



Boyicup predator control program

Feb-Mar 2013



Thank you for the opportunity; it was a pleasure to be involved in such a challenging exercise. Thanks to all DEC staff, Warren Catchment Council and the Local Farming Community for all the support given. It is a terrific environment to work in, and the cooperation between parties should be commended.

## **Effort and Results**

The program was a joint initiative between DEC and the Warren Catchment Council and the works were conducted on both DEC and private property. The control techniques were chosen at each site based on a risk assessment. The hazards being injury or death to people, domestic animals and native animals and the risk being likelihood of each consequence occurring.

All spotlight shooting was carried out in open paddocks on private property. Private property allows better control of both authorised and unauthorised access.

Foxes and cats could be spotted and shot whilst in open ground, in a forested environment both cats and foxes will utilise cover and observe the spotlight and vehicle without being detected.

Foothold trapping was conducted on both DEC estate and private property. All though it should be noted, that six foothold traps were set on one farm for one night only. On the last night of the program Murray Muir invited Gavern to inspect the cage trap he had set and the fox tracks surrounding the cage. On inspection the tracks were deemed to be feral cat. It was mentioned that the trap had been set off and rolled over on one occasion. Foothold traps were deployed immediately, but neither feral cat nor fox, visited the area that night. Unfortunately, in this instance the traps were originally loaned to Rod Muir who was shown how to set them, but the traps were then subsequently passed onto Murray Muir. Hence, there was not the opportunity to ensure that the trap was set effectively. There also would have been a much better opportunity to catch the cat if Wildthings had been made aware of the fresh cat activity sooner. As a future recommendation, the Landholder Information night would also have been a good opportunity to demonstrate the effective setting of cage traps for landholders.

Only cage traps were used by land holders around dwellings and where feral cats were likely to reside. Cage traps take considerably less skill to set than leghold traps and reduce the potential risk of injuring possums and domestic animals.

Three cage traps were set at the Tone Perup Bridge for three nights to attempt to capture a cat scavenging off the bins. On the fourth night the parking area was occupied by campers so the trapping was aborted.

Wildthings effort would be most accurately divided between DEC and Landholders as;

DEC - 150 hours spent trapping for 403 trap nights

Landholders – 41 hours spotlight searching and 6 hours trapping for 6 trap nights

## Spotlighting

- 41 hours searching
- No foxes sighted
- One cat sighted
- One cat shot (Photo not taken in the field)

## Foothold Trapping

- 409 foothold trap nights were set between the 19<sup>th</sup> Feb to 10<sup>th</sup> Mar in 36 locations.
- 34 offset laminated Bridge traps #2 sized and two rubber jawed 1.5 sized traps used
- A total of 156 hours was spent searching for fox and cat sign, setting traps, maintaining trap sites etc.

Four foxes captured and dispatched,

- One on a remade set that had previously captured a tammar.
- One on a remade set that had previously captured both tammar and fox.
- One on a food lure.
- One with a passive/blind trap set at the same site as the fox was caught on the food lure.

The estimation at the end of the program is two foxes remaining; one appeared on the river every 5- 7 days and one on Glendale Rd near De Landgraft Rd of which tracks were sighted only twice during the program.

27<sup>th</sup> February, trap 7



28<sup>th</sup> February, trap 19



3<sup>rd</sup> March, trap 19



7<sup>th</sup> March, trap 7



## Cage Traps

Three cages were set at Tone Perup Bridge for three consecutive nights.

Two traps were loaned to land holder Rod Muir and subsequently reloaned to Jan and Murray Muir.

## Feral cats

One feral cat was shot throughout the program.

Cats were hard to monitor without camera technology due to the soil medium (mostly gravel). Cats generally don't leave much of an imprint on the soil but on a gravel track or road it is almost impossible to find sign consistently.

DEC allowed WildThings to access camera data throughout the program. This led Wildthings to set four traps to target photographed cats in locations that would not have been set without the data. Unfortunately, unlike the cats in the previous Balban program, the Boyicup cats showed no regular patterns in road usage and infrequently returned to these sites if at all. If a pattern had been detected from the cameras then this information would have been used to target passive placement of traps on roads, as was conducted at Balban. The camera data did not influence the placement of traps for foxes, again as a regular pattern was not detected from the cameras.

Feral cats visited traps (within 30 cm) on three known occasions.

- On the first occasion a cat stepped on the back of the pan which meant that the pressure needed to fire the trap was increased and subsequently the trap didn't trigger. See photos below of this trap location.



Cat tracks at trap site



The site as first found



The site set with trap

- On the second instance, the set was arranged for the animal to walk up to the lure, investigate and walk onto the trap (this arrangement is one of the methods used to deter non target captures, since the lure is some distance from the trap), the cat investigated the lure and for reasons unknown, then backed out of the set, which was unusual.
- The third instance was at site seven which was a remade set that had captured a Tammar and fox. As the set had been remade, there was a less defined focal point, the cat walked over the trap circle and onto the trap but didn't step on the pan.

Whilst no cats have been captured live on either program, Balban or Boyicup, there have been enough visits and near captures to prove that cats can be lured to a trap in the southern forests.

