

Kangaroo Island Landscape Board Progress Report

January — March 2022



Nurturing Kangaroo Island's landscapes together to create a thriving sustainable future

This is the vision of the new Kangaroo Island Landscape Board (the Board). This report captures the work undertaken through Board projects from 1 April to 30 June 2021 to deliver this vision.

Formed in 2020, the Board aims to deliver practical, on-ground programs to help manage the island's water, land and soil, pests, and biodiversity in partnership with farming groups, environmental non-government organisations, local councils and community groups. The Board consists of seven members, including a Chair, Andrew Heinrich. They have recently developed a new *Kangaroo Island Landscape Plan 2021-2026* (the Plan), which combines community values, local knowledge and scientific evidence into a strategic road map to guide how the Board will work in partnership with the community and investors to support the recovery and management of Kangaroo Island's landscapes into the future. The Plan aims to strike a balance between productivity and profitability, and looking after the environment to maintain biodiversity. The plan contains five regional priorities, each with a suite of focus areas to guide the actions for the Board and the wider regional community over the next five years.

 COMMUNITY	Priority: A connected community at the centre of decision making Focus areas: <ul style="list-style-type: none"> • Working with all sectors of the community to improve the island's landscapes • Making decisions based on the best available scientific, local and traditional knowledge • Understanding, valuing and taking care of the natural environment and cultural heritage
 BIODIVERSITY	Priority: Healthy terrestrial and marine ecosystems and biodiversity Focus areas: <ul style="list-style-type: none"> • Safeguarding the structure and function of habitats and ecosystems • Protecting biodiversity to minimise species loss • Improving our understanding of the environment and the beneficial role it plays
 ECONOMY	Priority: Sustainable primary production and the island's economy Focus areas: <ul style="list-style-type: none"> • Improving the health of the soil, water and biodiversity that supports our economy • Strengthening the viability of primary production through sustainable practices • Working in partnership with industry to ensure the island's economy continues to prosper
 WATER	Priority: Effective water management Focus areas: <ul style="list-style-type: none"> • Managing water resources sustainably and equitably for all users • Improving water quality in the island's catchments and wetlands • Protecting aquatic biodiversity and ecosystems
 PESTS	Priority: Effective terrestrial and marine pest management Focus areas: <ul style="list-style-type: none"> • Controlling and, where possible, eradicating weeds, pests and diseases • Strengthening KI's biosecurity arrangements • Managing the impact of overabundant native species

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Cover image: Ashleigh Wycherley, Feral Cat Field Officer, with enthusiastic visitors to the Feral Cat Eradication Program Community Information Day at Penneshaw.

Water Resources Management

Overview:

This program supports the Kangaroo Island (KI) community to manage their water resources in line with the *Landscape South Australia Act 2019*.

Key achievements January–March 2022:

- 30 vegetation surveys and 30 macroinvertebrate (water bug) surveys were undertaken for analysis as part of water security planning for participating landholders. The surface water modelling work for this project also began.
- Supported the Department for Environment and Water (DEW) to reinstate eight baseline surface water monitoring sites that were damaged in the bushfires.
- Investigated flood damage on western KI following heavy rainfall in late January and advised of options for repair.
- Repaired KI Landscape Board managed surface water monitoring sites that were damaged in the flood.

Community engagement:

- Five landholders within the bushfire scar have been selected to be assisted with the remediation and/or stabilisation of erosion around their watercourses.
- Maps for use in water security planning were given to interested landholders.
- Received seven Water Affecting Activities (WAA) permit applications and one Development Application. Advised 30 people about water resources management, the requirement for WAA permits and development applications.

Future directions and upcoming events:

- Undertake remediation and/or stabilise erosion around watercourses.
- Analyse the water level, vegetation and macroinvertebrate monitoring data collected to develop the water security plans.
- Continue to work with the Department for Environment and Water (DEW) Compliance Unit and the KI Council to progress compliance and enforcement activities under the *Landscape South Australia Act 2019* and the KI WAA policy.
- Contribute to the final year of the Environmental Assessment of Water Management Options for KI project to improve the science underlying the Water Policy.
- Continue to develop products derived from the high resolution elevation survey for water management.

30 water bug surveys undertaken for water resource assessment

30 vegetation surveys undertaken for water resource assessment

Links to KI Landscape Plan

- Effective water management
- A connected community at the centre of decision making
- Healthy terrestrial and marine ecosystems and biodiversity
- Sustainable primary production and the island's economy

Funded by:

- Government of South Australia:
 - » State Appropriations
- Australian Government:
 - » Future Drought Fund – NRM Drought Resilience Grant
 - » Bushfire recovery package for wildlife and their habitat

Image below: Major bank collapse in the DeMole River Estuary due to the late January floods.



Invasive Species Control Program

Overview:

This program manages declared weed and pest animal species in accordance with risk assessment priorities and regional management plans.

Key achievements January–March 2022:

Declared weeds:

- Up to 1,000 khaki weed plants (*Alternanthera pungens*) were detected and destroyed at Reeves Point following a report by a member of the public. This weed is not established on KI and has only ever been detected once before in 2007. Khaki weed out-competes native ground covers, contaminates wool and irritates the feet and mouths of stock. It can also cause hay fever, asthma and dermatitis in humans. A voucher specimen was collected and lodged with the State Herbarium.
- Summer rains have increased the number of caltrop plants this year. Around 50 plants were detected and removed from Penneshaw.
- Six blackberry infestations with 300 plants were controlled across 15 ha. This included two new infestations on Church Road and Playford Highway.
- Around 10,000 bluebell creeper plants were destroyed over 25 ha at two locations on Church Road and North Coast Road. Bluebell creeper is an introduced, native plant that has proliferated following the bushfires.
- An infestation of silverleaf nightshade at American River was first reported two years ago. It has been repeatedly treated and now contains only 20 plants and covers 50 m².
- 600 km of roadsides were monitored and over 50,000 horehound plants sprayed to reduce their spread. Due to control over previous years, horehound plants are decreasing along KI roadsides.
- Fountain grass is a relatively new weed to KI. Two known infestations with 50 plants have been detected and destroyed at Emu Bay this year.

