

Project Summary

Kangaroo Collective Pilot



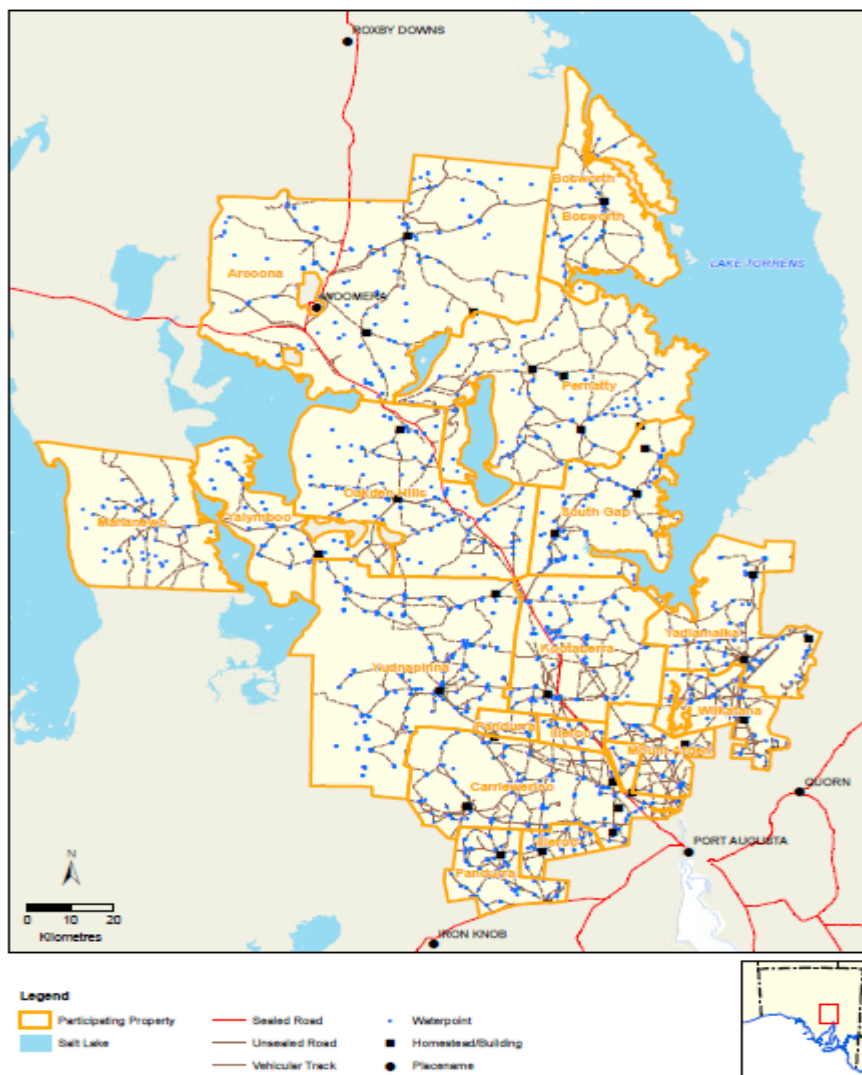
Kangaroo Partnership Project

Optimising kangaroo management in South Australia –
A partnership approach to improving landscape and economic resilience

The Kangaroo Collective Pilot was one of three projects funded through the [Kangaroo Partnership Project](#) (KPP) grant program. In this project, a collective of neighbouring land managers worked collaboratively to trial landscape-scale approaches to kangaroo management.

Background

The Kangaroo Collective group was assembled by Kate Greenfield (South Gap Station) through discussions with neighbouring land managers about the need for improved kangaroo management in the Gawler Ranges region. The group included 15 land managers, across 17 properties. The aim of the project was to bring these land managers together to trial landscape-scale kangaroo management approaches. This approach intended to empower land managers through the provision of funds that were then allocated by the Collective group according to on-ground landscape-scale needs, with consideration to the [KPP focus areas](#) and grant program criteria.



Workshop

The project began with a workshop in February 2023 with participating land managers. The workshop was facilitated by Andrea Tschirner (Regional Agriculture Landcare Facilitator), with support from Chris Fulton (Gawler Ranges Community Landscape Officer).

Amanda McLean (DEW Kangaroo Ecologist) set the context for the workshop by presenting the 2022 Quota report and survey findings. Land managers were staggered by the estimates of kangaroo numbers on their properties and across the landscape. A comprehensive map was created by SA Arid Lands Landscape Board staff for the meeting, highlighting key aspects like water points and kangaroo migration routes.

The group discussed their understanding of the local kangaroo industry supply chain, including the field processors currently servicing their properties, the meat processors the field processors work with, and chillers available locally. They also discussed current kangaroo meat value, average harvest rate, and costs to field processors (e.g. harvesting tags, fuel, ammunition).

