Kangaroo Island Landscape Board Progress Report

April — June 2021



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.

9	
COMMUNITY	 Priority: A connected community at the centre of decision making Focus areas: 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: 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: 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: 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: Controlling and, where possible, eradicating weeds, pests and diseases Strengthening KI's biosecurity arrangements Managing the impact of overabundant native species
_	

Contents

Water Resources Management	3	Sustainable Agriculture Program	10	Planning & Evaluation Team	18
Declared Animal & Plant Control	4	KI Narrow-leaved Mallee Program	11	Community Grants programs	19
Feral Cat Eradication Program		KI Glossy Black-cockatoo Recovery	12	Communication, media & events	20
Feral Pig Eradication Program	8	KI Dunnart Recovery	14	KI Native Plant Nursery	22
KI Phytophthora project	9	Oyster Reef Construction	16	How we can help	23

Cover image: A glossy black-cockatoo nestling in a nest box, as seen through a monitoring camera.

Water Resources Management

Overview:

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

Key achievements April–June 2021:

- Analysed high resolution elevation survey data (Light Detection and Ranging (LiDAR) technology) to quantify more accurate calculations of: catchment areas of dams, 1 m contour lines and flow accumulation dam capacities, and to define the locations of watercourses.
- Completed flow gauging to help calibrate the Board operated flow monitoring sites.

Community engagement:

- Received five Water Affecting Activities (WAA) permits and two Development Applications.
- Advised about 30 people about water resources management and the requirement for WAA permits and development applications. These queries commonly related to the Department of Primary Industries and Regions (PIRSA) KI On-farm Emergency Water Infrastructure grants program for installing new dams and/or graded catchments.

Future directions and upcoming events:

- Contribute to the final year of the project *Environmental Assessment of Water Management Options for KI* to improve the science underlying the Water Policy.
- Continue to implement the project *Partnering with Kangaroo Island landholders to develop property-scale water security plans to prepare for future droughts.* This project will assist the Board to develop a clear, evidence based understanding of property water security in line with current climate models. Having these climate models will allow landholders to request information from the Board on both the position, size and reliability of both current and proposed dams, in order to make informed property management decisions.
- 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.

30 people advised about water resources



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

Image below: Flow over the crossing of Harriet River and East West Two Highway. The flow rate was measured at this site with a flow meter to help calibrate the instrument at the nearby monitoring site.



Declared Animal and Plant Control Program

Overview:

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

Key achievements April–June 2021:

Weeds

Gorse:

- Most gorse sites in burnt and unburnt areas on central-northern KI have been searched for seedlings, with assistance from the PIRSA weed staff.
 - » Sites that previously had thousands of seedlings and mature plants now have 0-50 gorse seedlings, except for a site at Timber Creek where hundreds of seedlings still needed to be removed.
 - » The Board's persistent work over the last eight years has really paid dividends in reducing the recruitment and spread of gorse and it will be important to maintain this work.

One-leaf Cape tulip:

• Board staff partnered with PIRSA to coordinate a very successful blitz controlling one-leaf Cape tulip over five days in late June. A dozen staff from mainland landscape boards and PIRSA worked with local landholders to control one-leaf Cape tulip around Karrata and within the Stunsail Boom catchment.

Arum lily:

• An isolated infestation of arum lily was controlled over 2.5 ha in April. Over 10,000 plants were found and destroyed using cut and swab technique.

Cape Leeuwin wattle:

• Cape Leeuwin wattle was controlled over 25 ha. Over 100,000 plants were destroyed using cut and swab, physical removal and handline spraying.

100,000 Cape Leeuwin wattle plants found and removed

329 ha bridal creeper controlled in western outliers

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: Jason Walter, KILB Weeds Officer, demonstrating the weed wiper at the one-leaf Cape tulip control blitz.



Bridal creeper:

Western outliers of bridal creeper were controlled over 329 ha in June by physically removing the rhizomes from up to 1,000 plants:

- 300 ha was controlled in the vicinity of Kelly Hill Conservation Park with 160 kg of rhizomes dug up and removed
- 25 ha was controlled around Mount Taylor with 1,020 kg of rhizomes dug up and removed
- 4 ha was controlled at Hill View on Gosse Richie Road with 820 kg dug up and removed.