Tasmanian blue gum (TBG) wildlings:

- TBG wildlings were listed as a declared weed on KI on 14 February 2022 under the *Landscape South Australia Act 2019*. This declaration means landholders are now required to control TBG wildlings on their land. An estimated 3,500 ha of native vegetation across western KI has been infested with TBG wildlings that have germinated following the 2019-20 bushfires. To date, volunteer groups and contractors have collectively completed 901 ha of initial control work and 207 ha of follow-up control.

1,000
khaki weed plants found
and removed

6
blackberry infestations
controlled over 15 ha

Links to KI Landscape Plan

- A connected community at the centre of decision making
- Healthy terrestrial and marine ecosystems and biodiversity
- Sustainable primary production and the island's economy
- Effective terrestrial and marine pest management

Image below: A khaki weed plant from the newly found infestation at Reeves Point.



- During March, Board staff collaborated with the Department of Primary Industries and Regions (PIRSA), KI Conservation Landowners Association (KICLA) and DEW to prioritise areas for ongoing control of TBG wildlings.

Declared animal management

- Domestic pigs were listed as a declared animal on KI on 31 January 2022 under the *Landscape South Australia Act 2019*. This declaration aims to reduce the risk of domestic pigs escaping and re-establishing feral pig populations on KI following their eradication.
- A new declared animal policy for pigs on KI was approved by the Board in March. Domestic pig owners are now required to apply to the Board for a permit to keep or move domestic pigs onto, or around, KI. The new permit system will be transitioned over coming months to take effect by 31 December 2022.
- Board staff investigated a tourist report of a possible fox sighting on the Dudley Peninsula. On examination it appears the sighting had a low likelihood of being a fox. Ad hoc surveillance was increased in the area, and a reminder posted on the Board's Facebook page asking landholders to report any sightings of declared animals, such as foxes. There have been no subsequent observations, or reports, of foxes.
- Board staff investigated a report of a domestic dog being a dingo hybrid. Dingoes and their hybrids are declared animals inside the SA Dog Fence and are not allowed to be kept as pets on KI. Staff from PIRSA's Invasive Species Unit inspected photos of the dog and were satisfied that it was unlikely to be a dingo hybrid.
- The Feral Animal Control Officer participated in an aerial feral goat cull on the mainland as part of the DEW Aerial Marksmen Team.
- Work on the eradication programs for feral cats and feral pigs continued (see reports on pages 6, 7 and 8).

Phytophthora cinnamomi (Pc)

- The Board supported the development of an efficient, cost-effective method of diagnosing the presence of Pc in soils using a molecular approach. The quantitative polymerase chain reaction (qPCR) test developed by Flinders University has been used to diagnose the presence of Pc at several sites suspected of being infested with Pc, and will be used to update mapping of Pc presence in priority areas of KI.

Community engagement:

- Declared animal and weed information was shared with the KI community through seven Facebook posts about: a new on-line weeds hub, weed dispersal following floods, calls to report pest animals, combating weed spread following natural disasters, distinguishing between weeds and pioneer native plant species, and an alert post seeking public reports of khaki weed.
- The KI Weeds Officer updated the Board's on-line weed factsheets for [African daisy](#) and responded to three public reports of weeds.

Future directions and upcoming events:

- Ongoing seasonal control of priority weeds across KI, including African boxthorn, arum lily, Cape Leeuwin wattle, gorse, Montpellier broom and Italian buckthorn.
- Farm visits to disseminate information and introduce the new domestic pig permit system to KI pig owners.
- A follow-up Pc workshop will be held on 9 May to update stakeholders on the progress and outcomes from the initial 2021 planning workshop, including updates on new research from Flinders University.

10,000
bluebell plants
controlled over 25 ha

2
species declared under
the *Landscapes Act*

Funded by:

- Kangaroo Island Land Levy
- Government of South Australia and Australian Government:
 - » National Disaster Recovery Funding Arrangements through the Minister of Primary Industries and Regional Development
- Australian Government:
 - » Regional Fund for Wildlife and Habitat Bushfire Recovery

Feral Cat Eradication Program

Overview:

The aim of the KI Feral Cat Eradication Program is to eradicate feral cats from KI, beginning on the Dudley Peninsula and then moving west across KI. The program is being led by the KI Landscape Board in partnership with the Kangaroo Island Council, Nature Foundation and many other partners.

Key achievements January–March 2022:

- Eradication work has continued over 65% of the Dudley Peninsula.
- 25 feral cats have been culled during this quarter using cage traps and soft-foot leg-hold traps, over 2,577 trap nights. Three feral cats were captured in cage traps and 22 feral cats were captured in soft-foot leg-hold traps.
- Overall captures have been relatively low because of the high mice numbers throughout the summer months.
- Work behind the eradication front is continuing well. The array of 90+ 4G connected cameras detects any occasional feral cats sneaking through the eradication line which are they hunted and removed.
- A far seeing, programmable, infra-red camera, with on-board artificial intelligence (AI) that can detect a feral cat 1.6 km away, has been built and deployed on private land for testing. The first images from the camera show promise as the camera has effectively detected animals, classified them and successfully tracked their movements.

