, because the potential downside could be worse," he said.

The system will also allow forecasting of ideal weights, which helps with scheduling trucking contractors.

"It will make us more timely in our decision making and it's allowing us to quantify without the need to handle the cattle much at all."

He said the property was now looking towards inducting weaners to the system at the point when they are tagged, with information from those tags added to the Datamars system.

The next addition to the WOW system will be the installation of an auto-draft system and camera, which will allow Bennett to set parameters that will allow him to auto-draft every steer that walks over the system and records a weight set to the sample size, leaving behind those that weigh outside it.

"It's exciting and if it does work well, it could potentially have big benefits in the future."

Participants in the second round of the Property Management Program are (from left) Alan Fennell, Jess Harvie, Kerri-Ann Fennell, Matt Fennell (Lambina), Bailey French, Brenton French, Jo-Anne French (Corunna), Matt Reynolds, Mija Reynolds (Upalinna), Nick Rasheed, Penny Rasheed (Koonamore), Andrew Smart, Rachel Smart (Wilkatana), Ian Morris and Katrina Morris (Thurlga)



FIVE PASTORAL GRANTS AWARDED

More than \$110,000 has been awarded to five projects in the second round of the Pastoral **Sustainability Grants program.**

Three of the grants were funded through the Building Pastoral Sustainability program funded by the Australian Government, with the board opting to fund an additional two grants to expand the reach of the program.

The grants are offered to pastoral businesses to trial management practices and technologies to better adapt to varying climates and markets, and improve the sustainability of their businesses. Participants who took part in the first round of the Property Mapping Planning program, which identified projects as part of the property mapping component, were among those awarded grants.

Funding was awarded to:

- YEDNALUE Yednalue Erosion Control to Improve Rangeland Condition \$12,812
- SOUTH GAP Sustainable Grazing Adaption Project \$29,244.67
- WINTINNA Wintinna Swamp Regeneration through use of timecontrolled cattle grazing \$12,240
- **CROWN POINT Adoption of** technology enabling geolocation of animals for multiple benefits \$30,100
- PINE GROVE Automatic Solar Powered Containment Feeding in the SA Arid Lands \$29,900

The third and final round of funding will open in April next year. For more information on the grants program and the Building Pastoral Sustainability program contact the board's Regional Agriculture Landcare Facilitator Andrea Tschirner on 0438 720 469 or email andrea.tschirner@sa.gov.au Information is also at www.landscape. sa.gov.au/saal/Projects_and_ Partners/Projects/building-pastoralsustainability-program

New property planning round starts

Links between primary production, business management and healthy landscapes are the foundation for the board's Property Management Planning (PMP), with six new properties selected for round two.

The four-stage PMP program works with landholders to establish personal business drivers, property mapping, financial analysis and developing an action plan for future property works.

Properties from the SA Arid Lands region selected to take part in the second round are Thurlga, Corunna, Wilkatana (Gawler Ranges), Koonamore (North East Pastoral), Lambina (Marla-Oodnadatta) and Upalinna (North Flinders) with participants meeting in Port Augusta in August for the first workshop, Personal Business Drivers.

The workshop, with Jeanette Long from Ag Consulting, focussed on setting business goals, strategy, business culture and communication.

During September and early October Richard Marver from Contour **Environmental and Agricultural Consulting** visited the properties and, with landholders, they will develop landscape management plans. These will have a focus on practicality and ways to deliver positive natural resource management outcomes for their property under stage two of the program.

Participants from round one completed the program earlier this year and an independent survey highlighted the positive impact the PMP program has had on participants and their businesses. Participants stated they had:

- · A significant change in knowledge and adoption of tools for monitoring land
- Increased capacity to respond and adapt to climate changes through improved land and business management practices (best practice management strategies).
- Increased knowledge and adoption in landscape management practices that will improve and protect the condition of the soil, vegetation and biodiversity.
- Increased confidence and capacity in farm business management practices.
- Increased capacity in managing future droughts (climate change).

One landholder said, "The way they designed the whole program was clever. It was about the long term. Not a lot of projects look at it that way. We looked at financial sustainability, how to make sure we are there in 5, 10, 15 years; livestock changes, what things to do now that will have long term benefits; individually and as a business, we looked at where you want to be in the future.

