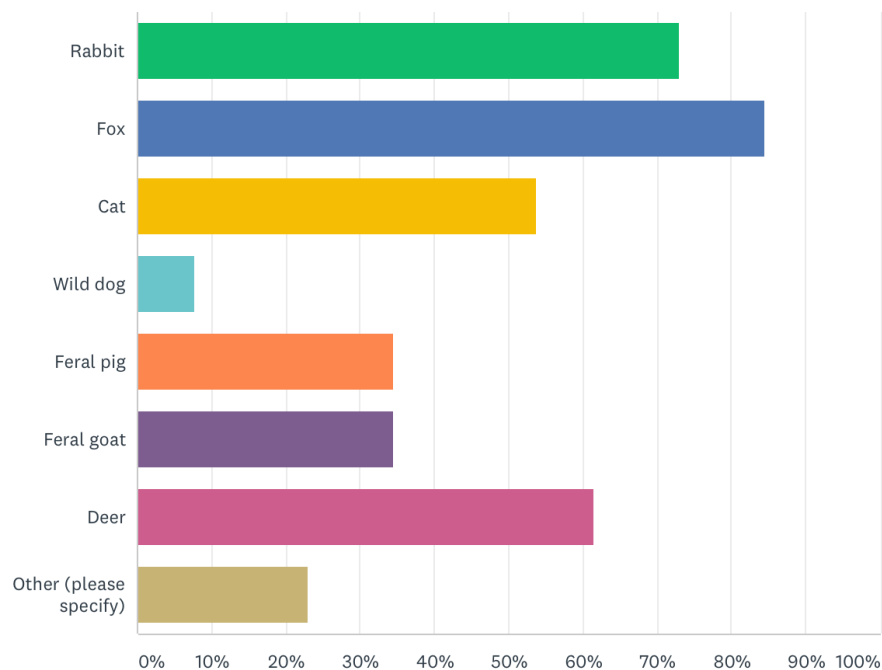


# A Helping Hand - Upper Murrumbidgee Landcare Wildlife and Farming Recovery Project (SE03561)

The Upper Murrumbidgee Landcare Post-fire Helping Hand Project sought to undertake pest animal control so as to provide relief for native fauna and flora relief from predation and grazing pressure adjacent to fire-affected areas of Bredbo and Michelago. The program aimed to engage with landholders to understand local pest issues and to offer support for vertebrate pest control. As part of the program the community participated in an online survey, an information session, undertook control and engaged in the use and analysis of wildlife trail cameras. The program was promoted through a series of flyers distributed across social media platforms, newsletters, local businesses (Appendix 1, 2 & 3). The program was also discussed on the local Canberra community radio program (31/03/21).