Community engagement:

- A community information field day was held in Penneshaw on 26 February 2022 to further engage the local community with the Dudley Peninsula Feral Cat Eradication Program.
 - » Project staff were on hand to answer any questions, update the community of the program's progress and encourage their support for a trapping blitz planned for winter 2022.
 - » Over 80 people attended the field day.

80
people attended the
information day

25
feral cats culled across the
Dudley Peninsula

Links to KI Landscape Plan

- A connected community at the centre of decision making
- Healthy terrestrial and marine ecosystems and biodiversity
- Sustainable primary production and the island's economy
- Effective terrestrial and marine pest management

Visit the
[Feral Free Kangaroo Island](#)
Facebook page to learn more

Image below: Members from the local community speak with the feral cat eradication team at the recent community information day in Penneshaw.



- » The new AI camera was on display at the field day and there was a lot of interest by residents in its deployment, both on the feral cat exclusion fence gaps and behind the eradication line.
- » The KI Council and KI Veterinary Clinic also participated in the information day.
- A video has been developed and posted on You Tube to demonstrate the best practice methods of setting a feral cat trap to the community to improve their feral cat trapping success and assist with the Dudley Peninsula Feral Cat Eradication Program. See <https://bit.ly/3sAaxVQ>
- A scientific article has been developed which has been accepted for publishing by CSIRO Wildlife Research. The article promotes the benefits of using Curiosity® feral cat bait in hard to access areas to the wider feral cat control and research community.

Future directions and upcoming events:

- Continue feral cat control, moving west across the Dudley Peninsula into Penneshaw.
- Undertake a large-scale feral cat trapping blitz on the Dudley Peninsula in June and July.
 - » The feral cat eradication team is asking for as many landholders as possible to trap with them during the blitz.
 - » This large, simultaneous trapping event will cover as much of the Dudley Peninsula as possible, particularly as feral cats can move long distances very quickly.
 - » This will help the team move towards the feral cat exclusion fence. Feral cat traps will be available.
- The new AI camera will be left in place to ensure that feral cats can be detected and classified. Refinement of the on-line platform and programmability of the camera is ongoing.
- Testing of deterrent and capture devices will begin later this year.

2,577
trap nights for feral cats
(no. traps x no. nights)

1
infra-red, far-seeing, AI
camera built and tested

Funded by:

- Government of South Australia:
 - » Landscape Priorities Fund
- Australian Government:
 - » Regional Land Partnerships
 - » Smart Farms Small Grants
 - » Bushfire Wildlife and Habitat Recovery Fund
 - » Regional Fund for Wildlife and Habitat Bushfire Recovery
- Foundation for Rural and Regional Renewal
- Members of the public

Image below: Board member Peggy Rismiller and Project Leader of Feral Cat Eradication James Smith examine the new AI camera at the recent community information day in Penneshaw.



Feral Pig Eradication Program

Overview:

The program aims to eradicate feral pigs on KI across private and public land, parks, reserves, forestry and agricultural farmland using a coordinated landscape approach. This program is led by the Department of Primary Industries and Regions (PIRSA) in close collaboration with the Landscape Board and KI National Parks and Wildlife Service. The below achievements are a record of the direct contributions made from Landscape Board staff.

Key achievements January–March 2022:

- The Feral Animal Control Officer and Feral Pig Control Officer continued to track, monitor and pursue feral pigs on foot. An additional 18 feral pigs were destroyed during the quarter across plantations and private land using a combination of baiting and ground shooting, with a further 10 feral pigs being pursued as at 31 March.
- Both Control Officers continued to deploy and monitor cameras for feral pig activity across western KI.
- The Feral Pig Control Officer participated in PIRSA's recruitment of two new Biosecurity Operations Officers to work on the eradication program. Both of the Board's Control Officers actively participated in field training for each of the new staff during the quarter.
- The Feral Animal Control Officer participated in the Thermal Assisted Aerial Cull (TAAC) operation that commenced on 28 March. The two week TAAC is targeting specific hotspots across Western KI, with a particular focus on creek lines throughout the area. As at 31 March, an additional two feral pigs had been detected and destroyed by Board staff as part of the TAAC.

Community engagement:

- The Control Officers engaged with 31 landholders across central and western KI to undertake control, monitor for feral pig sign and discuss different aspects of the Feral Pig Eradication Program.

Future directions and upcoming events:

- The TAAC operation will continue into early April. Both Control Officers will assist with planning for the next TAAC currently scheduled for July.
- On-ground control work will continue, focussing on searching for signs of feral pigs, establishing and monitoring free-feed stations, maintaining the 4G camera network and responding to feral pig detections with targeted baiting and ground shooting.

20
feral pigs destroyed

31
landholders supported
with on-ground control

Links to KI Landscape Plan

- A connected community at the centre of decision making
- Healthy terrestrial and marine ecosystems and biodiversity
- Sustainable primary production and the island's economy
- Effective terrestrial and marine pest management

Funded by:

- Government of South Australia and Australian Government:
 - » National Disaster Recovery Funding Arrangements through the Minister of Primary Industries and Regional Development

Image below: Feral pigs detected and destroyed in north-western KI.



Kangaroo Island Native Plant Nursery

Overview:

The Kangaroo Island Native Plant Nursery grows over 150 different species of KI native plants, which can be used for revegetating land, windbreaks, coastal plantings and home garden use. The Nursery Manager is available for native vegetation management advice to assist landholders with their projects.