Tasmanian blue gum seedlings (TBG):

- A significant proportion of areas infested by TBG has been mapped by Board staff, the KI Conservation Landholders Association (KICLA) and KI Plantation Timbers (KIPT). All stakeholders that have undertaken control works have mapped the areas they have worked in. This mapping has been completed using the App that the DEW have created. The mapping App also enables users to show where they are planning to undertake control works, to avoid duplicating effort.
- Board staff assisted Trees for Life (TfL) to control TBG on Gosse Ritchie Road, Conservation Volunteers Australia (CVA) to control TBG on three private properties and KICLA to control TBG in several heritage agreement areas on KIPT properties.

Pest animal management

Domestic goat:

- Board staff visited one permit holder to ensure the goats on their property were adequately managed. The permit holder plans to sell their goats to another permit holder.
- Five of the 15 permit holders were contacted to confirm their existing goat numbers. Some of these permit holders either no longer kept goats or had reduced their goat numbers.

Community engagement:

Weeds

• Six community members were advised about control of one-leaf Cape tulip, bridal creeper and African boxthorn.

Tasmanian bluegum:

- Board staff engaged with TfL, CVA, Nature Conservation Society of SA (NCSSA), KICLA, DEW, PIRSA, KI Council, KIPT and Agriculture KI (AgKI), to facilitate and support control works.
- A sponsorship package was negotiated with KI Sealink to assist volunteer groups to come from the mainland to control TBG.

Future directions and upcoming events:

- Continue the control of priority weeds across KI, including fire affected areas.
- TBG control will be undertaken by NCSSA and TfL with the community in early July and KICLA in KIPT holdings in late July.
- A community working bee to control TBG is planned for October.

community groups and agencies assisted with bluegum control



Funded by:

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

Image below: Arum lily control on western KI.



Feral Cat Eradication Program

Overview:

The aim of the Kangaroo Island Feral Cat Eradication Program is to eradicate feral cats from Kangaroo Island by 2030, 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.

Key achievements April–June 2021:

- 29 feral cats have been culled over 9,250 ha of the Dudley Peninsula this quarter: 21 using cage traps and eight through ground shooting.
- Information captured through camera trap arrays have been used to guide where to undertake control. This has been particularly useful for mopping up feral cats behind the eradication line. The arrays contain 235 remote cameras which were used over 67,104 trap nights (number of traps x number of nights). The data from some of these cameras will also be analysed to give an updated estimate of southern brown bandicoot and echidna occupancy across the Dudley Peninsula.
- The high numbers of mice over this guarter have limited the effectiveness of cage trapping, however more soft-jaw foot-hold traps have been bought and an experienced cat trapper employed to help with trapping cats behind the line.
- Feral cat ground and aerial baiting using Curiosity[™] baits (para-aminopropiophenone) was conducted over 10,585 ha of unburnt woodland refuge areas on the Dudley Peninsula. The majority of the 4,000 baits were delivered by helicopter at a density of 30 baits/km². All roads and tracks in the baiting zone were also ground baited. The number of individual feral cats removed by the baiting is unknown but it is expected to achieve at least 50% knockdown based on trials from 2020 with the same technique.

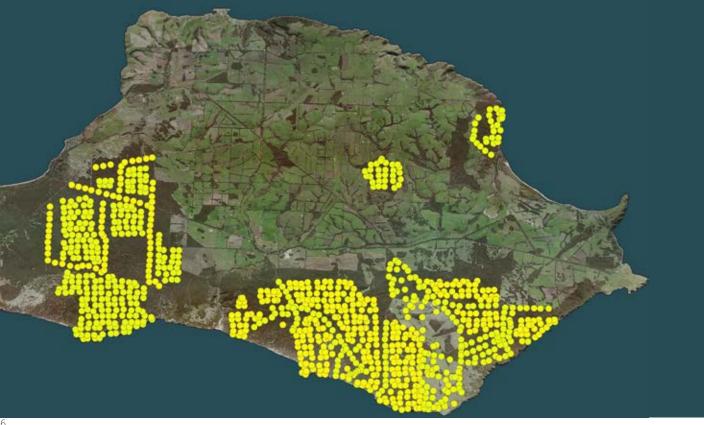
feral cats 29 controlled across the Dudley the Dudley Peninsula

feral cat baits distributed over 10,585 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: Map showing the locations of the feral cat baits laid on the Dudley Peninsula in June.