The PMP is a component of the Building Pastoral Sustainability Program, which is supported by the SA Arid Lands Landscape Board, through funding from the Australian Government's National Landcare Program.



Monitoring of wild dog activity and impacts

(2021 Autumn vs 2020 Spring)

Data received from landholders as returned paper maps or as entries to Wild Dog Scan in the past six months (Autumn 2021) is detailed below. The italic data represents 2020 Spring results as a comparison. If you do not use Wild Dog Scan and are yet to return your Autumn 2021 maps, please do so soon as we can only report on the information we have available.

DISTRICT	NO. OF PROPERTIES REPORTING	SHOT	TRAPPED	SEEN	SIGNS (SCATS/ TRACKS)	STOCK LOSS
NF_M 2021	28	3	23	1	23	32
2020	22	13	3	0	51	0
NEP 2021	19	0	2	5	14	0
2020	11	1	2	0	7	1
KIN 2021	7	1	10	0	0	9
2020	8	0	1	2	18	7
GR 2021	11	2	8	2	0	0
2020	12	2	6	6	111	50
PA_Q 2021	0	0	0	0	0	0
2020	0	0	0	0	0	0
M-O 2021	4	22	0	13	12	0
2020	2	6	0	16	2	0
M-I 2021	0	0	0	0	0	0
2020	1	4	0	20	100	0
TOTAL	69	28	49	21	49	41
2020	56	26	11	44	289	58

INSIDE FENCE INJECTION SERVICE DATES

Injection services have been held in the North Flinders and Kingoonya districts. If landholders experience high dog issues before the autumn 2022 service, please contact the SAAL Landscape Board on 8648 5307 to discuss your options.

The final spring injection services will be held during October in the Gawler Ranges and North East Pastoral districts.

- Gawler Ranges (groups 19-21) District: 6 October 2021.
- North East Pastoral District:
 12-15 October 2021.

OUTSIDE FENCE BAIT ACCESS

Although ground baiting is not mandatory outside the fence, Biteback staff tentatively allocate a small amount of time annually to enable access to wild dog baits. These trips only occur on a needs basis

If you need the service, please contact Blteback officers Chris or Anna.

- Marla/Oodnadatta District:
 25-29 October 2021.
- Marree/Innamincka District: 8-12 November 2021.

AERIAL BAITING

A review of the aerial baiting program is currently underway which may change the target areas of this service, planned for October 2021. A second aerial baiting program is scheduled to occur in autumn 2022.

BITEBACK WEBINAR

Biteback webinars have been introduced to share information about wild dog management, new technology and research updates, and a chance to discuss what is happening across the region.

The first Biteback Webinar was run in September and included presentations about the SA Dog Fence Rebuild, the emerging dog tick disease and bait preparation, transport and storage. If you were not able to link into the webinar on the day, a recording will soon be added to the SAAL Landscape Board website at www.landscape.sa.gov.au/saal/news-resources/podcasts-and-videos.

If you have ideas for future webinar topics, please let us know.

TRAPPER TRAINING WORKSHOPS

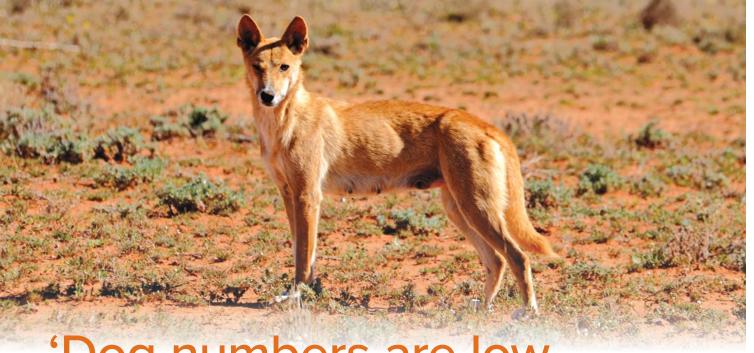
Unfortunately the trapper training workshops scheduled for August 2021 were postponed due to COVID restrictions preventing the trainer from interstate attending. These workshops will be rescheduled for mid 2022 with two additional workshops to be added.

DOG MUZZLE SURVEY

If you received a free dog muzzle at the organic workshops held last November or from a Biteback Officer, please follow the survey link below. The muzzles were provided free of charge courtesy of an Australian Wool Industry grant, to increase participation in wild dog and fox control.

