



Surviving the Fires

Life on the Rocks

Natalie Simpson

Friends of the Brush-tailed Rock-wallaby is a not-for-profit organisation that has been active in the Kangaroo Valley region of New South Wales for the last twenty-five years. They advocate for the protection of the endangered brush-tailed rock-wallaby (*Petrogale penicillate*) in the Kangaroo Valley and beyond, working alongside National Parks and Wildlife Service and the Saving Our Species program.

Brush-tailed rock-wallabies are known for their agile nature, successfully living along escarpments often in the vertical environment of rock crevices in north-facing cliff habitats. However, in recent times, they have suffered from habitat

loss and predation from introduced foxes (*Vulpes vulpes*) and feral cats (*Felis catus*), as well as wild dogs. The Friends' mission is to protect these threatened animals through community awareness campaigns via social media, community events, school programs, and fundraising initiatives. With the support of other organisations, the Friends' have been able to undertake feral pest control and monitor the number of individual rock-wallabies in each of the three Kangaroo Valley colonies. Over the years, they have helped the rock-wallaby populations to increase in numbers, however they still battle to help them reach a sustainable level.

In January 2020, the Currowan bushfire crept north from Nowra in New South Wales and entered the western section of Kangaroo Valley. Unfortunately, some residents lost their homes, including the Friends' President, Chris Pryor, who has been working with the Friends' for many years. Not only did the residents of Kangaroo Valley suffer at the hands of the bushfire, so did the rock-wallabies in one of the three colonies – the 'creek colony'.

Above: National Parks and Wildlife Services field officers leading a team of experts into the burnt-out remnants of the 'creek colony' after the January 2020 bushfires. Supplementary food, consisting of sweet potato and carrots, was delivered to the brush-tailed rock-wallaby colonies.

The 'creek colony', estimated to consist of nineteen individuals, was subjected to the ferocity of the 2020 bushfires and experienced a significant loss of vegetation. In 2019, the 'creek colony' had suffered from a fire at the top of the escarpment, as well as a serious drought. Most of the remaining rock-wallaby habitat, from the 2019 fire, was wiped out in the 2020 Currowan fire. Furthermore, the local water storage system was burnt out and trees crashed onto the nearby soft-release animal enclosure. The Friends' made frequent trips to the colony to identify the number of survivors. Initially, seven were alive and well. Supplementary water and food in the form of pellets, sweet potato, and carrots were provided.

Images, collected via remote monitoring cameras, provided much-needed data on the impacts of the 2020 bushfires to the 'creek colony'. In addition, the Friends' expert team was able to locate individuals of the colony using individual identification traits (e.g. notches in ears and chest blazes). Amazingly, almost all the rock-wallabies were alive.

As a result of the bushfires, the Friends' were looking for funds to assist with supplementary feeding for all three colonies, given that the other two colonies had been severely drought-affected, even though they had been spared by the bushfires. Much-needed assistance was acquired through generous donors to assist in implementing a recovery action plan. The initial phase of the action plan included the deployment of watering stations and supplementary feeding. The Friends' implemented supplementary feeding every week to ensure the survival of the rock-wallaby colonies. It has since been found that most of the 'creek colony' did survive, except for two younger wallabies who succumbed to injuries a few weeks after the fire.