• The southern section of the feral cat proof fence being constructed across the narrowest part of the Dudley Peninsula is almost complete.

Community engagement:

- A survey of landholders on the Dudley Peninsula indicated 96% of them supported the project and were happy for control works to be undertaken on their properties.
- 98 landholders were notified prior to the ground and aerial baiting using Curiosity™ baits on the Dudley Peninsula.
- A <u>Feral Free Kangaroo Island Facebook</u> page was launched to share information relating to the KI Feral Cat Eradication Program.
- Began a promotion to encourage people to sponsor a 4G camera. This will help with real time feral cat detection and allows sponsors real time access to images of KI wildlife. <u>See link to sponsorship page</u>.

Future directions and upcoming events:

- Feral cat control activities will continue to move slowly west and north across the Dudley Peninsula. New cameras will be installed to monitor feral cat movements and detect when they have been removed from an area.
- Baiting will be undertaken again across woodland refuge areas on the Dudley Peninsula.
- Information captured through camera trap arrays will be analysed to give an updated estimate of southern brown bandicoot and echidna occupancy across the Dudley Peninsula.
- The final workshop for the *Feral Cat Strike Force* project is planned for October. As the array of 4G connected cameras develops, detector dogs will probably become even more valuable, as they will enable the eradication team to respond to feral cat sightings in close to real time.

235 remote cameras used to track feral cats

Iandholders 96% contacted support the project

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
- Members of the public

Image below: Getting ready to commence baiting operations on the Dudley Peninsula.



Feral Pig Eradication Program

Overview:

The program aims to eradicate feral pigs on Kangaroo Island across private and public land, parks, reserves, forestry and agricultural farmland using a coordinated landscape approach.

Key achievements April–June 2021:

- The KI Feral Animal Control Officer and Feral Pig Control Officer controlled 106 feral pigs during the reporting period, 18 through poisoning using Hoggone® baits and 88 through ground shooting. Over 480 feral pigs have been removed through ground and aerial programs since the eradication program commenced in September 2020.
- Ground control focussed on the southern management zones, aiming to completely remove or reduce feral pigs to very low numbers to achieve significant knockdown in these zones.
- The last remaining boar from the central outlier population was sighted in June just outside of the native vegetation where it is believed he resides. Unfortunately he was unable to be controlled at the time.

Community engagement:

• The Control Officers engaged with 20 landholders on central and western KI to determine the presence and locations of feral pigs.

Future directions and upcoming events:

- The KI Feral Animal Control Officer will participate in the thermal aerial shooting operation planned to occur from July to September on western KI under the auspices of the DEW aerial marksmen team.
- Continue feral pig control and landholder engagement as part of the PIRSA-led KI Feral Pig Eradication Project.
- Remove the final feral pig from the outlier area.

88 feral pigs controlled through ground shooting

18 feral pigs controlled with Hoggone® bait

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: » Minister of Primary Industries and Regional Development
- Australian Government:
 - » Bushfire Wildlife and Habitat Recovery Fund

Image below: Feral pigs feeding on Hoggone® bait (PIRSA).



Kangaroo Island Phytophthora project

Overview:

• This project supported the development of a new soil testing technique to detect Phytophthora (Pc). The project has also increased awareness of current and developing Pc hygiene protocols and techniques for use on KI.

Key achievements April–June 2021:

- Phytophthora fieldwork hygiene protocols have been developed for use by agencies, non-government organisations, weed contractors etc. when undertaking surveys and on-ground works on KI, to reduce the spread of Pc.
- Flinders University has completed the very early stages of lab work to develop a Polymerase Chain Reaction (PCR) soil test for Phytophthora and also to test efficacy off disinfectants used in hygiene procedures aimed at preventing the spread of Pc.

Community engagement:

• The Phytophthora fieldwork hygiene protocols have been distributed to agencies, non-government organisations and weed contractors.

Future directions and upcoming events:

- Flinders University to continue to develop the PCR test to reliably detect Pc in soil samples.
- Planning for activities for 2021-22.

PC fieldwork hygiene protocols developed

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: » Minister of Primary Industries and Regional Development



Image below: Yacca dieback potentially due to Pc, in the vicinity of Scott Cove in April 2021, 15 months post-fire.