The group then discussed different options for expending the project funding (see Table 1). These options were brought down to a shortlist: covering or subsidising field processor costs (e.g. harvesting tags or fuel or tyres), or investing in getting more chillers in more locations. The options covering field processor costs were all based around a strategic allocation across properties according to landscape needs. A majority vote on the shortlist favoured purchasing harvest tags. Land manager concerns about industry risks led to initially allocating half of the project funds to this trial.

Key outcomes

- Increased knowledge and shared understanding about kangaroo populations amongst involved land managers
- Strengthened partnerships and sharing of information between involved land managers and field processors
- Creation of a land manager collective that recognises the complex issues surrounding kangaroo management and wishes to see impact-causing kangaroo populations managed sustainably for positive agricultural and biodiversity outcomes
- Collective decision-making leading to a harvesting tag subsidy trial

Table 1. Potential uses of funding discussed at the workshop.

<ul style="list-style-type: none">● Cover or subsidise shooter expenses (e.g. rebate for distance covered or ammo or rough country)● Produce dog baits with kangaroo meat● Pay Traditional Owners \$1/head to remove animals● Subsidise a fulltime processor to service the region for ~3 months● Support land manager/employee training in processing	<ul style="list-style-type: none">● Purchase/rent a chiller● Fund a coordinator/agent position to manage acquiring processors where they are needed to ensure capacity● Fix existing chillers in the region● Trial approaches to flush kangaroos out of scrubby country (e.g. helicopter, bird scarers, Mars Rovers)● Engage a kangaroo business social scientist to tackle public perception issues
--	--

<ul style="list-style-type: none"> • Cover costs for land managers involved in training or developing new business model 	<ul style="list-style-type: none"> • Support harvesting in “pulses” to really get on top of kangaroo numbers
---	---

Harvesting tag subsidy trial

Subsidised tags were issued on a property-by-property basis, in an effort to allocate tags strategically across the properties based on landscape needs and ability to attract harvesters to the properties (e.g. distance from chiller/town). This was an immediate and mid-term strategy, where impacts could be realised on-ground within days of tags being issued and the ongoing effect of removing breeding individuals was expected to lower the population over time.

Three rounds of tags were purchased and allocated in March, May and November 2023, with the ability to use these tags up to a year after purchase, giving a total lifespan of tag use from March 2023 to November 2024.

Land managers were followed up individually by Kate Greenfield after a few months of tags being available to discuss the effectiveness of the tag subsidy. At this point consideration was given to properties that had not opted in to ensure outcomes at landscape scale could still be delivered. Land manager and harvester feedback indicated that the success of this approach varied across properties.

In general, the subsidy approach was more successful for properties that were more remote from meat processors and chillers, and had higher numbers of kangaroos present, such as Pernatty and South Gap Station (see Table 2). At South Gap the increase in harvesting realised the harvesting quota on the property for the first time in over 23 years. It is worth noting, however, that even with the quota realised the regenerative grazing practise of resting paddocks to regenerate feed was not wholly effective as kangaroos not absent from these paddocks continued their grazing pressure.

Table 2. Harvest numbers across three of the properties involved in the subsidy trial as of 8 August 2023. These numbers have been approximated based on reporting to date and indications from land managers and harvesters, and are subject to change due to expected reporting lags.

Property	Approx. annual quota	Approx. historical harvest		Approx. harvest number			Predicted % of annual quota realised during trial	Change in quota realised
		Annual average	% quota realised	Early trial period 15 Mar - 30 Jun 2023	Mid trial period Jul - Nov 2023	Predicted total		
Pernatty Station	3700	1100	29.7%	1655	1783	3438	92.9%	+212.5%
South Gap	1850	1100	59.5%	213	1587	1800	97.3%	+63.6%
Kootaberra Hesso Mt Arden	2962	381	12.9%	166	TBC	374	12.6%	-1.8%

For the properties where the subsidies did not seem to work, a consistently cited challenge was the limited demand for kangaroo products and resulting low value of kangaroo meat that was discouraging harvesters. Other challenges included changes in harvester availability due to personal reasons, as was the case for the Kootaberra, Hesso and Mt Arden conglomerate properties.

Key outcomes

- Some land managers on properties indicated the trial resulted in an increased kangaroo harvest, particularly on properties that were more remote and had higher numbers of kangaroos
- Others indicated a consistent challenge was the limited demand for kangaroo products, and supported diverting their tag funding to the local meat subsidy instead
- The tag subsidy was very positively received by harvesters who appreciated the reduced cost burden and indication of support for harvesters on the ground

Local kangaroo meat subsidy trial

To address the challenge of low demand for kangaroo products, some land managers elected to divert their allocation of the harvest tag subsidy funds to instead subsidise locally harvested kangaroo meat, with the aim to increase local interest and consumption.