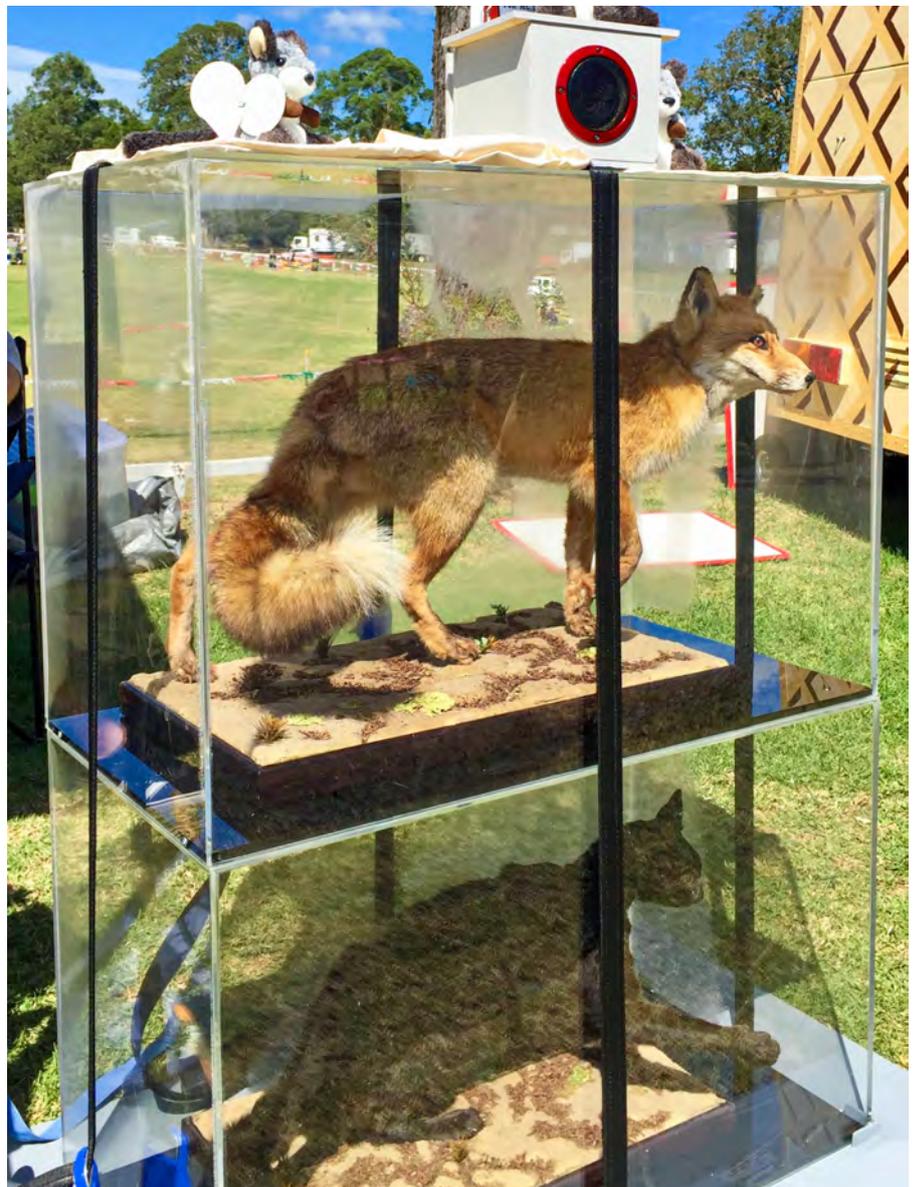
The Road to Recovery

One year has now passed since the devastating bushfires tore through Kangaroo Valley. The Friends' are seeing signs of vegetation regrowth. Thanks to the welcome rainfall throughout the winter months of June and July 2020, National Parks and Wildlife Service have noted the return of native flora species such as ferns. As natural vegetation across the valley begins to replenish, the Friends' look forward to the rock-wallaby colonies thriving once again.

Images on the remote monitoring cameras have shown that the rock-wallabies are no longer actively seeking supplementary feed, which means that they are finding sufficient feed among the natural regrowth of vegetation. Whilst there is still a long way to go, the Friends' are confident that life on the rocks will continue, and hope to see self-sustaining numbers of rock-wallabies in the future.



A remote motion detection camera at the 'creek colony' in Kangaroo Valley on the 4th January 2020, recording temperatures over 70°C in bushfire conditions.



Taxidermy displays of a feral cat (*Felix catus*) and fox (*Vulpes vulpes*) used by the Friends of the Brush-tailed Rock-wallaby at school presentations and community events.



Australia's Wildfires

The Response from Sydney Wildlife Rescue

Sandra Guy

In summer 2019-2020, the world watched in horror as news emerged of mega-wildfires affecting Australia's landscapes. The fires were part of a record fire season that started in winter and lasted eight months until mid-March 2020. The last fires were finally doused by the heaviest rainfall in thirty years. Lives, property, and businesses were lost, and communities were devastated.

In New South Wales alone, some six million hectares of land was fire-affected including more than forty percent of National Park estate. Devastatingly, up to nineteen million hectares of land was fire-affected across the whole of Australia. The World Wildlife Fund estimated that nearly three billion native vertebrates – mammals, reptiles, birds, and frogs – had been killed or displaced in one of the worst wildlife disasters in modern history. The breakdown of fire-affected wildlife included 143 million mammals, 2.46 billion reptiles, 180 million birds, and 51 million frogs.

Many wildlife rescue organisations were overwhelmed by the enormity of the situation and the sheer number of animals requiring rescue and critical care. These community organisations, often staffed by volunteers and funded

by donations, responded immediately, identified priorities, and offered care and expertise where it was needed most.

The blanket media coverage alerted many people to the plight of native wildlife and the enormous efforts being made by wildlife rescue organisations. Generous donations from local communities and international sources contributed significantly to Sydney Wildlife Rescue's ability to respond to the bushfire emergency and fire-affected wildlife. Furthermore, donated animal pouches, possum boxes, medical supplies, fabric material, and fuel were all essential items that supported Sydney Wildlife Rescue in their efforts to respond to animals in need.