Sustainable Agriculture Program

Overview:

This project 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 April–June 2021:

• A Climate Smart Farming Forum was held in on 6 May in conjunction with the Hills and Fleurieu Landscape Board at which Jenny Stanton was interviewed about her experiences as a regenerative farmer and in particular her ideas on soil monitoring. 15 farmers attended the <u>Climate</u> <u>Smart Farming Forum</u>.

Community engagement:

- Five farmers were assisted to monitor their soil acidity through soil testing and advice given to them by Rural Solutions SA.
- 24 farmers attended the Resource Consulting Services (RCS) Grazing Clinic on 22 April 2021.
- One farmer attended the Integrated Pest Management workshop on 27 May 2021 conducted by South Australian Research and Development Institute (SARDI). The workshop will be available on-line in the future.
- Four farmers with regenerative agriculture demonstration sites on their farms were given advice on best practises, including the results of their soil monitoring, from Kim Deans and Dick Richardson.
- Monthly webinars were held for the KI Healthy Soils group with soil health coach Kim Deans. The webinars provide a forum for members to raise issues, troubleshoot and share information. The group contains 18 members, of which 16 are farmers.
- A Growing KI e-newsletter was published in April 2021.

Future directions and upcoming events:

• Recruitment of a Sustainable Landscapes Manager to continue this work.



farmers **15** attended the Climate Smart Farming Forum

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: KI farmers at Paul McGorman's property during the RCS Grazing Clinic (The Islander).



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 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 April–June 2021:

- 20.2 ha of KI narrow-leaved mallee woodland was protected from stock grazing and trampling with 7 km of fencing.
- Three landholders revegetated 0.93 ha of KI narrow-leaved mallee woodland with tubestock. The purpose of the revegetation was to recreate KI narrow-leaved mallee woodland and strengthen corridors between remnant vegetation patches.

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:

- Opening of the <u>2021 Narrow-leaved Mallee on-ground works funding</u> round.
- Landholders are currently protecting 100 ha and revegetating 9.4 ha of KI narrow-leaved mallee woodland.
- Planning for a KI narrow-leaved mallee pollarding workshop.

Image below: New fencing installed to protect regenerating KI narrow-leaved mallee woodland.





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



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 April–June 2021:

- Monitoring has shown that glossy black-cockatoos are continuing to persist and breed in all areas of KI, and have not vacated flock regions despite large areas of feeding habitat being burnt in the 2019-20 bushfires. However, there are some breeding areas within these flock regions where glossy pairs have not been seen since the 2019-20 bushfires. These glossy pairs may have relocated to nearby new breeding areas, or are not breeding as often post-fire.
- Flora surveys indicated that sheoak woodlands that had not burnt for over 60 years before the 2019-20 bushfires are regenerating successfully. The high densities of seedlings in all sheoak woodlands indicate it may take many years (10-20 years minimum) for these woodlands to produce seeds again. Another bushfire in these woodlands before sheoaks are producing seeds will threaten this species and therefore glossy feeding habitat. Patches that had a longer fire interval before they burnt in 2019-20 (greater than 60 years) have a slightly lower seedling density but better seedling growth. This indicates that sheoak woodlands recover from bushfires faster when there is a long time between fires, rather than a shorter interval.
- To restore glossy feeding habitat, 6,500 sheoaks were planted on 31 properties over 15 ha across KI to 'spread the risk' from future bushfires. Sheoaks were planted at intervals of 4 m to increase sheoak growth in the hope they begin producing cones within five to ten years.

Image below left: Young glossy black-cockatoo ready for banding.

Image below right: Volunteers planting glossy habitat near one of the glossy nesting sites that lost all of its remnant feeding habitat during the 2019-20 bushfires.









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





- All glossy nests were monitored over the breeding season for interference and predation.
- Monitoring during the glossy breeding season shows the work undertaken in 2020-21, to protect glossy nests and control nest competitors, has increased glossy breeding success to 58.5%. This breeding success rate is higher than the long-term average of 52%, and much higher than the breeding success rate of unmanaged nests (approximately 20%).
- To date 38 glossy chicks that have hatched this season have fledged. 34 of these have been banded and this will give the project team invaluable information about their long-term survival and movements over their life.
- The project has helped glossies expand east across KI. In 2020 recovery staff found glossies feeding 10 km east of the furthest eastern nesting site. However, the site had few large trees with nesting hollows so recovery staff installed three nest boxes in surrounding habitat. Monitoring in June revealled glossies using all three of the new nest boxes.