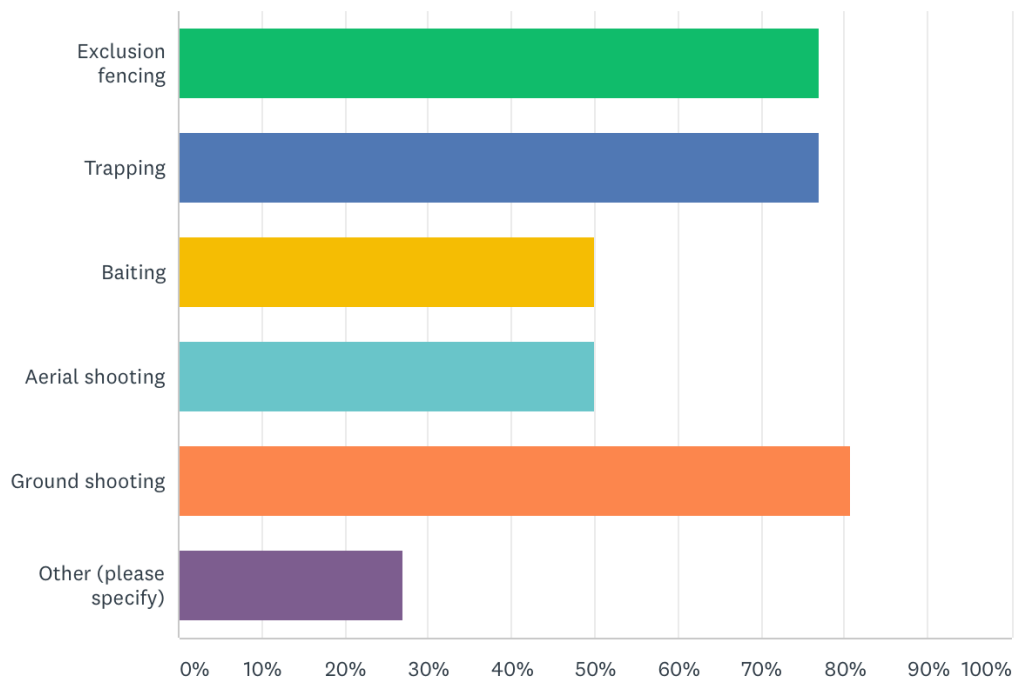
## Community survey

The community survey was undertaken throughout December 2020, to gauge the level of community interest in Landcare supported pest control and understand local issues and control expectations. Twenty-six people responded to the survey and 24 that provided their details for further communication about the program. Foxes and rabbits were the pests of most concern, with deer and feral cats also highlighted as an issue for over 50% of respondents (Figure 1). Wild dogs were the least concern, which may be more related to the very few participants running stock on their properties. Comments within the other category listed kangaroos and wombats as ‘pest’ species of concern.



**Figure 1. Survey response to the question ‘What vertebrate pest animals are of concern to you?’**

When asked about the type of control methods participants have previously used, 60% had used ground shooting, 36% exclusion fencing and 28% trapping. Baiting was the least used option with only 3 people or 12% of participants having undertaken baiting. In response to what type of control techniques people were happy to use or have used on their property, ground shooting, exclusion fencing and trapping were the most acceptable methods (Figure 2). Other methods, such as baiting and aerial shooting recorded 50% acceptance.



**Figure 2. Survey response to the question ‘What control methods are you happy to use or be used on your property?’**

***Community information session***

A community information session was held on the 24th April 2021 on a participating Calabash property. In response to the local concerns, the session covered all vertebrate pests but with a feral cat focus. The session included presentations from Andrew Claridge (DPI), Roger Roach (SE LLS) and Georgeanna Story (UMLC), with Libby Lindsay (NSW NPWS) a last minute apology. The day saw 19 participants learn about the ecology, research and management of feral cats, trapping and baiting options for cats, foxes and wild dogs, and monitoring techniques and resources for community groups to undertake coordinated control.

***Control campaign***

Of the 24 survey participants that were interested in further information, 6 participated in the control campaign. An additional 2 landholders signed up to the program from the community information session and through further promotion and neighbour canvassing another 7 landholders joined the program. A total of 15 landholders were part of the program.

Landholders participated by deploying trail cameras, trapping using Landcare loaned cage traps, used the commercial trapper and/or the commercial shooter. UMLC provided 12 trail cameras and 8 cage traps free for landholder use from March through to June 2021. Figure 3 highlights the properties that participated in the survey and control campaign.

The control program ran from March through to June 2021. KO Culling and Native Dog Environmental Services were contracted to undertake shooting and trapping. Native Dog Environmental also utilised a detection dog to determine trap placement. Contractors were flexible with the timing of the control, responding to the landholders observations to maximise the control success. Neighbouring properties were also encouraged to maximise control efficiency and in areas like Baroona Road, contractors were able to operate over a larger more connected area. The landholder participation and trapping effort of each contractor is listed in Table 1. Table 1 also lists the number of landholders that independently trapped in addition to the contractors. In total, 315 pests were control throughout the control campaign. Rabbits were the most controlled pest, followed by deer (fallow, red and sambar) and foxes (Table 2; Figure 4).