The survey information will be used for research into lessening the risk of baiting working dogs. Information gathered may be used for a report on the usage of the muzzles in media content for editorials in publications.

Do the survey at www.surveymonkey.com/r/NWDAPmuzzles



'Dog numbers are low, let's keep them that way'

The wild dog control effort by many land managers has helped to reduce wild dog numbers in the SA Arid Lands region in the sheep pastoral zone. When coupled with ongoing drought conditions across much of the state, the result has been the biggest reduction in wild dog activity reported in several years.

However, this is not the time to become complacent about wild dog control according to Nonning and Uno Station manager Bill Filmer who has seen first-hand how quickly wild dog numbers can increase.

Bill's pastoral career began as a Jackeroo on Yandarlo Station near Tambo and continued around the Muttabura area in central west Queensland in the early eighties. Sheep were the dominant stock for pastoralists in that area, making up about 80 per cent of total stock numbers.

"Back then, Muttabura had six shearing teams that shore around one million sheep in and around the district," Bill said.

"Wild dog impacts were virtually unheard of and most pastoralists would only do fox control at lambing time and saw this as sufficient enough control to protect their flocks."

Bill said wild dog numbers increased significantly over the next few years and land manager apathy towards effective and coordinated control resulted in most properties in the area converting from sheep to cattle production.

"Sheep numbers are around 10 per cent of what they were 40 years ago, and this is the sort of thing that could happen in South Australia if we are not vigilant with control," he said.

At the organically-certified Uno Station, restrictions on chemical use imposed on organic properties meant predator control was limited to shooting as the only

available tool. It was difficult to reduce impacts caused by wild dogs and other predator species.

Recent guidelines developed by The National Wild Dog Action Plan outline a process that can allow organically certified properties to excise sections of land from the organic certification to allow wild dog control measures, including trapping and baiting.

"Being able to excise small areas of the property to do wild dog control without affecting our organic certification has been a game changer for us," he said.

wild dogs, we have also seen a massive reduction in fox numbers on the property." In 20/21 Nonning purchased motion-sensor cameras and traps to help with the wild dog control effort in a number of Gawler Ranges properties. These devices will be shared

"It not only gives us the ability to control

control effort in a number of Gawler Ranges properties. These devices will be shared with neighbours to help monitor and control wild dogs before they become a problem in the area.

The cameras have already yielded results, with one elusive wild dog being recorded.

"My neighbour reported he had some sheep bitten near the lake. We put a camera on a nearby trough and got a photo of the dog drinking. We used this information to guide our baiting and trapping efforts," he said.

"I believe that baiting is not enough on its own and must be augmented with trapping and shooting to control bait-shy dogs." Bill is also passionate about ensuring

everyone has the skills needed to effectively manage wild dogs and worked closely with the Gawler Ranges Community Landscape Officer Chris Fulton to organise a Trapper Training workshop that was to be held at Nonning Station in August. An interstate presenter and COVID restrictions put a dampener on those plans, but it is hoped the workshop will run in 2022.

The workshop will give land managers in the area the skills and confidence they need to effectively monitor and trap wild dogs on their properties. It will include information sessions about the Wild Dog Scan app, the use of new technologies such as drones and night vision tools, and camera monitoring techniques.





Utricularia fenshamii, commonly known as Blue Fairies or bladderwort, is a small herb typically found on boggy ground or where shallow water from underground springs seep through the ground's surface. In the arid region, they are most often found surrounded by gibber country on such mud springs just beyond the northern edge of the Flinders Ranges.

A highly-evolved carnivorous plant, the name bladderwort refers to the small bladders that hang off the stems, where the apron-like flower attaches with a small trap for capturing invertebrates. It is difficult to identify when not in flower.

Uncommon in Australia, Utricularia bladderworts occur around the world, with many found in North America.

The white-flowering plants were found near a mud spring by Friends of Mound Springs members. They were located in a patch with other pale blue flowering varieties and the more regular blue, amongst the endangered Salt pipewort (Eriocaulon carsonii ssp.carsonii) and the more common Bore-drain sedge (Cyperus laevigatus).