Community engagement:

- 25 community volunteers planted drooping sheoak woodland at four planting events in June 2021.
- Twelve kindergarten students from Kingscote participated in a field trip with project staff to see how they maintain and monitor glossy black-cockatoo nest boxes.
- The Glossy black-cockatoo Recovery Program newsletter "Chewings" was sent to over 300 people. See link: <u>Chewings Newsletter</u>
- A media release on the new nest boxes 'Cockatubes' donated by a WA Landcare group was released in June. Staff have installed 25 of these new nest boxes, and they are already being used by nesting glossy black-cockatoos. See link: <u>The Islander article</u>

Future directions and upcoming events:

- Conduct glossy black-cockatoo census to determine whether we are missing major breeding locations for flocks on western KI.
- An honours student from Flinders University is investigating the size and structure of woodlands that bear natural hollows large enough for glossy black-cockatoos. They have completed the field work for their research and in the coming months will analyse the data collected. This research may shed light on which areas on Kangaroo Island have limited glossy hollows.

Image top right: A project staff member at a nest box to remove a glossy black-cockatoo nestling for leg banding.

Funded by:

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



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 April–June 2021:

- Kangaroo Island dunnarts were detected at three new sites this quarter. There are now 60 sites where KI dunnarts have been detected by this project since the fires. This quarter KI dunnarts were detected 125 times across all sites. There have now been 328 individual KI dunnart detections since the project began in February 2020.
- Twenty-five new survey sites were installed in suitable burnt and un-burnt habitat across a combination of private land, forestry and public land, bringing the total sites surveyed to 186. The team has begun to move east across KI, installing 12 new sites in the Cassini area where KI dunnarts were recorded historically. Unfortunately no KI dunnarts have been detected at these historical sites yet. So far the most eastern site where the KI dunnart has been found is on Gosse Ritchie Road.
- The project has found KI dunnarts at 31 burnt sites and 29 unburnt sites, indicating there may be a positive fire response. In autumn this year there was an increase in detections of young KI dunnarts at some burnt sites. This suggests post-fire reproductive success for KI dunnarts, followed by dispersal of their off-spring, which is similar to responses in other dunnart species on the mainland.
- Feral cats have been controlled systematically across sites where KI dunnarts have been detected, and broadly across the fire scar, to buffer these sites from re-invasion. 101 feral cats were removed this quarter from 33,244 ha of public, private and forestry properties.

Image right: Feral Cat Field Officer, setting a soft-jaw foot-hold trap. Image below left: Kangaroo Island dunnart photographed recently.







01 removed from feral KI dunnart cats habitat



Community engagement:

- A Kangaroo Island Dunnart Recovery Program update was sent to participating landholders, project partners and recovery team members and will be posted on the KI Landscape Board webpage.
- The KI Dunnart Recovery Team engaged with 46 KI landholders seeking permission to survey for KI dunnarts and/or conduct feral cat control. 85% of landholders were happy for the team to undertake work on their properties.

Future directions and upcoming events:

Map below: KI dunnart survey sites and detections.

- As KI dunnarts have now been detected at many sites within their predicted range, survey effort is expanding across the island in areas of suitable habitat. Outcomes from this comprehensive survey will help understand the current distribution of the KI dunnart to update species distribution modelling and inform conservation actions for the species in the future.
- To maximise feral cat control over large, landscape scales, approaches and techniques will continue to be trialled and refined, to reduce predation on threatened species and the potential for re-invasion.

Image below: Field staff setting a camera to photograph animals moving along the driftline.