Key achievements January–March 2022:

The KI Native Plant Nursery has been extremely busy this quarter. Initially their work focussed on collecting seed and propagating plants for orders. During the second part of the quarter their work focussed on supporting the growth of the new plants through weeding and thinning.

- Seed collection has been ongoing with seed from 40 different KI native plant species collected. Many of the seedlings grown from this seed will be used to revegetate areas of nationally threatened KI Narrow-leaved Mallee Woodland and to improve, restore and connect threatened plant and invertebrate habitat within the 2019-20 bushfire scar.
- Seedling propagation for the 2022 planting season is well underway. Plant orders for KI Narrow-leaved Mallee on-ground works projects and bushfire-affected properties have brought the nursery to over capacity. Approximately 57,000 tubestock of over 120 species are currently being grown out to planting size.

Community engagement:

- Nursery staff are working closely with KI Spirits and their owners Mighty Craft to help them develop gardens at the distillery and their Emu Bay eco-cabin site.
- Nursery staff presented to the KI Wildlife Network Annual General Meeting on 12 February.
- Nursery staff have also given advice to many KI landholders through phone calls, emails and clients directly visiting the nursery. This is usually to advise on the most suitable plants for their projects.

Future directions and upcoming events:

- Continue growing and maintaining seedlings growing out in the KI Native Plant Nursery for planting in late autumn/winter this year.
- Continue to seek funding to move the nursery to a larger site.

40
native plant species
seed collected for future
propagation

150
different plant species
currently growing in the
nursery

Links to KI Landscape Plan

- A connected community at the centre of decision making
- Healthy terrestrial and marine ecosystems and biodiversity
- Sustainable primary production and the island's economy

Funded by:

- Australian Government:
 - » National Landcare Program
 - » Regional Land Partnerships
 - » Regional Fund for Wildlife and Habitat Bushfire Recovery
- Prince Albert II of Monaco Foundation
- 8 Billion Trees
- Collette Travel

Image below: Jo McPhee hand watering plants stored on makeshift benches to meet KI Native Plant Nursery orders.



Sustainable Agriculture Program

Overview:

This program uses a holistic, systems approach to assist primary producers to improve soil health and increase on-farm diversity as the basis for resilient grazing and cropping systems.

Key achievements January–March 2022:

- Expressions of interest were sought for farms to participate in Integrated Pest Management (IPM) trials and establish demonstration sites. Two farms were selected.
 - » IPM technologies Pty Ltd were engaged to assist with establishment of trials and delivered an online workshop on 17 February.
 - » The application of herbicides and pesticides for pest and weed control with low off-target impacts were discussed during the workshop, along with strategies related to timing, biological and cultural factors. The take away messages from this workshop were:
 1. Overuse of broadspectrum herbicides may weaken plant immune systems and impact beneficial predatory insects. A reduction in these good bugs can have a counter-productive effect resulting in increased pest numbers.
 2. It is possible to transition to an easier more cost-efficient production system with less chemical use and fewer pest species.
 3. The goal is finding an equilibrium that works for the farmer with ecological and economic benefits.
- The Sustainable Landscapes Team has successfully sought funding to assist KI farmers increase on-farm drought resilience through the development of comprehensive property management plans. The project will receive \$981,000 over three years through the Australian Government's *Future Drought Fund Drought Resilience Innovation Grants*.
 - » The project will assist farmers to develop property management plans with the tools and capacity to adapt, reorganise, transition, and transform their properties in preparation for drought and less reliable and more variable seasons. The plans will complement and value-add to the outcomes of PIRSA's Kangaroo Island Farm Business Management project.

2
farmers to trial Integrated
Pest Management

1 grant
successfully obtained to
develop property plans

Links to KI Landscape Plan

- A connected community at the centre of decision making
- Sustainable primary production and the island's economy

Funded by:

- Australian Government:
 - » National Landcare Program
Regional Land Partnerships
 - » Smart Farms Small Grants
Program

Image below: Carly Bussenschutt discusses land management practices they have been implementing at their demonstration site with KI and Hills and Fleurieu Landscape Board staff.

Image right: Jenny Stanton explains the operation of their mobile chicken coop to KI and Hills and Fleurieu Landscape Board staff.



- » A project facilitator will be employed for the life of the project to work with participants, consultants and other stakeholders to ensure the plans are tailored to suit the farmers businesses and properties. They will continue to support the farmers as they transition from the planning to implementation phase.

4

KI properties
visited during
field trip with
Hills and Fleurieu
Landscape Board

Community engagement:

- Dr Paul Horn and Rebecca Addison from IPM Technologies delivered the IPM workshop with the farmers undertaking the IPM trials. During the workshop development began on IPM plans for the trial properties. These plans are currently being finalised.
- The Regional Agricultural Landcare Facilitator coordinated a tour with Richard Leask (Leask Agri) and Anton Groffin (Wirra Wirra vineyard) for KI wine growers on 24 February. The tour showcased the effective management strategies they employ to increase vineyard production, reduce pest and disease, reduce costs and labour, and create ecological systems that do the work for them. The tour found mid-row and under-vine ground cover was a practical solution for improving soil health and fertility and suppressing weed infestation. Some of these management practices will now be trailed at the Bay of Shoals vineyard as part of their IPM work. This trip fostered some great relationships between KI and mainland vineyard managers who now plan to work together in the future.
- The team coordinated a field trip on 3 March for staff from the Hills and Fleurieu Landscape Board to visit three of the KI demonstration farms and the Stokes Bay garlic farm to showcase the innovative and sustainable practices our KI farmers are implementing. KI and Hills and Fleurieu Landscape Board staff are working together to strengthen relationships and help connect KI farmers with like minded farmers on the mainland to help build networks and increase their exposure to other landholders implementing similar land management practices.
- The [Growing KI e-newsletter](#) was published in February 2022 and was emailed to 514 recipients. 42% of these recipients opened the newsletter.
- The team used social media and email campaigns to promote events, webinars, useful information and links relating to carbon footprinting and feasibility, seasonal forecasting, returning bluegums to agriculture land, composting methods and mixes, and funding available.