Friends of Mound Springs member Bruce Gotch said Friends had not noticed the white and pale blue flowering varieties on a previous visit to the site in 2020. The property managers have been aware of the presence of the rare plant for more than 20 years, since staff from the Botanic Gardens visited the property in search of it.

Botanists Peter Lang and Dan Duval revisited a recorded population in the area some years ago, and observed them growing with the Salt pipewort.

Peter said the all-white flowers were natural variations of the blue variety, which sometimes occurs in a population. The phenomena is also observed in Sturts Desert Pea populations and in Spider and Greenhood orchids.

A preferred future for the Outback

Fifty people have considered what is needed to make South Australia's Outback an even better place to live, work and visit and how to ensure its growth and long term management.

They met in Coober Pedy in early September for a strategic planning workshop that was part of the Outback Communities Authority's (OCA) Outback Futures project. Those attending answered two questions:

- What do we need to talk and agree on if the current issues facing South Australia's Outback are to be resolved and future opportunities grasped?; and
- How can the OCA support the Outback to be the best it can be?

Meetings with all Outback communities in October will provide an opportunity for further engagement and feedback on the workshop outcomes, which are available at oca.sa.gov.au/OutbackFuturesProject

Outback Communities Authority presiding member Bill McIntosh AM said the response to the invitation to participate in the strategic planning workshop was

"It speaks volumes to the passion and commitment that our communities and stakeholders have to South Australia's Outback," he said.

Workshop participants included community representatives and people bringing perspectives from tourism, environment, infrastructure, social services, economic development, Aboriginal communities, the pastoral sector and sports organisations. They travelled from as far away as Fowlers Bay and Penong on the West Coast, Innamincka in the state's north east, and Blinman and Beltana in the Flinders Ranges.



Bounty to control foxes

More than 20,000 foxes will be killed under a bounty scheme introduced as part of a targeted attack to reduce the impact of the pest on livestock.

The \$220,000 program will provide a \$10 payment for each fox destroyed across South Australia to help cull the feral pest and further support farmers.

Primary Industries and Regional Development Minister David Basham said a fox bounty had been a successful initiative interstate and would work well with the ongoing baiting program.

"Foxes cause significant economic losses to farmers by preying on newborn lambs, calves, kid goats and poultry," Minister Basham said.

"We also know they are responsible for the ongoing decline of ground-nesting birds and small to medium sized mammals such as the greater bilby and reptiles."

The program is limited to claims from livestock and poultry producers, to ensure the funding directly benefits farmers and prevents claims being made for foxes killed interstate. Farmers can enter into their own arrangements with professional and recreational shooters.

The fox bounty will be available for two years, or until the funding is exhausted. A collection point will be offered quarterly in Port Augusta, in conjunction with industry meetings, workshops or field days. The first collection day will be offered at the Port Augusta Racecourse on 15 October from 9-11am.

A minimum of 10 scalps and a maximum of 100 scalps can be claimed per property at each collection day. Each property can claim up to 300 scalps per year.

For more information on how to participate, visit pir.sa.gov.au/fox-bounty



New projects target priority pests

Two new projects will improve management of priority pest species for SA land managers and the environment.

The projects, funded by the Australian Government will ensure land managers are on the front foot in the fight against established pest animals and weeds, to limit the impact they have on agriculture, the environment and indigenous heritage.

A Pest Animal Coordinator will support best practice control of foxes, deer and rabbits and a Biosecurity Coordinator will target invasive grasses to support the management of unpalatable perennial grasses. Both positions will be offered through Primary Industries and Regions SA.

Federal Minister for Agriculture David Littleproud said the coordinators would work with landscape boards to support landholder groups seeking to improve local coordinated control of priority pests, and providing examples for future extension activities.

A second project will build the capacity of Aboriginal land managers to control Weeds of National Significance (WoNS), supported by a State WoNS coordinator – Aboriginal Lands.

"The WoNS coordinator for Aboriginal lands will work with Indigenous communities

and delivery partners, providing advice, coordinating training and establishing management priorities, to improve the coordinated management of WoNS on their lands," Minister Littleproud said.

Minister Littleproud said Australian land managers did a great job at managing the impact of pest animals and weeds on their land, but he acknowledged the need to improve the tools available to them to better manage pest animals and weeds.

