



December 2016

## Students at Kangaroo Valley School have a Good Grip on Rescuing Rock Wallabies

Marking Threatened Species Day on September 7, stage 3 students from Kangaroo Valley Public School performed a puppet show and rap songs to nurture awareness of local threatened species like the Spotted-tailed Quoll, Glossy Black-Cockatoo, Gang Gang, Broad-headed Snake and Koala. National Parks and Wildlife Service (NPWS) Technical Officer Juliet Dingle presented a biodiversity educational workshop to the whole school where they also learnt about the Shoalhaven Rock-wallaby Recovery program and the importance of community involvement.

“It’s timely that during September, Biodiversity Month, the children and teachers focussed on learning about the plight of local wildlife and the importance of a healthy ecosystem for oxygen, clean water, food, medicine, shelter, fibres and stable climate

“We talked about making educated choices and evidence-based decisions as consumers and being responsible pet owners. Kids with cats were inspired to go home and create enclosed playgrounds for their feline friends, knowing that is one of the simplest ways they can save hundreds of native animals every year. Most kids know it’s bad for the environment to litter, but I love seeing the look in their eyes when they find out how many other ways they can help look after the amazing variety of local wildlife,” Juliet said.

This curriculum-based educational experience on biodiversity, including the Shoalhaven Rock-wallaby case study, has been delivered to over 1,000 students across 20 schools by Ms Dingle on behalf of the *Friends of the Brush-tailed Rock-wallaby* and with assistance from the NSW Environment Trust.



Stage 3 students from Kangaroo Valley PS impressed everyone with their passion, mature knowledge and creative plans to reduce the threats on local threatened species.



Kangaroo Valley Public School Principal Andrew Smee said NPWS conservation work with the local population of threatened rock wallabies has provided the students with an understanding that they can all make a difference and be champions for their local and greater environments.

Friends' committee member, Vice President of Shoalhaven Landcare and Project Office for Upper River Landcare, Belinda Stewart, inspired the older students to work on their own local threatened species recovery plans. Belinda has mentored these students at weekly bush regeneration sessions aimed at restoring weed-infested Kookaburra Creek bushland adjacent to the school. Taking up the opportunity to borrow motion-detecting fauna monitoring cameras from NPWS and the Friends, these students have been horrified to learn how many foxes and cats are roaming around their home at night.

"It's so obvious to the kids of Kangaroo Valley that we should work together and do everything possible to prevent the extinction of unique local species, including the most southerly remnant population of the iconic Brush-tailed Rock-wallaby" said Juliet.

### Want To Get Involved and Help Save Local Threatened Species?

Members of Kangaroo Valley community are encouraged to download the **FeralScan App** and record sightings of foxes, cats and other feral animals into a local database. Contact the *Friends* via their website [rockwallaby.org.au](http://rockwallaby.org.au) to join 'KVFerats' and help save the local *Brush-tailed Rock-wallaby* from extinction.

Motion-detecting cameras and cat traps are also available for loan to Kangaroo Valley residents.

### Southern Highlands Threatened Species Seminar

The Southern Highlands is an incredibly diverse region with 374 animal species calling it home. The sad reality facing the region though is that 56 are listed as threatened. Threats such as habitat loss and predation by feral animals are jeopardising the long-term survival of a large number of species. This sobering status report set the scene of a Threatened Species Seminar facilitated by Capernwray Australia and A Rocha Australia in Burradoo on Saturday 10 September.

Bushcare volunteers, landholders and interested residents gathered together to mark Threatened Species Day by hearing about what is happening locally to save our species and to recognise the dedication of many which is resulting in real impacts and successes.



Juliet Dingle, from the NSW National Parks and Wildlife Service gave updates on Rock-wallaby and Potoroo Conservation Programs happening in Kangaroo Valley and Barren Grounds. Kylie Madden, a senior threatened species officer from Office of Environment and Heritage presented an overview of the very popular Southern Highlands Koala Conservation Project, where 460 locations are being monitored. Eucalyptus trees used for feed and shelter are being identified, as well as how far koalas travel in different parts of the Highlands. Other fascinating presentations were given by experts from Local Land Services, Wingecarribee Shire Council, Greening Australia and BirdLife Southern Highlands on topics ranging from threatened plant species and endangered ecological communities through to public awareness programs and how to encourage volunteering.

Kylie Madden said “It was a great pleasure to share information about the NSW Government’s 100 million dollar Saving Our Species programs in the Southern Highlands ... From the flagship project on the Southern Highlands’ koalas to lesser known projects on the endangered Paddy’s River Box, there was someone there who was interested ... Robust discussion was the order of the day, with topics ranging from how we should direct funding toward threatened species to the local annoyance of noisy miners, a problematic native bird.”