1 tour

to visit mainland
vineyards

Future directions and upcoming events:

- Eco-Vineyards workshop with Mary Cole on 5-6 May. The workshop will look at specific case studies, biological soils analysis and solutions for vineyards. Whilst aspects of this workshop will focus on soils in vineyards it is recommended to any land manager with an interest in the role of microbiology and practical solutions to improve soil health that reduce inputs and save time and resources.



KI Narrow-leaved Mallee Woodland Threatened Ecological Community Recovery Program

Overview:

This project will improve the condition, extent and connectivity of remnant KI Narrow-leaved Mallee woodland community patches through direct investment in threat mitigation actions and empowering landholders to undertake best practice management of narrow-leaved mallee on their properties.

Key achievements January–March 2022:

- Project management tasks have been undertaken to finalise completed on-ground works projects from the 2020-21 round and assist landholders to establish new on-ground works projects under the 2021-22 funding round.
- This project has been assisting local landholders who are looking to actively manage senescent KI Narrow-leaved Mallee Woodland using pollarding (coppicing) or ecological burning.
 - » Pollarding and ecological burning are techniques that can be used to regenerate ageing KI Narrow-leaved Mallee Woodland and help to increase understorey species diversity.
 - » Without active management, very old stands of remnant KI Narrow-leaved Mallee eventually fall over, die, and are lost from the landscape entirely.
 - » Both pollarding and ecological burning are considered as *Clearance for Ecological Restoration* and require a Native Vegetation Council approved Vegetation Management Plan before they can be undertaken. This project has been able to assist landholders by producing these Vegetation Management Plans for them, and obtaining the necessary approvals landholders require to undertake the restoration works.
 - » With approvals obtained with the assistance of this project, four landholders are currently undertaking pollarding and ecological burning, with a further two landholders planning to undertake works in the near future.

Community engagement:

- Landholders were assisted with their revegetation and fencing projects being funded through the 2020-21 on-ground works funding round.

Future directions and upcoming events:

- Ongoing inspection and finalisation of Narrow-leaved Mallee on-ground works landholder projects as they are completed.
- Finalisation of landholder vegetation management plans for ecological restoration of Narrow-leaved mallee.

55.4 ha
KI narrow-leaved mallee
woodland fenced

8
vegetation management
plans produced for
6 landholders

Links to KI Landscape Plan

- A connected community at the centre of decision making
- Healthy terrestrial and marine ecosystems and biodiversity

Funded by:

- Australian Government:
National Landcare Program
Regional Land Partnerships



Image right: KI Narrow-leaved Mallee seedlings growing at the KI Native Plant Nursery.

Glossy black-cockatoo Recovery Program

Overview:

This project will deliver emergency interventions for SA glossy black-cockatoos (*Calyptorhynchus lathami halmaturinus*) affected by bushfires to assist with their recovery, including protecting glossy black-cockatoo (glossy) nests from predators to improve nesting success.

Key achievements January–March 2022:

- Due to increased rainfall in spring 2021 and summer 2021-22, more glossy nests were invaded by feral bees than usual.
 - » Four bee hives were treated within glossy nests, and three bee hives in surrounding vegetation near to nest trees were treated to reduce the chances of reinvasion.
 - » The high level of bee activity this summer also meant 34 nest boxes needed to be re-sprayed to deter bee invasion in problem areas.
- New nesting trees were searched for, and existing nest trees where previous protection measures had failed, were targeted for repair. Tin tree collars were installed around the base of trees and the canopy pruned to prevent possum access to glossy nests.
- Temperature loggers installed to record temperature changes inside and outside of nest boxes during glossy black-cockatoo nesting season (February-May) were installed at one site and checked at another.
- Motion activated cameras mounted on nest boxes with competitor exclusion devices were serviced so they can continue to record visitation of all species to glossy nest boxes.

Community engagement

- The Glossy Black-cockatoo Program Manager, Karleah Berris, presented to the Nature Foundation on their field trip to KI in March.

Future directions and upcoming events:

- Finalising landholders for the winter 2022 plantings of 7,000 drooping sheoaks to spread sheoak woodlands across the landscape.
- Re-surveying burnt sheoak woodlands to measure at survival and growth of post-fire sheoak seedlings
- Two research students will continue their projects investigating glossy's use of planted sheoak post-fire and the effect of the 2019-20 bushfires on glossy nesting and foraging activity.

7 nest trees
were treated to prevent
possums accessing nests

38 glossy
nests treated for
honey bee
invasion

Links to KI Landscape Plan

- A connected community at the centre of decision making
- Healthy terrestrial and marine ecosystems and biodiversity
- Effective terrestrial and marine pest management

Funded by:

- Australian Government: Regional Fund for Wildlife and Habitat Bushfire Recovery
- World Wide Fund for Nature Australia



Image right: Karleah Berris presenting to the Nature Foundation.

Kangaroo Island Dunnart Recovery Program

Overview:

This project will support the recovery of the Kangaroo Island dunnart following the 2019–20 bushfires by implementing key priorities of the *2011 Recovery Plan for the Kangaroo Island dunnart* and the 2019 draft *Conservation Advice for the Kangaroo Island dunnart*.