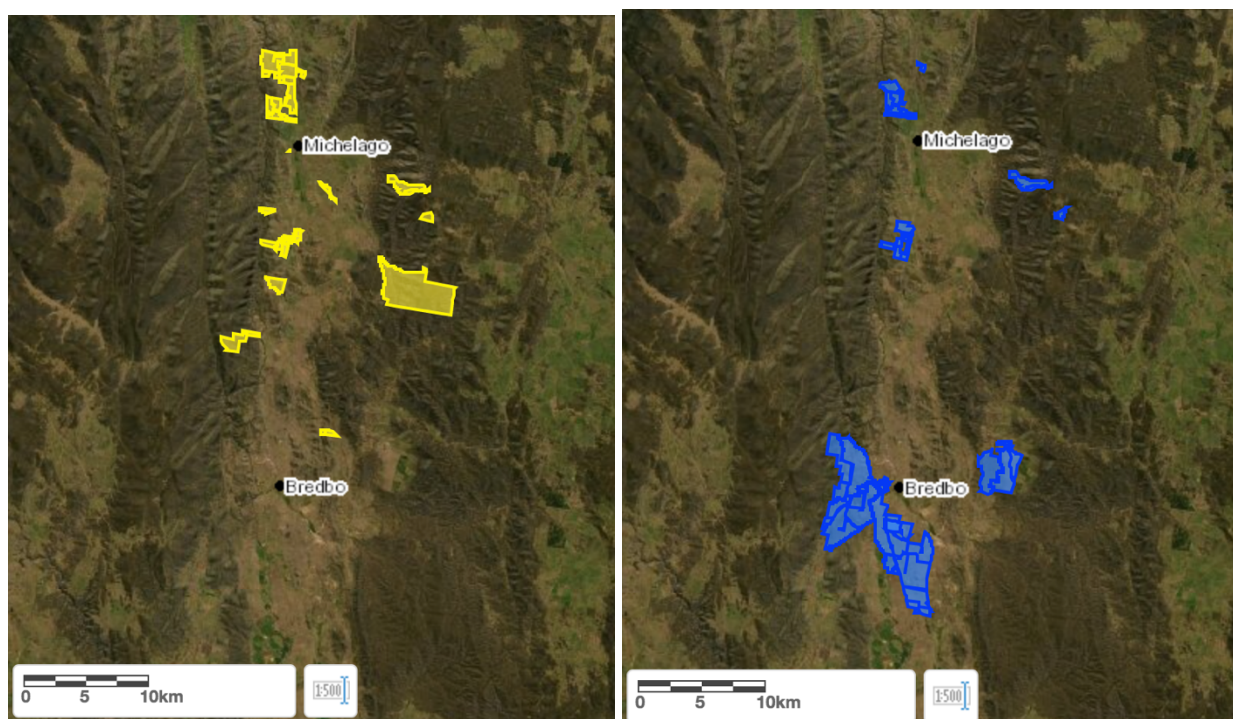


Figure 3. Property participation in the UMLC pest survey (Yellow) and control campaign (Blue).

Table 1. Program participation and effort for each commercial contractor.

	KO Culling	Wild Dog Environmental	Landholders
Number of properties	7	9	5
Control effort	125 hrs	412 trap nights	224 trap nights (approximately)
Total captures	267	47	1

Table 2. Number of pest species controlled by each commercial contractor.

	KO Culling	Wild Dog Environmental	Landholders	Total
Fox	32	12	1	45
Cat	0	1	0	1
Rabbit	150	32	0	182
Deer	19	2	0	21
Pig	57	0	0	57
Goat	9	0	0	9
<b>Total</b>	<b>267</b>	<b>47</b>	<b>1</b>	<b>315</b>



The species focus for each contractor varied according to the control method. For example, traps were used to target foxes and feral cats, while shooting was focused on the larger herbivores. The success of landholder control was low. Figure 4 provides examples of the pests controlled throughout this program.



**Figure 4. Example photos of pest species controlled. Photos courtesy of Chis Davies and Luke Beaman.**



### ***Predator diet***

Of the 44 foxes and 1 cat controlled during the program, samples were collected from 12 foxes and the single cat. Stomach and intestines were collected to examine predator diet and blood, liver and scat samples were collected for CSIRO Predator RHDV surveillance project. Foxes consumed a wide range of prey, with at least 5 native species and 5 introduced species (Table 3). Eastern grey kangaroo and rabbit were most frequently consumed. Rabbits were the only prey species identified for the cat. The samples for CSIRO are still being processed.

**Table 3. Prey species identified in fox and cat samples**

	<b>Fox</b>	<b>Cat</b>
<b>Native species</b>	Eastern grey kangaroo Common ringtail possum Magpie Unidentified bird Unidentified skink Invertebrates Fruits, seeds & vegetation	
<b>Introduced species</b>	Rabbit Goat Cow Sheep House mouse	Rabbit

### ***Camera monitoring***

Trail cameras were used to assess presence of pest species and identify other wildlife within the trapping area. Cameras were deployed in a variety of environments, including the Murrumbidgee River corridor, the Tinderry ranges and across properties managed for different purposes, like grazing enterprises and environmental conservation. Due to COVID restrictions, the deployment of the trail cameras was restricted to the landholders and commercial contractors, who also undertook the initial review. Photos were also uploaded onto the online platform, DIGIVOL (<https://volunteer.ala.org.au/institution/index/168946997>), which allows the community to view and identify species in the camera trail photos. A total of 1,350 photos were uploaded and 121 volunteers assisted identifying just under 1,200 individual animals (Table 4).

Approximately 10% of detections were of feral animals, especially foxes, rabbits and deer. All potential macropod species were observed, with eastern grey kangaroos the dominant species. Brushtail possums, wombats and antechinus were also detected. A minimum of 10 bird species and one reptile were also observed. Control operations continued until the end of June and coincided with the collection of the cameras, so camera detections do not provide information on the control effectiveness. Review of photos throughout the control campaign was able to help operators assess success or otherwise for targeted individuals. For example, Native Dog Environmental could be confident of trapping an observed fox along Baroona Road but knew of two cats in the Tinderry Ranges that evaded capture. Trail camera photos were also a great tool for landholders to view and appreciate the animals on their properties. A baseline level of information on species presence has also been established for comparison with future monitoring.