This initiative had the potential side benefit of supporting local businesses and social enterprises by providing them with a local, nutritious, and budget-friendly protein source. Larger organisations were also approached with the hope that they might be interested in providing ongoing subsidies to benefit social good organisations beyond the project timeline.

As a result, both Carrapateena Mine catering and the Bungala Food Service trialled kangaroo meat on their menus. While both organisations face challenges in continuing to serve kangaroo meat (e.g. change in organisation ownership, lack of client interest in kangaroo meat), they have expressed interest in exploring opportunities beyond 2023.

Key outcomes

- Enabled conversations around kangaroo populations in the region, with a number of diverse groups indicating surprise but interest in being part of the solution
- Engaged local organisations with kangaroo meat, with BHP Carrapateena and Bungala Food Service trialling kangaroo on their menus
- Inspired support for supply of local kangaroo meat by the KPP for fundraisers at the [Quorn Kurti Festival](#) in October 2023

Challenges

Some challenges to kangaroo management were identified through this project, including:

- A lack of public demand for kangaroo products
- Some low understanding from land managers of the numbers of kangaroos on their properties and the number harvested in recent years
- Occasional poor communication between land managers and field processors working on their properties
- A high level of time and resources required to acquire harvesting tags, particularly as a collective group with regular written permission required from all involved. Future work could consider developing a permissions agreement from land managers to streamline collective efforts
- Concern that even if the full harvest quota is achieved, harvesting alone is seen as unlikely to bring kangaroo numbers to a sustainable level from a land management perspective

Learnings and recommendations

The workshop demonstrated how a collective approach can lead to a shared understanding and acceptance of the scale and impacts of impact-causing kangaroo populations. Presentations of scientific data, such as that from DEW's annual Kangaroo Quota Report, can be used to build land manager understanding, and as a tool to support estimations of kangaroo numbers on the property level and reflections on current harvest numbers versus the harvest quota. This project indicates that collective land manager groups could be useful in supporting ongoing communication and support for ongoing kangaroo management efforts, and potentially lead to increased capacity to advocate for industry improvements where needed from a land management perspective.

The harvesting tag subsidy trial indicates that such subsidies can result in an increased kangaroo harvest when the cost saving provides sufficient compensation to incentivise field processors to service particular properties (e.g. remote properties). Where there are other challenges however, such as limited kangaroo demand, such subsidies are unlikely to be an effective solution. Further trials are therefore needed to establish long-term sustainable pathways to increase the effectiveness of harvesting as a land management tool.

The local kangaroo meat subsidy provided an opportunity to start conversations with organisations about the issue of local impact-causing kangaroo populations. The positive response from the approached organisations, and willingness to trial kangaroo meat even without a subsidy, suggests that local organisations could be appropriate targets for further engagement and solution pathways.

Conclusion

This project acted as a catalyst for a new approach to kangaroo management by providing financial support to encourage collaborative efforts among land managers, kangaroo harvesters, and the Department of Environment and Water, to support effective kangaroo management at a landscape scale. Overall, the project demonstrated the complexity and challenges of on-ground kangaroo management, and laid the foundation for ongoing collaborative landscape-scale management approaches.

Acknowledgments:

This project acknowledges the crucial involvement of the local land managers including: Kate and Paul Greenfield (South Gap Station), Scott and Amanda Michael (Carriewerloo, Illeroo, Parakylia), Scott Dayman and John and Heidi Wilkinson (Hesso, Kootaberra, Mt Arden), Ben and Laura Hewitt, Col and Jill Greenfield (Pernatty Station), Karl Wurst (Mahanewo Station), Andrew Smart (Wilkatana), Tom Smart, Tom Austin and Tom Doman (Yadlamalka, Mt Arden), Adam Willis (Arcoona, Bosworth), Daniel and Bruce Nutt (Oakden Hills, Yalymboo, Pandurra), and Joanna and James Gibson (Yudnapinna). We also thank the KPP Steering Committee, South Australian Arid Lands Landscape Board and Department of Environment and Water staff. We also acknowledge the on-ground efforts of industry bodies, including meat processors and field processors working on the properties involved.

This document was produced by the Kangaroo Partnership Coordinator, with approval from the project lead, Kate Greenfield (South Gap Station).

Want to learn more? Check out our [kangaroo management factsheet](#) and other resources on our [webpage](#)

Published by the Kangaroo Partnership Project.
March 2024

T: +61 (8) 8429 9666

E: saal.landscapeboard@sa.gov.au



With the exception of the Piping Shrike emblem, other material or devices protected by Aboriginal rights or a trademark, and subject to review by the Government of South Australia at all times, the content of this document is licensed under the Creative Commons Attribution 4.0 Licence. All other rights are reserved.