Key achievements January–March 2022:

- This quarter island-wide surveys for KI dunnarts were completed to:
 1. assess all suitable KI dunnart habitat
 2. map the current distribution of the KI dunnart
 3. establish a baseline of where the KI dunnart lives following the 2019–20 bushfires.
- » 255 sites have been surveyed by the team since the fires, with KI dunnarts detected at 72 of these sites on 840 individual occasions. All detections are on western KI within the predicted pre-fire distribution model determined by Hohnen et al. 2021.
- » The most eastern KI dunnart detections were at two sites on Coopers Road. These sites are in the transition zone from large intact protected areas of native vegetation in the west, to smaller, fragmented patches of native vegetation which often lack connectivity, in forestry and agricultural lands, which dominate the remainder of eastern KI. These sites also receive a minimum of 800 mm rainfall, which is an important predictor of KI dunnart occurrence (Hohnen et al. 2021a).
- » In this quarter 42 sites were installed and surveyed across KI. 25 sites were resurveyed to monitor the persistence of KI dunnarts. Re-surveying sites is important to monitor persistence and detect changes in occupancy following severe large-scale bushfire events and the ongoing control of introduced feral predators.

349 KI dunnart
detections at
5 new sites

42
sites surveyed to detect
KI dunnarts

Links to KI Landscape Plan

- A connected community at the centre of decision making
- Healthy terrestrial and marine ecosystems and biodiversity
- Effective terrestrial and marine pest management

Image below: A KI dunnart catching a stick insect.

Image right: Representatives from Landcare Australia and local farmers met with Paul Jennings and Chantelle Geissler to view a trial of the new trap alert system.



» The high number and broad spatial scale of detections suggests KI dunnarts have dispersed across most of their predicted range, a positive response to bushfire and possibly the reduction in feral cat numbers due to coordinated landscape-scale control programs. The vast majority of detections during quarter three have been of sub-adult dunnarts, which is consistent with the highly dispersive phase evident in other dasyurid species elsewhere in Australia (Doherty et al. 2015; Bennison et al. 2018; Radford et al. 2020) following bushfire.

- Feral cats were controlled systematically across sites where KI dunnarts have been detected, and broadly across the fire scar, to buffer these sites from re-invasion.
- 840 ha controlled for feral cats using new, state of the art, wireless trap monitoring system. This high tech, easy-to-use, system is being rolled out across western KI. The system alerts the team when a trap closes, saving time manually checking traps each day. The new system is a collaboration between the Board, KI Council, KILand, AgKI and farmers.

Community engagement:

- A joint press release by Zoos SA, Department for Environment and Water and KI Landscape Board was released in February highlighting how the organisations are working together to address critical knowledge gaps for the KI dunnart. See <https://www.zoossa.com.au/ki-dunnart-discovery/>
- The KI dunnart feral cat control team presented to Landcare representatives on their field trip to KI in March.

Future directions and upcoming events:

- Continue analysing KI dunnart survey data to re-run the species distribution and occupancy models, with outputs used to inform design of a long-term monitoring strategy for the species that will have the power to detect changes in occupancy as a proxy for population trends.
- Continue strategic feral cat control within KI dunnart habitat.
- Support landholders to use the Trap Alert system to monitor their feral cat traps.

86 removed from
feral cats KI dunnart
cats habitat

840 ha
feral cat control with new
wireless trap system

Funded by:

- Australian Government:
 - » Environmental Restoration Fund
 - » Bushfire Wildlife and Habitat Recovery
 - » Regional Fund for Wildlife and Habitat Bushfire Recovery
- Landcare Australia and National Landcare Network
 - » Landcare Led Bushfire Recovery Grants Program



Oyster Reef Construction Program

Overview:

This project will build a series of 20 small, native oyster shellfish reefs close to Kingscote and American River to provide important habitat for premium recreational fishing species and to contribute to the national shellfish reef restoration initiative. The reefs, once placed on the seabed, will be initially seeded with native oyster larvae (spat) and will also provide a substrate for wild spat to settle.

Key achievements January–March 2022:

The spat collection breeding program for native oysters (*Ostrea angasi*) continued over the summer spawning season.

- 80 additional oyster basket spat collectors were deployed in Western Cove.
- As part of a new methodology, spat collectors made from ceramics, terracotta tiles and timber modules, were deployed in the same collecting area. 100 ceramic razorfish forms, 150 terracotta forms and 20 timber modules were installed.
- The 80 collectors previously placed in Western Cove last quarter were monitored on-site. Results indicated evidence of high shellfish settlement on the recycled oyster shell.
- The baskets and other materials collecting spat will be left in the bay until late autumn, to protect settled spat while they grow. Once the spat have grown large enough to avoid predation they will be collected and distributed onto the newly built reefs.

Community engagement:

- A brochure was produced about the project for locals and visitors to KI. It is available from the KI Landscape Board reception, Ingrams Home Hardware, Jamieson's Marine and The Oyster Farm Shop.

Future directions and upcoming events:

- Construction of 10 reefs in both Kingscote and American River sites.
- Seeding of oyster reefs with juvenile spat from collectors.



250
spat collectors deployed
to harvest oyster larvae

268
spat collectors monitored
for oyster larvae growth

Links to KI Landscape Plan

- A connected community at the centre of decision making
- Healthy terrestrial and marine ecosystems and biodiversity
- Sustainable primary production and the island's economy

Funded by:

- Australian Government:
 - » Fisheries Habitat Restoration

Image below left: Ceramic spat collectors beginning to grow algae.

Image below right: Project staff heading out to deploy basket spat collectors.



