

Story by Magdalena Zabek & Sara Weir
Design by Magdalena Zabek
Photos by Magdalena Zabek, Ethan Dagg & Liberty Olds

The 11th wild warru TRAPPING SURVEY

Peter Copley and Harry Wheoki at New Well with trapped warru

Photo: Magdalena Zabek

Over the past decade, the Warru Recovery Team and employees from the APY Lands have done their fair share of black-footed rock wallaby trapping surveys, and this was another successful trapping event. Performed annually until 2014 and every second year thereafter, this marked the 11th trapping survey in the Musgrave and Tomkinson Ranges, located north-east and north-west of the APY Lands in South Australia.

The survey teams consisted of indigenous rangers, Anangu traditional owners, IPA coordinators, project officers, ecologists and volunteers. They came from APY Lands, from interstate and overseas. But no matter how diverse in age, nationality or occupation, they all shared one thing in common – a passion for the preservation of black-footed rock wallabies – locally known as warru.

Over the course of one week from the 10th till the 15th July, these teams worked hard climbing some of APY's tallest hills in order to trap warru. However, the commitment of Warru rangers and project officers in the weeks prior to trapping in preparation for the survey should be also noted.

There were five trapping sites in the Musgrave and two in the Tomkinson Ranges totalling 59 traps. The Musgrave Ranges traps were located in New Well Main Face (11 traps), New Well West (9 traps), New Well Far West (5 traps), Kaanka Mangka (5 traps), and the highest hill of all - Alalka (9 traps). The Tomkinson Ranges traps were located in Maku Valley (13 traps) and Mutata Scree (6 traps).

Before the show begins

Since the last trapping was carried out two years ago, each site had to be checked before the commencement of the survey and each trap had to be re-located, marked, inspected for damage, and repaired if necessary. The completion of this task took two weeks of intensive work for the east and west ranger teams.

As the traps were not used for nearly two years, it was necessary to 'remind' warru of their presence; therefore the next step in trapping preparation involved free feeding. Baits were placed inside each trap for a couple of days before the survey to attract

warru to the cage, which was cable tied open. Since warru have a sweet tooth, they are fed with freshly cut apple and oat balls made of oat mixed with peanut butter and golden syrup.



Harry and Ethan are checking whether the construction of traps can withstand another survey. Several traps needed fixing and two had to be replaced.



Magdalena is marking each trap site with a pink flagging tape, so trap location can be seen from a distance.



Ethan gives instructions to Carolina (Caro) how to replace cable ties on traps in Alalka



The East Warru team

Photo: Ethan Dagg

Trapping week

Abundant rainfall, that was constantly interrupting survey preparations ceased for one week during the survey, allowing us to stay dry, however what followed was an intense cold front of 0 degree lows overnight and windy sunny days during the survey. Following the recent rainfall the desert landscape had changed dramatically and many of the survey participants that have been visiting APY Lands for many years were amazed by the abundance of green vegetation!

The camp of the Musgrave Ranges trapping team was set at the footstep of the New Well and Kaanka Mangka hills. Equipped with tents, swags, a fair amount of timber and an enormous amount of food, the team quickly adjusted into campsite cooking, washing and packing routine. Although some duties were swapped between teams and days, it became evident who was in charge of the kitchen and cooking and who was in charge of the fire.



Pete was the first up every morning. He always re-started the fire from the previous night and boiled the first billy. The steam from the billy and aroma of hot cup of coffee awakened the rest of the camp. After a quick brekkie, and still before the sunrise, the teams departed to their designated hills.

The feel of the freezing morning lasted up to the first climb. If not the hot coffee, then a fast, marching hike uphill woke up everyone. The teams were on a mission, to get to the first trap as soon as possible and retrieve any warru trapped from the previous night.





Sunset at the Musgrave Ranges campsite

Photo: Magdalena Zabek

'Here it is!' Harry whispered with excitement. Hearing approaching people, the trapped warru jumped inside the trap in a hope of an escape. But Harry was fast; he quickly grabbed the cage and stepped on the bottom frame, stabilising it, making escape impossible. In response, Sally promptly grabbed a cotton bag to which Harry transferred the fighting warru.



SOP of warru removal from a trap by Harry and Sally



Once in the bag and covered from the morning sunlight, the warru immediately calmed down. Slowly but precisely, warru were weighted, measured, micro-chipped, and ear-tagged.

A quick examination revealed that this was a young male. Since this was a new individual (never trapped before), a small ear biopsy was also taken for DNA testing. Only 15 minutes and 20 photos later, the warru was released back to its rocky home.



Thanks to incredible foot anatomy, warru can move fast and elegant across hilly landscapes



Ellen and Jacob during 'warru processing'

Simultaneously, in Kaanka Mangka, Ethan's team re-trapped a female warru. The female was known to the team from a previous survey in 2015. This was a huge success for the project, as it indicates survival of trapped individuals in Kaanka Mangka.