South Australia's landscape boards will provide more than \$4 million of cash and in-kind support towards the projects, building on their existing commitment to community-led action for established pest animals and weeds.

"These projects are a great example of how strong collaboration across governments and land managers can improve the management of established pest animals and weeds."

The Australian Government funding is provided through a Federation Funding Agreement as part of the Established Pest Animals and Weeds Management Pipeline Program.



Marine microplastics under the microscope

A big problem is being tackled one small step at a time along Port Augusta's coastline. The pollution of microplastics, tiny pieces of plastic in the environment, is a worldwide issue with a small group of volunteers stepping up to be part of the solution.

Eleven Port Augusta community members are taking part in a national citizen science project to better understand the level of micoplastics in the marine environment, with the aim of tackling the increasingly significant issue. The group recently took part in an AUSMAP training day to learn how to monitor microplastics in marine and coastal environments.

Above left: Dominic De Sousa, Melissa Clifton, Tili Krebs and Jodie Harris collect a sample under the watchful eye of AUSMAP trainer Michelle Blewitt Right: The group tests the sample

A national volunteer program, AUSMAP monitors and collects information on microplastics to detect pollution hotspots and identify the type of pollution at a national level. The locally trained volunteers will now take part in ongoing microplastics monitoring to highlight the amount and types of microplastics found at the top of Spencer Gulf.

The data obtained from the monitoring program can then be used to manage the source of microplastics and track the impact of management activities.

The newly formed Port Augusta Coastcare Group will lead the monitoring program and will select a number of sites for ongoing monitoring.

If you are interested in joining the program, or the Port Augusta Coastcare Group, contact Port Augusta-Quorn Community Engagement Officer Hannah Ling on 0409 753 495 or hannah.ling@sa.gov.au

SCIENCE ON SHOW

It was a massive week of activities for National Science Week, with 28 events held across seven schools, in Port Augusta and Quorn over five days.

Hundreds of students were able to learn more about insects and native animals and their importance as part of the unique arid lands environments, hosted by the SA Arid Lands Landscape Board.

Bugs n Slugs delivered interactive sessions where students were able to get hands-on with different invertebrates, and learn about distinguishing features and general biology. They also gained an understanding of the role invertebrates play in the ecosystem. Insects that come out after dark were showcased at a community show at the Australian Arid Lands Botanic Garden.

With Animals Anonymous, students learned about local biodiversity through native animals, including snakes, lizards, marsupials and an owl in an interactive learning experience that emphasised the importance of looking after our unique arid environments. Two community shows were also staged.



Adrian Sherriff from Animals Anonymous entertained students during Science Week

Jeff Adams and Shirley Mundy were among the community members who volunteered to clean up illegal dumping in Port Augusta

VOLUNTEERS FIGHT ILLEGAL DUMPING

Illegally dumped rubbish on the outskirts of Port Augusta has been well publicised and the community has had enough.

Eleven community members pitched in to tackle the dumped rubbish, taking part in a clean up morning in early September.

Coordinated by board's Community Landscape Officer Hannah Ling, the clean up was a collaborative effort involving volunteers, Port Augusta City Council, the Department of Infrastructure and Transport and the SA Arid Lands Landscape Board.

And while the volunteers made a small dent in the dumped rubbish, SAAL Landscape Board General manager Jodie Gregg-Smith said illegal dumping is a complex problem that is detrimental to the environment.

"When people dump rubbish illegally they create an environmental risk for native animals and marine life. There needs to be a cooperative and multi-pronged approach that focuses on the source of the issue and the ongoing impact of waste on our coastal and marine environments," she said.

While the volunteers put in the hard labour, the event was facilitated and volunteers supported by the board, with Port Augusta City Council providing a tip truck and excavator to take away the rubbish, while the Department of Infrastructure and Transport covered the costs of rubbish disposal at the Waste Transfer Station.



Bootcamp kicks off in Marree

The Maree-Innamincka Landscape Group hosted its rescheduled Pastoral Bootcamp at the Marree Sports Club in August. With the cancellation of the Marree Camel Cup, the Innamincka Bush Sprints and other local events due to COVID-19 and border closures, it was a great chance to bring the community together.

More than 40 people from 11 pastoral properties attended the event and and took part in discussions, workshops and demonstrations with a pastoral focus.