### **Non targets**

Over the four hundred trap nights five non-target animals were captured. Three were released unharmed, one sheep and two brushtail possums. A woylie was euthanized and a tammar was found deceased in the trap due to predation by fox, this animal however would have required euthanizing as a result of trap injuries. These were unfortunate deaths and were not taken lightly, however when setting foothold traps in the presence of these animals there will always be an inherent risk of capturing and injuring an animal. These risks need to be acknowledged. On two occasions, where native animals were captured, one brushtail possum and one chuditch, the offset jaws allowed the animals to pull free.



Possum fur in a trap where the possum was captured and pulled free



Trapped sheep, released unharmed

### Issues that could have influenced the results:

- The animals didn't appear to have a steady rhythm or use any particular roads on a nightly basis
  - Since one of the techniques used to reduce non-target capture is to only trap on regular sign this made choosing trap sites difficult. This also reduced the total number of trap nights and lessened the exposure of predators to traps.
- Roads that were cleared by hand were a potential tyre staking hazard to a quad bike
  - If a machine was used to clear the road this would have had a twofold effect of making those tracks more accessible and therefore a potential trap site and would have brought those roads up to a point where they could be read for tracks.
- Moon phase
  - The program was undertaken without considering the moon phase and its effect on animal movements and behaviour.
  - The full moon is generally the hardest time to trap and shoot cats and foxes, ideally the program should be scheduled to take advantage of the new moon period.
- All animals were shy of lures
  - It is hard to qualify why this is, it could be the excess of live food, a bad experience with sub lethal baits or another negative experience. I have seen this behaviour in areas with high food resources that is heavily baited.
  - This led to trap sites being set with more than one trap and exposing natives to more risk, without damage on those occasions.
  - This also meant that some traps sites were set passively, without lures, which captured one possum (released without harm).
- Non targets
  - Since the area is inhabited by species that are protected and in decline, a considerable effort was needed to reduce the impact of the control program on those species.

- This lessened the number of traps deployed, and reduced the exposure of predators to traps
- The setup of the traps reduces the likelihood of catching non target animals, but this setup will make the area the animal needs to step on smaller. On three occasions (one cat and two foxes) stepped on the back of the pan but didn't produce enough down force to fire the trap.
- Experience from the previous program dictated that the lure selection to exclude solid food and some visual lures.
- The native animals were less attracted to the lures used than previous food lures.

### **Potential improvements to the next project:**

- Land holders
  - While most landholders were supportive and cooperative, some were less so. This should be qualified earlier.
  - A higher priority should be given to the landholder information night; this is the best opportunity to build rapport and enthusiasm for the project.
  - The list of land holders should be completed and be ready for the contractor before the program starts.
  - All external groups need to be informed of control activities. In this case, the feral pig eradication group was checking water holes with dogs within the control area on at least one occasion. Whilst the dogs were on the back of a ute, the ute was parked within meters of a trap site.
- Move trial to a location where tracks are easily identified.
  - It was difficult to read tracks in a large part of the study site at Boyicup due to the gravelly and rocky substrate.
- Maintain stricter protocols with the baiting program.
  - All foxes were extremely cautious and wouldn't come to food lure and were hard to trap. The removal of any uneaten, partially consumed baits from the area, whilst impractical on such a large scale, may reduce the risk of foxes receiving sub lethal 1080 dosages and hence the potential for wariness to meat lures.
- Take advantage of new technologies, M-44 ejectors when available.
  - For example - limit the trapping effort to 6000 ha and deploy M-44 ejectors with cyanide throughout the remainder of the 30,000 ha.
- More time to organise logistics.
  - The traps and supplies for this job are extremely specialised and need to be manufactured and imported specifically for these conditions, the successful applicant would need at least four weeks to allow for manufacture and transport issues.



**Finally, how could we best maximise the opportunity to successfully capture a cat in the southern forests;**

- Choose sites with sandy tracks.
- Select sites with areas of dense vegetation, whereby allowing for more effective targeting of predators compared to open forest.
- Utilise cameras to scope large areas to select the control site.
- Place cameras at sites and process the data well in advance of control. This would allow for targeting cats with regular visitation patterns.
- Allow for greater scoping of the chosen site for signs prior to commencement of the control.
- Select sites with the lowest non-target densities.
- Select control site with greatest number of resident cats.
- Upgrade tracks with a machine rather than by hand to improve readability of the ground for tracks (as well as for ease of travel with a quad bike).
- Trial new trap types to reduce the risk of trap injury to non-targets allowing for greater trap saturation of the area.
- Greater landholder trapping effort. Encourage coordinated trapping with landholders and provide training.
- Target landholders rubbish tips with cage traps.
- Provide education to landholders about the impacts on fauna from cats on their properties (i.e. shed cats).

**GPS locations of native fauna sightings (lat/long).**

Numbat-

34 6.632 116 33.438

Woylie

34 6.035 116 30.263

Woylie

34 6.617 116 31.959

Woylie

34 11.8 116 35.375

Phascogale

34 6.933 116 31.87