Fortunately, Sydney escaped the harshest of fires. Consequently, Sydney Wildlife Rescue sent teams of volunteers to areas in desperate need of assistance. Sydney Wildlife Rescue's Mobile Care Unit is a van that has been retrofitted with the resources needed to provide wildlife with intensive care, when out in the field. On 11 January 2020, the Mobile Care Unit made its inaugural trip to Wandandian on the south coast of New South Wales. The volunteer carers and wildlife vets coordinated with the two local wildlife groups in the

region, Wildlife Rescue South Coast and the Native Animal Rescue Group, who provided direction and knowledge of the local area which informed the response plan to the situation unfolding.

With support from Aussie Mobile Vets and Vets Beyond Borders, an emergency triage centre for wildlife was established on a carer's property in Wandandian, to assist local wildlife groups. It was an extraordinary operation with teams working around the clock. Some international wildlife groups also assisted and flew in volunteers to help rebuild wildlife rehabilitation infrastructure on carers' properties, as well as providing funds for resources such as medical supplies, food, and fabric material. Their assistance was astonishing and meant that the local wildlife groups were able to operate shortly after the fires had passed.

The Mobile Care Unit also headed west to Lithgow, New South Wales. A second triage centre was set up with the assistance of Vets with Compassion, Aussie Mobile Vets, and Doctor Howard Ralph and his team from Southern Cross Wildlife Care – a non-profit organisation that provides veterinary assistance to native wildlife at no cost.

During the fires, it was necessary to locate and capture injured and orphaned wildlife remaining on the fire grounds. Training for Sydney Wildlife Rescue members was arranged, with the New South Wales Rural Fire Service, where they learnt the skills to safely conduct 'black walks', where teams walk through a charred and burning landscape. It became apparent, on these 'black walks', that qualified and licensed darters and shooters were required to help capture and euthanise injured and suffering animals that were beyond help. The Firearms Safety and Training Council was approached and many of their members volunteered to assist the local wildlife groups. The fire had destroyed much of the local infrastructure, including wildlife care facilities and enclosures. As a result, many of the animals were brought back to Sydney for long-term care and treatment.

The downpour of rain that occurred in March 2020 was very much welcomed and flooded life back into the charred landscape. Vegetation started to recover, providing food and shelter for wildlife that had survived the fires, and Sydney Wildlife Rescue was finally able to release rehabilitated animals back into the bush.

Above: The eastern grey kangaroo (*Macropus giganteus*) orphans.



Sydney Wildlife Rescue's Mobile Care Unit and volunteer vets preparing to leave to assist bushfire-affected wildlife.

As well as assisting with rescues and acute care, Sydney Wildlife Rescue provided bulk supplies of equipment, such as possum boxes and feeding and water stations. These feeding and water stations were periodically replenished to support animals in the wild until the local vegetation recovered. Sydney Wildlife Rescue's Mobile Care Unit proved invaluable and provided

immediate and high-quality on-site treatment to native wildlife; especially in remote areas where comfortable, air-conditioned treatment rooms and X-rays were hours away. The Mobile Care Unit was funded by donations to Sydney Wildlife Rescue, through the Global Giving website, and made a crucial difference to the number of animals they were able to save.

Furthermore, Sydney Wildlife Rescue arranged for delivery of veterinary care equipment and supplies to Kangaroo Island's wildlife rescue group, which was also devastated by the fires.

Through a member's family contact, Sydney Wildlife Rescue was offered the spare space in the cargo hold of a private plane flying to Kangaroo Island. Being so remote, Kangaroo Island faced a unique set of circumstances – one of the worst being isolation and a lack of supplies. Therefore, the arrival of the three cubic metres of veterinary supplies was of enormous assistance to the local vets and wildlife carers.

The efforts of Sydney Wildlife Rescue's volunteers and all the supporting organisations, donating their time and resources, was monumental. They witnessed raw horror and were sleep-deprived but continued to work around the clock. They were confronted by extreme circumstances in communities that were traumatised, yet they responded with resilience, grace, and dignity. They also shared their expertise and hope with the local community, while helping to save Australia's precious wildlife.

For more information on Sydney Wildlife Rescue's wildlife recovery efforts, please visit <http://www.sydneywildlife.org.au>



Volunteer vets treating an eastern grey kangaroo (*Macropus giganteus*) joey with burnt feet.



A bare-nosed wombat (*Vombatus ursinus*) being treated with oxygen for smoke inhalation.