Moreover, the female carried a healthy pouch baby! The baby was also a female, giving hope for the

continuation of successful natural breeding in the Kaanka Mangka colony.



One of the greatest rewards is a selfie with baby warru



Despite being the largest and highest hill of all, Alalka revealed a much sadder story of the local warru population. Jason and Carolina checked nine traps in four consecutive days and only trapped one male and one female warru. Freshly made peanut butter balls and organic apple did not attract other individuals to the traps, indicating the Alalka colony has decreased dramatically from the previous survey in 2014 which captured 13 warru. Whether the reasons for this decline in capture can be attributed to an increase in predation from feral cats and foxes, decrease in the availability of suitable habitats (destroyed caves due to recent earthquakes), or reasons unknown to the Warru Recovery Team, the current status of Alalka colony is concerning.



Kimberly and Sally on the lookout for a stallion donkey

Photo: Magdalena Zabek

Over in the Tomkinson Ranges, two teams consisting of Anangu rangers, zoo volunteers and APY staff eagerly set off before the sun broke over the neighbouring hills to check 19 traps.



Similarly to Alarka, the overall trapping success was low capturing only 12 warru in comparison to 16 and 19 warru trapped in 2013 and 2014 respectively. Although on a couple of days strong winds closed doors of several traps making them unavailable for warru, other traps were found open continuously and with baits that had been left from the previous day. Open traps indicate that warru were either not interested in taking the bait, moved away to other parts of Maku Valley and Mutata Scree hills, or the overall number of warru has decreased. It was also speculated that the sudden cold front and winds could have affected the movement of warru which may have kept to the protection of their cave den sites.

On the brighter side, out of the 12 warru trapped approximately eight were female and seven of those had pouch young indicating successful breeding. In addition to trapping, monthly remote

camera data is collected surrounding many of the trap sites which can tell us additional information regarding individual survival. In the coming weeks this camera data will be reviewed to give a supporting assessment of the condition of the Maku Valley and Mutata Scree warru colonies.



Trapping in the Tomkinson Ranges was a special event for the whole Kalka and Pipalyatjara communities as everyone was interested to know how many warru were caught each day and how many iti's (young) there were. On the last day, the Warru Minmya, community elders and children came together at the foot of Maku Valley to sing and dance their Maku Inma.



The Musgrave Ranges warru trapping team

Photo: Magdalena Zabek

Conclusion

The 11th wild warru trapping survey was a success. The hard work in preparation for the survey and commitment from all teams during the trapping week paid off. We trapped a total of 53 warru in the Musgrave Ranges of which 31 (58%) have been re-trapped from previous surveys. In the Tomkinson Ranges, we trapped a total of 12 warru from which seven (also 58%) were known to the team from previous surveys.

Collected data has to be first analysed to confidently announce the actual status of surveyed colonies, but observational evidence suggests that warru in the surveyed sites at Musgrave Ranges are doing well. All adult females had pouch young, which indicate a high breeding rate and high proportion of re-trapped warru from previous years indicate high survival of the population. Although not tested, the environment in the Musgrave Ranges appears to be rich in warru food resources; we recorded a number of wild fig and spear bush trees in surveyed slopes, which are the

most favourite warru food. This gives us hope that although very tasty, the peanut butter balls and organic apples are not the only warru diet in the APY Lands.

While the breeding rate of adult females in the surveyed Tomkinson Ranges sites is high (nearly every trapped female had a pouch young), the total number of trapped warru was smaller than anticipated. However it must be noted that the warru population in these western ranges extends much further than the small area where trapping occurred so the low trapping rate is likely not indicative of the total status of the meta-population. Adelaide Zoo staff member, Althea Guinsberg suggested repeating the trapping survey next year to check on the population in light of the low number caught this year. In addition, it is important that continuous monitoring through remote camera trapping, supplementary feeding, predator control and kuna (scat) plots are carried out to support these trapping assessments.



Purple carpet at New Well Far West

Photo: Ethan Dagg

Acknowledgements

We would like to thank all survey participants for their hard work during the survey and in the campsite, for sharing their fantastic ecological knowledge and great sense of humour which all made the 11th wild warru trapping survey a great success! In particular, thanks to (in alphabetical order):

Brett Backhouse, Bronson Bennett, Sally Bryant, Pete Copley, Ethan Dagg, Arnold Dodd, Christopher Dodd, Kumanara Dodd, Carolina Galindez Silva, Althea Guinsberg, Luke Ireland, Phillip Kugena, Travis Lewis, Alice McGlashen, Jacob McKenzie, Matthew Miller, Molly Miller, Angkelya Nelson, Liberty Olds, Tony Paddy, Sandra Petermann, Elijah Pinta, Elisha Roesch, Ellen Ryan-Colton, Danielle Shallow, Kimberly Solly, Jason van Weenan, Sara Weir, Rebecca West, Harry Wheoki, Inpiti Winton, and Magdalena Zabek.