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:
 - » Environmental Restoration Fund
 - » Bushfire Wildlife and Habitat Recovery
 - Regional Fund for Wildlife and Habitat Bushfire Recovery



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 will be built in shallow water in close proximity to boat launching facilities to improve access for local and visiting recreational fishers in small vessels. 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 April–June 2021:

- Project staff have been working closely with The Nature Conservancy (TNC) to adapt their existing native oyster reef restoration suitability model to guide the placement of this project's 20 native oyster reefs around KI. Sites for the oyster reefs have been identified, ground-truthed and selected to meet a range of suitability metrics including: proximity to recreational boat facilities, depth range, habitat type and baseline data for presence of key recreational fish species.
- In April, native oyster spat collectors were deployed at 20 sites in Western Cove to identify suitable sites for natural spat collection. Collectors will remain in-situ for three to six months, to allow any collected spat to grow to an easily visible size so that levels of natural spat collection and survival across various sites can be determined.
- Reef building materials have been sourced for the construction of the native oyster reefs.
- This project has reviewed and synthesized the data collected between 2014 and 2018 by the KI Natural Resources Management Board Coast and Marine Program to establish a baseline for fish species biodiversity in marine coastal habitats where native oyster reefs will be built.

Native oyster spat collectors deployed at **20 sites**



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

Images below left and right: Field staff working with the KICE Marine Warriors in the classroom and at the Kingscote Wharf.



- A project monitoring plan has been developed to assess the success of the reefs. Monitoring will occur pre- and post-construction and will be assessed against nearby control sites in comparable habitats. Sites will be surveyed twice a year: once in spring/summer and once in autumn/ winter to account for seasonal variations in fish species assemblages and abundance. Monitoring indicators are:
 - » Species richness Count of species found in each habitat; a key measure of biodiversity.
 - » Total fish biomass Total biomass of the fish assemblage over the area of survey.
 - » Biomass of fishery important species Biomass of species of fish that are of interest to fishers (King George whiting, southern calamari).

Community engagement:

- Project staff have engaged with 28 local school students from Kangaroo Island Community Education's (KICE) 'Marine Warriors' group to inform them about the project and the importance of native oyster reefs. Activities include:
 - » a classroom presentation
 - » a field trip to the Kingscote Jetty.
- A media article was published in the local newspaper <u>The Islander</u> about the project and to promote the importance of building native oyster shellfish reefs to improve fish habitat on Kangaroo Island.

Future directions and upcoming events:

- An oyster recycling collection point will be established at the American River Oyster Farm Shop, for customers to deposit their oyster shells, for use in spat collection and reef building.
- Engaging with the community and stakeholders to get their input into the location of the oyster reefs.



Image above: Map of area and sites where native oyster reefs will be built and changes in fish diversity will be monitored near Kingscote.



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.

Key achievements April–June 2021:

- Assisted the Board to develop the KI Landscape Plan, KI Landscape Board Business Plan and KI Landscape Plan Consultation Report and submitted these plans to Minister Speirs for endorsement.
- 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
 - » Support to RLP KI (SA) Service Providers for Emergency Pest Mitigation and Habitat Protection (Phase two)
 - » 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
 - *» 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.
- Developed Monitoring, Evaluation Reporting and Improvement Plan and program logic for the project *Building native oyster shellfish reefs to improve fish habitat on Kangaroo Island*.
- Developed Work Health and Safety Plans for the following projects:
 - » Controlling feral cats to protect priority fauna species on KI
 - » 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.

Community engagement:

• 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.
- 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 the island's landscapes.

KI Landscape Plan 21-26 developed

on-line reports submitted to the Australian Government

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 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 April–June 2021:

- Two KI Grassroots Grants projects from the previous 2020-21 round have been completed:
 - » 28.74 ha of native vegetation has been fenced to protect the shelterbelt from stock while it regenerates post-fire.
 - » Defensive driving and fire response training was given to volunteers from the Kangaroo Island Wildlife Network who are part of their wildlife rescue first response team.
- The 2021-22 KI Grassroots Grants round opened on 29 March 2021 and closed on 30 April 2021. Seventeen applications were received, ranging in value from \$1,650 to \$8,450 per year. The total value of the applications for 2021 was \$111,827.
 - » Eight applications were recommended for funding totalling \$49,040.
 - » On-ground activities to be funded include fencing to protect regenerating native vegetation post-fire, revegetation to reduce erosion and connect native vegetation, control of environmental weeds within Parndana and an outlier infestation of salvation Jane, and the installation of signs to protect shorebirds at Reeves Point and Brownlow.

Community engagement:

• All applicants for the 2021-22 KI Grassroots Grants round have been notified of the outcome of their application. All successful applicants have accepted their offers of funding. On-ground activities are due to start from 1 July 2021.

Future directions and upcoming events:

• Develop guidelines, procedures, on-line application form and frequently asked questions for the KI Landscape Board Bushfire Recovery Fencing Grants and open the grant round.