Ian Perkins, Natural Resource Projects Co-ordinator at Wingecarribee Shire Council said “The event was a great success and provided Council with the opportunity to outline how it collaborates closely with other Agencies and the community on important threatened species conservation initiatives in the Shire. Participants were provided with insights into many “behind the scenes” and award winning programs and tools developed by Council.”

Threatened Species Day is a national day held each year on 7 September to commemorate the death of the last remaining Tasmanian tiger (also known as the Thylacine) at Hobart Zoo in 1936. It is a time to reflect on what has happened in the past and how we can protect our threatened species in the future. This event was held with support from South East Local Land Services, the NSW Office of Environment and Heritage and Wingecarribee Shire Council.



*Threatened Species Seminar attendees were given a tour of the Capernwray restoration project and Cecil Hoskins NR*

The Friends of the Brush-tailed Rock-wallaby supported the Friends of Morton and NPWS at an event in Bundanoon in November aimed at helping the endangered Glossy black-cockatoo by giving away 700 free Black Sheoak feed trees for planting throughout the Southern Highlands community. Another 700 casuarina tube stock are to be distributed in February to aid restoration of a feeding corridor between the Blue Mountains and Morton National Park. As is the case for numerous other threatened species, old growth forests with tree hollows are also essential for Glossy nesting. The story featured on ABC News: <http://www.abc.net.au/news/2016-11-25/glossy-black-cockatoo-plan-to-return-species-to-bundanoon/8057766>

## **Holidaying in Queensland?**

Jann and Terry have travelled well around Australia and are seasoned wildlife watchers. Here is a fantastic link they have shared to help you find rock wallabies and other unique native mammals in Queensland: <http://www.mammalwatching.com/places/australia-queensland/>



## School Education

Year 10 Students at St Johns in Nowra were enthusiastic about the Shoalhaven Brush-tailed Rock-wallaby Conservation Case Study presented by Juliet in September. With far less identified threats and solutions than the number of threatened fauna species, the students could draw many comparisons from this project to assist with their individual threatened species class assessment projects. Habitat loss and predation/competition by introduced species are common threats to many declining Australian native species with scientific research, monitoring technology, pest control and community engagement being shared solutions.

On behalf of the Friends, Juliet visited five Year 7 Science at Bomaderry High School in November to demonstrate the importance of science, technology and community involvement in the conservation of a local endangered species. Students benefited from hands-on learning in the play ground with the radio-tracking equipment used to monitor the Kangaroo Valley rock-wallabies.

Following the adoption of four rock-wallabies by the four classes at Jamberoo School, Juliet personally thanked the students for their outstanding fundraising effort and informed them of the plight of the rock-wallabies and how the Friends, NPWS and the Kangaroo Valley community have combined forces to rescue these precious creatures from the edge of extinction.

## NPWS Report

With the implementation of the NSW Government's Save our Species (SoS) project, many changes have occurred to the allocation of funds for the Brush-tailed Rock-wallaby project (which has been a headache for the Project Officer). Extra motion-detecting cameras have enabled continuous, strategic monitoring for foxes, cats and wild dogs around the three surviving Shoalhaven Rock-wallaby colonies. To assist with the shortfall in salary, seven landholders are assisting the project through weekly checks of photos on these new cameras. NPWS and the Friends will respond to repeat observations of bait-shy or bait-disinterested introduced predators near the rock-wallabies with targeted shooting and humane leg-hold trapping by our trusted contractors, the Bagnall Bros. and Mark Soberijeski from Local Land Services. The Friends of the BTRW will play a more important role than ever in securing Kangaroo Valley sites in next years SoS funding allocations. So please renew your membership and help us raise awareness for their plight.

Tyson, the new male at the Creek Colony, has been on cameras throughout the colony, suggesting that he has made contact with Rosie, Pinot, Fiona, Nala, Jewel, Ariel and Bianca. We are hoping for some of his offspring to make themselves known soon. When we spy any joeys, our members will be the first to know!

Merinda and Irene have healthy young at foot, bringing the Mountain Colony population up to eight from a lone pair five years ago ... without any captive breed animals being introduced. Permanent integrated fox control appears to be working well for this surviving family. Pangari, Pindari, Cliff and Jessie are the four brothers still living happily together (enjoying their view over the Valley). Unusual behaviour – adaptation?

At the River Colony Flower is continuing her prowess as a mother, with her third joey at foot. Wirra's sexually mature son, Gingernut seems crazy about Flower's second daughter Pebbles, which is very cute (and just what the genetic diversity doctor ordered!). Brigalow seems to have chased off his more genetically similar sons Bindi and Barellan. Their mother Bangarra (Brigalows sister) has a new joey emerging. Sadly old Yalgoo has passed away at a very ripe old age after seeing Yara recruited into the struggling little population. Princess Pia has a new pouch young and another still following her around.