Community grants programs

Overview:

These grant programs support the KI community to undertake on-ground actions to benefit the natural resources of Kangaroo Island. Grants reported here include the KI Landscape Board Grassroots Grants and Bushfire Recovery Fencing Grants.

Key achievements January–March 2022:

Kangaroo Island Bushfire Recovery Fencing Grants

- 27 km of fencing has been installed across five properties. The fencing has created 11 stock-proof areas that protect burnt and regenerating native vegetation that contains threatened species. Through this fencing, 277 ha of threatened species habitat has been protected.
- Round 2 of the Bushfire Recovery Fencing Grants opened in February. Eligibility criteria has expanded to include fencing of burnt and unburnt vegetation and revegetation projects within the 2019-2020 firescar. This round is open until 31 October 2022, or when all funds have been allocated.
 - » An on-line application form is available at: www.bit.ly/3uCpgm4

Kangaroo Island Grassroots Grants

- The 2022-23 KI Grassroots Grants is open and seeking applications for projects with environmental and sustainable agriculture outcomes that address the priorities in the [Kangaroo Island Landscape Plan 2021-2026](#).
 - » Between \$1,000 and \$8,000 is available per project. Work would be undertaken between 1 July 2022 and 30 June 2023, or 30 September 2023 if the project contains revegetation.
 - » An on-line application form is available at: <https://landscape.smartygrants.com.au/KIGrassrootsGrants2022>
 - » The closing date for applications is 6 May 2022.
- One KI Grassroots Grant project from the previous 2020-21 round has been completed by Kangaroo Island / Victor Harbor Dolphin Watch who have:
 - » Conducted five monthly volunteer Citizen Science research surveys for dolphins in North Cape, Dashwood Bay, Emu Bay, Stokes Bay, Nepean Bay, American River and Hog Bay.
 - » Conducted monthly data analysis workshops.

Community engagement:

- The KI Bushfire Recovery Fencing Grants are available to all landholders within the 2019-20 bushfire scar.
- The KI Grassroots Grants are available to all KI residents, volunteers, schools, community organisations, First Nations and not-for-profit groups working locally.

Future directions and upcoming events:

- Process and assess applications received.

Image right A recently completed fence protecting regenerating native vegetation funded through the KI Bushfire Recovery Fencing Grants.

**KI Bushfire Recovery
Fencing Grants
& KI Grassroots Grants
seeking applications**

**27
km**

**fences installed
across 5
properties to
protect 277 ha**

Links to KI Landscape Plan

- A connected community at the centre of decision making
- Healthy terrestrial and marine ecosystems and biodiversity
- Sustainable primary production and the island's economy
- Effective water management
- Effective terrestrial and marine pest management

Funded by:

- Kangaroo Island Land Levy
- Government of South Australia:
 - » State Appropriations
 - » Minister for Environment and Water
- Australian Government:
 - » Regional Fund for Wildlife and Habitat Bushfire Recovery



Communications and media

Overview:

This project provides professional communication services, processes, advice and support to the Board, General Manager and regional staff. All work is in line with the Board's priorities and direction and tailored to the community and national/international audiences through targeted messaging and communication methods.

Key achievements January–March 2022:

- Conducted a series of communications audits with Board Members, staff and local stakeholders
- Drafted, presented and finalised the Annual *KI Landscape Board Communications Strategic Plan* which set up objectives and key results to be initiated and achieved by the end of 2022. The Plan was approved by the Board.
- Established internal protocols and documents including the Annual Board Communications Calendar, Annual Project Communications Calendars, Communications and Media Template, Communications and Media Outreach Approval Process and Key Stakeholders Mapping.
- Set up a weekly communications channel the 'Weekly with Wei' in order to enhance internal communications. This is currently in the format of emails which may evolve into different shapes and forms of communications in the future.

Community engagement:

1. Media

1.1 International media

- 25-02-2022 [The youngest spokesman of the Taiwanese Government became a Kangaroo Islander, and Yin Wei's life turned upside down again](#) (*UDN news*)

1.2 National/state media

- 11-02-2022 [Six healthy KI dunnarts have been found](#) (*Glam Adelaide*)
- 23-02-2022 ["A diabolical problem needing radical answers": when cats are not so cute](#) (*Australian Geographic*)

1.3 Local media

- 07-02-2022 [Volunteers work to restore Emu Bay dunes on Kangaroo Island](#) (*The Islander*)
- 10-02-2022 [PIRSA, Landscape Board offer support for west-end, storm-impacted landowners on Kangaroo Island](#) (*The Islander*)
- 10-02-2022 [Six more healthy Kangaroo Island dunnarts located by conservation teams](#) (*The Islander*)
- 01-03-2022 [Winter blitz to help eliminate feral cats on Dudley Peninsula on Kangaroo Island](#) (*The Islander*)
- 14-03-2022 [KI Landscape Board at AgKI Conference highlighting agricultural element](#) (*The Islander*)
- 14-03-2022 [Agriculture Kangaroo Island marks 25 years with annual conference](#) (*The Islander*)

1st
KI Landscape Board
Communications Strategic
Plan completed

3
international, national
and state media articles
published

Links to KI Landscape Plan

- A connected community at the centre of decision making
- Healthy terrestrial and marine ecosystems and biodiversity
- Sustainable primary production and the island's economy
- Effective water management
- Effective terrestrial and marine pest management

Funded by:

- Australian Government:
 - » National Landcare Program
 - Regional Land Partnerships
- Government of South Australia:
 - » State Appropriations

- 17-03-2022 [Second shorebird sign goes up at Kingscote, Kangaroo Island](#) (*The Islander*)
- 22-03-2022 [\\$981,000 drought resilience grants to enhance on-farm property management on Kangaroo Island](#) (*The Islander*)
- 28-03-2022 [Kangaroo Island Landscape Board announces its \\$49,000 'Grassroots Grants'](#) (*The Islander*)
- 28-03-2022 [Eight Landcare projects happening on KI post bushfire on Kangaroo Island](#) (*The Islander*)
- 31-03-2022 [Kangaroo Island Landscape Board's native oyster reefs to be built this autumn](#) (*The Islander*)

11
local media articles
published

40
Facebook posts with
major growth of **348%**
and engagement of **237%**

2. Facebook

- 40 posts with a reach of 348% and an engagement of 237% compared with the beginning of the quarter.