**Table 4. Frequency of animals detected through trail camera surveys**

	<b>Species</b>	<b>Number of detections</b>
<b>Native species</b>	Eastern grey kangaroo	464
	Red-necked wallaby	135
	Swamp wallaby	10
	Euro	4
	Wombat	43
	Brushtail possum	60
	Antechinus	17
	Bird	113
	Reptile	1
	<b>Total</b>	<b>1,080</b>
<b>Introduced species</b>	Rabbit	25
	Fox	67
	Cat	1
	Deer	11
	Pig	8
	Rat	233
		<b>Total</b>

Examples of photos capture of native and introduced species are presented in Figure 4.

### ***Control campaign outcomes***

The pest control program has proved successful in engaging with the community, with participating landholders providing favourable feedback on the program and the professional contractors. For example, when asked if the program was worthwhile and their opinion on the contractors, responses included:

*Overall I found the program excellent. It was simply wonderful to be able to call a professional who efficiently disposed of a herd of goats (they had been regular visitors to my domestic garden but I haven't seen any since). The fox trappers were also highly professional and efficient, and I haven't seen a fox or a deer since their efforts. I would be most interested to hear about how my neighbours went with pest eradication under the program, and of course would be delighted to participate in any further programs.*

and

*Absolutely! The outcome far exceeded our expectations and it was a little bit surprising how many feral animals were about. Luke was outstanding. We are very very happy with everything. He was reliable, flexible and very easy to work with. Luke always kept us in the loop about what he was doing and how we could assist.*

The report of this program will be distributed to all participating landholders and be available on the UMLC website.





Figure 4. Examples of photos collected during the pest program.

The program successfully removed 46 pest predators and 269 feral herbivores across the 15 properties. The number of pests remaining across these properties is now considered low, however pest species will move back into these areas in the future and follow up control will be necessary. UMLC will continue to secure funds to support landholders with future pest control activities.

This project has contributed towards the overall pest control efforts being undertaken across the region. South East Local Land Services, NSW NPWS and ACT PWS have all undertaken aerial shooting programs in nearby areas and have removed in excess of 800 pests, mainly pigs, deer and goats (Nicky Clarke pers comm. July 2021).



## Appendix 1: Pest program and survey promotional flyer



# **A Helping Hand**

## **Upper Bidgee Landcare Wildlife and Farming Recovery project**

Do you live in the Michelago-Bredbo region? Are you having issues with vertebrate pests? If you answered yes, Landcare could support you in your pest control efforts.

A Helping Hand: Upper Bidgee Landcare Wildlife and Farming Recovery project aims to help mitigate the pressure of vertebrate pests in the wake of the recent fires. Regeneration is being hampered by grazing pressure from feral herbivores and increased predation pressure on stock and wildlife is being felt. Through support from the South East Local Land Services Bushfire Recovery Program, Upper Murrumbidgee Landcare are offering support in vertebrate pest control.

To understand what is needed and what is already being done, we are asking residents of the Michelago-Bredbo region to undertake our short survey.

Contact Georgeanna on 0429779928 or [upper.murrumbidgee@gmail.com](mailto:upper.murrumbidgee@gmail.com) for details or take the survey at:

<https://www.surveymonkey.com/r/597X2FH>



## Appendix 2: Pest survey questions

### A Helping Hand

#### Upper Bidgee Landcare Wildlife and Farming Recovery project

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Name

Contact details: phone & email

Property address and size (ha)

Are you interested in pest control support?

Pest animals of concern

- Feral pig
- Goat
- Rabbit
- Deer
- Fox
- Wild dog
- Cat
- Other

What control methods have you tried

- Exclusion fencing
- Trapping
- Baiting
- Shooting
- Other





Michelago Landcare invites you to  
**FERAL CAT CONTROL**  
Why, who and how

**Have you wondered what the impact of the feral cats are your place or the best methods available to manage them? Curious about current research and local management? Concerned about other feral pests like foxes and rabbits?**

Join DPI vertebrate pest research officer, **Andrew Claridge** and local NPWS ranger, **Libby Lindsay**, in discussion on the NSW Feral Cat Project, advice for practical control and coordination with NPWS. We will also hear about options for other pests and current management programs in the area. Need help with your control? **Michelago Landcare** will also outline the free support available for landholders in the region.



**Saturday**  
**24<sup>th</sup>**  
**APRIL**

**Time: 2pm-4pm**  
**Location: 258 Calabash Rd**  
**Tinderry**  
**Look for the Landcare flag**  
**BYO chair**

Afternoon tea  
provided

Please RSVP for catering purposes at  
[upper.murrumbidgee@gmail.com](mailto:upper.murrumbidgee@gmail.com)  
or 0429 779 928



*This project is supported by South East Local Land Services through funding received from SE Bushfire Recovery Funding*