Please contact Juliet for photos of your adopted rock wallaby at [juliet@skymesh.com.au](mailto:juliet@skymesh.com.au). Unfortunately a computer drive malfunction and illness from tick bites has made it impossible to include photos this round. But stay tuned or check out the videos on the Friends own You Tube channel: <https://www.youtube.com/channel/UCMDe1OKrNwkyYi2UAnITQfw>

## Friends November AGM

Welcome aboard the *friendly* committee: Diana Jaffray, Jann Mattick and Belinda Stewart. It is exciting to have some new energy and talent join the committee. Lisa O'Neil, Rosie Johnson, Celia Thomson and John Rowntree continued on as ordinary committee members, Michael Irving is braving another year as Treasurer, and Melinda Norton and Chris Prior will continue as our Secretary and President, respectively. Thank you to all our wonderful members who attended.

## **Waterfall Springs November Work Party** by Jann Mattick

Our last work party for the year and what a great weekend. Friday night was spent trapping several rock wallabies which required relocation to new pens as well as weighing and checking for pouch young.

Up early Saturday for the release of the rock wallabies followed by breakfast and our allocated tasks for the day. Saturday was 'spring clean' day for the wallaby pens which involved scrubbing water troughs and feeding stations. We also planted many native trees as well as remove fireweed from several pens. With morning coffee, our lunch break and enlightening conversation our day flew.

Our Youth Ambassador – Sharni – was there with her mum Belinda to see first hand what happens at a Waterfall Springs work party. A very productive and satisfying day. Thank you to all participants for a wonderful year at Waterfall Springs.



Sharni, Belinda, Jann, Terry (back row), Gavin, Sam, John and Steve (front row) taking a well-earned break at the November Work Party (Photo by Juliet)

## **Kids Special - My First Time at Waterfall Springs** by Sharni

On Friday 18<sup>th</sup> November Mum picked me up from school at recess time so we could go to Waterfall Springs!! We drove for about 4 hours to get there. When we got there we chose our bunk beds for the night. Then I hand fed Thunder (the rock wallaby, of course).

We went out to set traps. After about four hours we went to check them. On the first check we caught Blue Tag and Diamond. 3 hours later we went around again and caught Granite. In the morning we caught Tinkerbelle. It was a very long night but I stayed awake for the first 2 trappings and slept in and missed the morning check. While we were waiting Steven took us in a buggy down to see the waterfall and glow worms. It was epic!! He drove really fast through the bush tracks. It was a little bit scary.

We fell asleep first. It was really fun. The next day Juliet came at 10. We cleaned out water tubs and cleaned the feed containers and moved things. We also removed all the fireweed from one of the enclosures. It was really epic seeing all the Brush-tailed Rock-wallabies.

# Symbolic Adoptions

make a perfect Christmas gift for young and old.

For just \$50 loved ones receive an adoption certificate, poster and profile of their Shoalhaven Rock Wallaby, as well as information about this shy and agile species, postcards, a sticker, kids' activities and a quarterly update on the Shoalhaven colonies via the Friends E-newsletter.

Many adopters can even view videos of their adopted Rock Star on You tube:

<https://www.youtube.com/channel/UCMDe1OKrNwkyYi2UANITQfw>

And Juliet is more than happy to email photos of adopted rock-wallabies to their adopters upon request: [Juliet.dingle@environment.nsw.gov.au](mailto:Juliet.dingle@environment.nsw.gov.au)

Order your adoption packs at [www.rockwallaby.org.au](http://www.rockwallaby.org.au) by PayPal or bank deposit by December 15 to ensure postal receipt by Christmas.

Tax-deductible donations and merchandise purchases are also available through the Friends website. Every dollar counts. Every Friend counts.

## Happy Little Customer

Christine Kelly, President of Birdlife Southern Highlands, supported the Brush-tail Rock-wallabies with a purchase of two adoptions for her grandchildren, Alexander and Annabelle. Alexander was excited to share the news about 'his' wallaby at preschool, proudly wearing his Friends T-shirt.



James Lidsey posted this amazing video on You tube after helping out at a Waterfalls Spring Work Party: <https://www.youtube.com/watch?v=ZMTGMtxJUG8&feature=share>

## New Website and Adult T-shirts for the Friends ... Coming soon!

### FYI: Mode of Action and Humaneness of 1080

Successful fox management depends on broadscale, integrated control, including 1080 baiting and shooting. Everyone landholder has a responsibility to control invasive species. However, many landholders harbour an aversion to using 1080 poison to control foxes for a variety of reasons. Below is an excerpt from a NPWS Submission to NSW Legislative Council Inquiry into Feral Animals that may alleviate common fears held by land custodians and encourage active feral and native biodiversity management.