3. Newsletter

- Assisted the review and editing process of [Growing KI's](#) February edition.

4. Brochure and poster

- Assisted the review and editing process of project outreach material in relation to Feral Cat Eradication Program, Oyster Reef Project and grants.

5. Community engagement events

- Assisted in production of visual assets for the 25th AgKI Conference, Dudley Peninsula Feral Cat Eradication Program event and Penneshaw Market Feral Cat Eradication Program stall.

Future directions and upcoming events:

- As laid out in the Communications Strategic Plan, overall messaging and branding, official website audits and the further work on opening up and beautification of our office space as an on-island space for promoting the Board's visions will be the priorities.



Image right: Wei Yin, Communications and Media Coordinator out in the field with the Glossy black-cockatoo Recovery Team.

Planning and Evaluation Team

Overview:

This team works with all KI Landscape Board projects to support their effective and efficient delivery and to assist them to meet their reporting responsibilities. The team also coordinates the KI Landscape Board's strategic planning, including evaluating performance towards implementing the KI Landscape Plan.

11 reports submitted to project funders

Key achievements January–March 2022:

- Submitted output reports for the following projects to the Australian Government through their on-line reporting tool (MERIT):
 - » *Core Services*
 - » *Recovering the KI Narrow Leaved Mallee Woodland Threatened Ecological Community through local landscape action*
 - » *Creating a safe haven for the KI dunnart and other priority threatened species by eradicating feral cats from the Dudley Peninsula*
 - » *Building resilient agricultural systems on Kangaroo Island*
 - » *Supporting the recovery of the KI dunnart through conservation and management actions*
 - » *South Australian Glossy Black-Cockatoo Post-fire Recovery*
 - » *Controlling feral cats to protect priority fauna species on KI*
 - » *Supporting the post-fire recovery of the Glossy Black-cockatoo on KI through conservation and management actions*
 - » *Helping threatened species on KI to recover from the 2019-20 bushfires through on-ground actions*
 - » *Building native oyster shellfish reefs to improve fish habitat on KI.*
- Prepared and submitted 170 documents to the Australian Government for an audit of the Board's delivery of the National Landcare Program Regional Land Partnerships program on Kangaroo Island.

170 documents submitted for audit

Links to KI Landscape Plan

- A connected community at the centre of decision making
- Healthy terrestrial and marine ecosystems and biodiversity
- Sustainable primary production and the island's economy
- Effective water management
- Effective terrestrial and marine pest management

Funded by:

- Australian Government:
 - » National Landcare Program
 - » Regional Land Partnerships

Community engagement:

- Updated the KI Landscape Board website. See www.landscapesa.gov.au/ki
- Assisted with the development of posters, web pages, media articles, factsheets, newsletters and flyers for KI Landscape Board projects.

Future directions and upcoming events:

- Assist projects with reporting and monitoring requirements and liaise with the Australian Government and project staff to meet contracted requirements for projects.
- Develop a comprehensive MERI plan to measure the success of the landscape plan in maintaining or improving the condition of KI's landscapes.

Image below: *Hakea mitchelli* seed collected from Murray Lagoon in January by the KI Native Plant Nursery staff.



How we can help you



KI Native Plant Nursery

- » local native plants
- » growing, planting and revegetation advice suited to KI soils and climate
- » plant identification

Contact Veronica Bates
0437 322 692
veronica.bates@sa.gov.au



KI Narrow-leaved mallee

- » advice on how to manage KI narrow-leaved mallee
- » grants available to protect and revegetate KI narrow-leaved mallee woodland

Contact Kym Lashmar
8553 2476
kym.lashmar@sa.gov.au



Regional Agricultural Landcare Facilitator

- » assist with sustainable agriculture activities, e.g. workshops, demonstrations and peer learning sessions

Contact Cassandra Douglas-Hill
0437 172 877
cassandra.douglas-hill@sa.gov.au



Water management

- » advice on water affecting activities and permits e.g. dams and earth works in or near a water body
- » advice on water resources e.g. salinity, wells

Contact Mark Agnew
8553 2476
mark.agnew@sa.gov.au



Weed control

- » weed management advice
- » weed identification
- » reports of new weeds
- » hire of cape tulip weed wiper

Contact Jason Walter
0418 708 557
jason.walter@sa.gov.au



Pest animal control

- » domestic goat and ferret permits
- » feral goat and deer reports

Contact Bronwyn Fancourt
8553 2476
bronwyn.fancourt@sa.gov.au



Feral pig control

- » control of feral pigs
- » feral pig trap hire
- » feral pig reports on eastern KI

Contact Brenton Florance
0427 618 304
brenton.florance@sa.gov.au



Feral cat control

- » control of feral cats
- » feral cat trap hire

Contact Ashleigh Wycherley
0427 947 223
ashleigh.wycherley@sa.gov.au