Veterinary expert Jack Coffey discussed how livestock rumens operate as the 'engine' for pastoral operations within the rangelands. A rare opportunity to link the theory with the reality of how sheep and cattle break down what can be tough, semi-arid rangeland vegetation was provided with the dissection of a sheep provided by Litchfield Pastoral Co.

Native food producer Warndu's Rebecca Sullivan provided an engaging workshop on South Australia's native food potential. It included a brief market update and outlining the range of uses of native vegetation. Participants were able to make their own blend of native teas and enjoy a selection of bush foods.

Janet Walton demonstrated her land management expertise leading a great discussion on how land holders could use low cost principles and techniques to address soil and erosion issues in the rangeland.

Lloyd Wright from Rural Business Support provided useful advice on what can sometimes be a daunting process of applying for government Regional Investment Corporation (RIC) loans while Fiona Lake explained how to safely use drones and busted some myths around what drones could realistically achieve for pastoral zone producers.

The Marree Pastoral Bootcamp was offered through the Building Pastoral Sustainability Project, which is supported by the SA Arid Lands Landscape Board through funding from the Australian Government's National Landcare Program and SANTOS.



left:

Fiona Lake, from Rural Drone Academy discusses safe flying principles

Jack Coffey provides a holistic view of the role of the rumen in pastoral operations

Those attending the event enjoyed a bush food tasting and tea makina session from Warndu and made the most of the opportunity to catch up with friends

ACROSS THE OUTBACK

Across the Outback is prepared and edited by the SA Arid Lands Landscape Board. Comments and suggestions are always welcome.

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Volunteers welcomed in the Gawlers

Volunteers Doug Reudiger and lan Maynard get ready to roll fencing wire during their week at Buckleboo

Opportunities for volunteers to experience the SA Arid Lands have long been available in the North Flinders district, but now new projects are opening on pastoral properties in the Gawler Ranges.

Two Adelaide-based retirees volunteered on Buckleboo in August, after reading about an opportunity to be involved on the property in the *Walking SA News*.

Facilitated by the SA Arid Lands Landscape Board, Doug Ruediger and Ian Maynard joined James Kerr on the property for one week, working on projects designed to improve the property's resilience and biodiversity.

Buckleboo is working through an ambitious program to droughtproof the property through the addition of quality bores and the establishment of a rotational grazing strategy. The strategy will move stock between six large paddocks, allowing each paddock to be rested for about nine months between rotations. It requires the replacement of internal fencing, which was badly degraded.

The volunteer duties on the property involved pulling about seven kilometres of old five-strand fence wire, which was then rolled and stacked for disposal as scrap metal. Having worked as a jackaroo many years ago, Doug knew what was involved; however there was little call for this type of work in lan's teaching role. The time spent on the property allowed lan to gain new skills.

The men worked for four days and enjoyed some down time where they were shown around the station, including a look at a new bore and a very old volcano, an earthquake and tsunami monitoring station and an "evil-looking" crocodile seeder, used to break the crust and seed native grasses on degraded ground.

"It was satisfying, physical work with beautiful clear weather, in a visually stimulating environment," lan said.

"While the vegetation was damaged by uncontrolled grazing during the drought, a couple of decent seasons has allowed it to improve and throughout the work days James enthusiastically explained the significance of the work we were doing," he said.

"The evidence we saw indicated the degree of biodiversity improvement he expected and James shared the plethora of other improvements he has in his head and in the station's business plan – his enthusiasm is contagious!

"It was very satisfying to know the logic behind the property plans, which added a depth of meaning to our work.

"We had a great time, we enjoyed the work and we were well looked after. We also felt that we had contributed and that our work had been valued.

"We look forward to getting back there later this year to see the horizon, breathe bush air and get a bit of good clean dirt on our hands while we follow up what we started."

James Kerr said as the only worker on Buckleboo, he welcomed the opportunity to have volunteers visit the property.

"My list is long and growing and the idea of an army of volunteers to conquer some of my projects was a dream come true," he said.

"They certainly rolled up their sleeves and worked like two teenage jackeroos. Their enthusiasm and banter coupled with the wisdom of 50+ years of working in various occupations enabled us to quickly develop the system to perfect the task at hand.

"I enjoyed their company and look forward to their return to scratch another project off my long list."