Iandholders 96% contacted support the project

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

Image below: President of the KI Wildlife Network Kate Welz, receiving a certificate following emergency response training from instructor Anne McLean. The training was funded by the 2019-20 KI Grassroots Grants.



Communication, media and events

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 April–June 2021:

- Coordinated visits, responses and interviews with media outlets to promote KI Landscape Board work.
- Assisted project managers to draft, develop and release a suite of newsletters, factsheets, brochures, advertisements, media articles, website updates and social media posts. These communications tools/ engagement products relate to the many areas of Board project work, including the KI dunnart, feral cat eradication, glossy black-cockatoo, feral pig eradication, Regional Agricultural Landcare Facilitator, weed management, water management, KI Native Plant Nursery and Tasmanian blue gum work.
- Prepared short to long-term action plans for the feral cat eradication and KI dunnart recovery programs.
- Supported the launch of the feral cat eradication Facebook page and provided strategic support re: content, voice, messaging, audience interest.
- Continued to liaise with PIRSA, National Parks and WIIdlife SA, and other government, and not-for-profit organisations on communications and media for projects on which they partner with the Board or directly fund.
- Filmed Board events and edited videos for various promotions.

11media
articles
published5radio
interviews
coordinated2,199
people reached through
KI Landscape Facebook

Image below: Communications and Media Manager assisting with filming to promote glossy black-cockatoo work.



Community engagement:

- Newspaper articles include:
 - » Feral cats curtailed on Kangaroo Island (The Islander)
 - » <u>KI feral cat program gets state funding boost (The Islander)</u>
 - » Large scale feral pig cull to begin in July (The Islander)
 - » <u>Aerial marksman using military-grade cameras culls more than 120</u> <u>feral pigs on Kangaroo Island</u> (The Islander)
 - » Minister checks out native plant nursery on KI (The Islander)
 - » Sustainable grazing practices discussed at KI workshop
 - » Al keeps track of threat to KI wildlife (The Advertiser)
- Radio interviews were coordinated with ABC radio Adelaide, Eyre Peninsula and West Coast, South East, Riverland SA, North and West SA, relating to feral pigs and feral cats. <u>Click here for links to all articles</u> <u>and interviews.</u>
- An article relating to <u>Australia's Bees: Kangaroo Island's bees, ecosystem</u> <u>recovering from bushfires</u> was reported on the China Global Television Network.
- Filming of project work was also coordinated for Sunrise on Channel 7 and the World Wide Fund for Nature Australia.
- Continued to grow the <u>KI Landscape Board's Facebook</u> presence. Data from the last 28 days shows 18 new page followers, 305 direct engagements, and a reach of 2,199.

Future directions and upcoming events:

- Board endorsement of the KI Landscape Board Engagement Strategy (developed at the end of 2020).
- Transitioning of the current KI Landscape Board website to the new platform.

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:

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

Image below: Communications and Media Manager participating in Kangaroo Island / Victor Harbor Dolphin Watch surveys funded through the KI Grassroots Grants.



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 April–June 2021:

- Approximately 52,000 tubestock of over 150 different species have been grown to planting size for the 2021 planting season. Over 9,000 plants from 70 different species will be used to revegetate nationally threatened KI narrow-leaved mallee woodland.
- The late arrival of winter rains has meant landholders could not begin planting until late June. As a result, plant orders have been maintained in the nursery for a longer period of time than normal.
- Minister for Environment and Water David Speirs visited the KI Native Plant Nursery in May 21 to thank KI Nursery Manager Veronica Bates for her tireless work over the past 15 years.
- Assisted with the coordination of the revegetation of the Fleurieu Regional Waste Authority site containing burnt infrastructure.

Community engagement:

• The KI Native Plant Nursery is open on Tuesdays and Thursdays from 18 May until 26 August for landholders to buy plants and collect their orders.

Future directions and upcoming events:

• Distribute orders to landholders and begin propagation of 2021-22 seedlings.

Image left: Minister Speirs with KI Nursery Manager Veronica Bates. Image right: Tubestock growing out in the KI Native Plant Nursery in June 2021.



52,000 KI native plants grown in 2020-21

different native plant species grown in 20-21

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



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 4456 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 4443 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 Trish Mooney 8553 4451 trish.mooney@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