The following has been prepared from information provided by NSW Agriculture (E. Davis pers. comm. 2001), NPWS research scientists (R. Harden pers. comm. 2001) and in various references (Eason 1998; Williams 1996; Marks et al. 2000). Once ingested, 1080 is metabolised from fluoroacetate to fluorocitrate, which blocks the tricarboxylic acid cycle, disrupting vital metabolic processes and resulting in death. Warm-blooded animals take 30 minutes to 3 hours to complete these processes. There are no signs of 1080 intoxication during the latent period between ingestion of 1080 and onset of poisoning. Death of an animal occurs 4 to 24 hours after ingestion. There is no known antidote for a lethal dose of 1080. Animals that ingest a sub-lethal dose of 1080 survive because the body can metabolise and excrete the poison in



the form of fluoroacetate or non-toxic metabolites. **This ability to excrete remnants of 1080 means that it does not accumulate in the body and all traces of any sub-lethal dose are gone within a week.**

Depending on the species, death from 1080 results from cardiac failure, central nervous system dysfunction, or a combination of both. Many species show symptoms consistent with central nervous system dysfunction ranging from tremors and muscular spasms, through to running, 'paddling' and convulsions. The perception of whether an animal feels pain during this process is greatly influenced by the observer's interpretation of these symptoms. The type of central nervous system dysfunction caused by 1080 is similar to that experienced by humans during epileptic fits. Animals eventually lose consciousness, as a human does during such a fit. It has therefore been inferred that the central nervous system stimulation caused by fluoroacetate poisoning in dogs and foxes does not cause them significant pain. There is limited objective evidence with which to validate this assessment. Research into the effects of 1080 on rabbits has concluded that there is no evidence that it causes them pain.

The following is a quote from the paper by Williams on the humaneness of the use of 1080 to poison rabbits, which was presented at a seminar on *Humaneness and Vertebrate Pest Control* held at Keith Turnbull Research Institute in 1996 (Williams 1996): *A lethal dose results in a period of weakness, not attended by evidence of pain, which precedes unconsciousness. Convulsions occur only after the rabbit loses consciousness and is insensible to pain. The convulsions are due to brain anoxia resulting from acute cardiac failure and circulatory collapse. Brain death follows rapidly after loss of consciousness.... Killing rabbits with 1080 does not contravene the spirit of the Prevention of Cruelty to Animals Act 1979 because there is no evidence that its use causes pain.*

Despite the apparent similarity to painless symptoms in humans, it is recognised that some community uncertainty remains regarding 1080, in part because its effect on the central nervous system gives animals the appearance of being distressed. It is also recognised that current technology cannot yet provide objective measures to adequately address these community concerns. At the present time, the use of 1080 poison is essential to prevent the otherwise extreme environmental and agricultural impacts of feral rabbits, foxes, dogs and pigs. Research into its humaneness will continue, but the community can be reassured by what is already known about 1080 and by the strict legislative controls over its use. For this reason, many organisations while reflecting community uncertainty regarding the humaneness of 1080, accept the necessity for its continued use, under these strict controls.

If you or your neighbours have domestic dogs, please consider becoming a **feral fighter** for just two weeks in Spring and two weeks in Autumn. Together we can make a huge impact of the local fox population and save tens of thousands of native animals each year.

**The Friends of the Brush-tailed Rock-wallaby offer free half day 1080 training by LLS to all Kangaroo Valley, Budgong, Illaroo landholders interested in pursuing fox control on their property.**

**November was a sad month for NSW conservation:** Just prior to the NSW Government passing amendments to the LLS and NPWS Acts and abolishing the state's biodiversity protection legislation – Native Vegetation Act and Threatened Species Act – the Baird Government was accused of failure to act on alleged illegal land clearing and their leading adviser quit in protest, forecasting a doubling of broadscale land clearing with detrimental impacts on land and soil quality, carbon emissions and the states' overseas reputation:

<http://www.abc.net.au/news/2016-11-14/battle-for-the-bush/7903010>

<http://www.smh.com.au/environment/scientist-hugh-possingham-quits-over-baird-governments-landclearing-plan-20161103-gsqx9r.html>

**For some scientific insight into rock-wallaby habitat preference:**

<http://australianmuseum.net.au/BlogPost/Science/Rock-wallabies-cold>

**See what is possible on an island:**

<http://www.abc.net.au/news/2016-10-07/kangaroo-island-plans-to-be-feral-cat-free-in-15-years/7908068>

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