

Caring for Camden's Wombats

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Camden Wombats Landcare Inc. was established in 2021 with the assistance of Greater Sydney Local Land Services after discussions with environmentally conscious wildlife advocates identified a need to conserve, support and restore the habitat of bare-nosed wombats (*Vombatus ursinus*) in the Camden region of New South Wales.

Camden Wombats Landcare is a small but dedicated group that aims to protect the local wombat population and promote biodiversity through the restoration and protection of the river-flat eucalypt forest, an endangered ecological community adjacent to the Nepean River within the environmental protection zone at Camden Airport. This site on the edge of south-west Sydney is an important wildlife corridor and supports the vulnerable Camden white gum (*Eucalyptus benthamii*) and endangered rufous pomaderris (*Pomaderris brunnea*).

The work of Camden Wombats Landcare volunteers includes remote burrow-flap treatment of deadly sarcoptic mange infestation in wombats, habitat restoration, invasive weed control, and upcoming plantings of native species with Greening Australia. Camden Wombats Landcare

conducts ongoing wildlife monitoring of the local wombat population and other native and introduced species using remote wildlife cameras. Our members are also actively trying to educate and improve community awareness about wombats. Our recent advocacy work with Camden Airport and Camden Council has resulted in the installation of road signage to help reduce and prevent road-strike deaths of this iconic native animal.

Wombats are efficient ecosystem engineers with their digging improving the surrounding environment by turning over and aerating hard, compacted soils, making nutrients more available to other animal and plant species, and increasing water availability for eucalyptus and other trees, particularly during drought. Native plants and grasses, such as the wombats' preferred weeping grass

(*Microlaena stipoides*), particularly benefit from the wombat's digging activity. Soil turnover also provides habitat and resources for many invertebrates that are a food source for birds, reptiles, and larger mammals sharing the wombats' home range. In addition, wombat burrows provide refuge for many species during natural disasters such as bushfires and extreme hot and cold weather.

One of the main aims of Camden Wombats Landcare is to save wombats suffering from the parasitic mite (*Sarcoptes scabiei*), commonly known as mange. This deadly infestation is prevalent throughout the wombats' range, with up to 90 percent of wombat populations being somewhat affected. The devastation caused by this microscopic mite cannot be understated. The mite eats through the wombat's thick skin, causing hair loss and decreasing the usually highly energy-efficient animal's ability to stay warm (i.e., loss of thermoregulation). Furthermore, the mite's life cycle and bacteria

Top: A bare-nosed wombat (*Vombatus ursinus*).
Image: Laura Hill.



The President of Camden Wombats Landcare Inc. completing camera maintenance at a wombat burrow. The cameras need fresh batteries every month. The photos downloaded from the SD cards are analysed and tagged by members remotely. Image: Megan Fabian.

from external sources impact the wombat's immune system and cause dehydration and subsequent starvation.

The suffering of the wombat from this mite is immense, with each female mite tunnelling into the deeper layers of skin, causing uncontrollable pain and itching as it lays its eggs and leaves waste and faeces in each tunnel wound. Death can be cruel and agonizingly slow, with progressive loss of condition as exponential damage occurs with each new hatching of mites creating new tunnels through the ravaged skin every few weeks. The damage caused by the mites leads to dehydration, distress, loss of eyesight and hearing, and increased metabolic pressures. If left untreated, unfortunately, it is fatal and can wipe out localised populations.

Bare-nosed wombats are facing a multitude of other challenges locally, including habitat loss, habitat degradation, and fragmentation through housing development, destroying their preferred native grasslands throughout their natural range. Decreased suitable habitat has a compounding effect on wombats,



A mange treatment flap is installed at the front of a wombat burrow and filled with anti-parasitic medication (Cydectin). These flaps must be refilled regularly as wombats require multiple doses to treat mange effectively. Image: Megan Fabian.

leading to forced burrow sharing and increased crossover between other mature wombats. This crossover increases stress and infestation of sarcoptic mange mites in wombat populations. These parasitic mites can live for up to three weeks in a cool, humid burrow environment. In short, the lack of social distancing between wombats causes increased sharing of infested burrows and compounded stress levels, leading to compromised immune function. Wombats also face the devastating impacts of road deaths (as mentioned above), domestic dog attacks, and increased competition for food resources by feral pest species, such as rabbits, deer, and goats.

The collaborative approach between environmentally conscious wildlife advocates, conservationists and bush regenerators is heartening. We encourage local landholders and members of the community to join us in gaining an appreciation for our amazing ecosystem engineers and taking action to protect wombats on both private and community property, such as being a responsible dog owner, driving cautiously between dawn and dusk, and reporting any burrow sightings or incidents of mange to local wildlife groups or via WomSAT.

Camden Wombats Landcare will continue to conserve, support, and restore more of the local wombats' natural habitat by monitoring the health of wombats, improving their landscape, and responding to mange outbreaks. We hope to promote



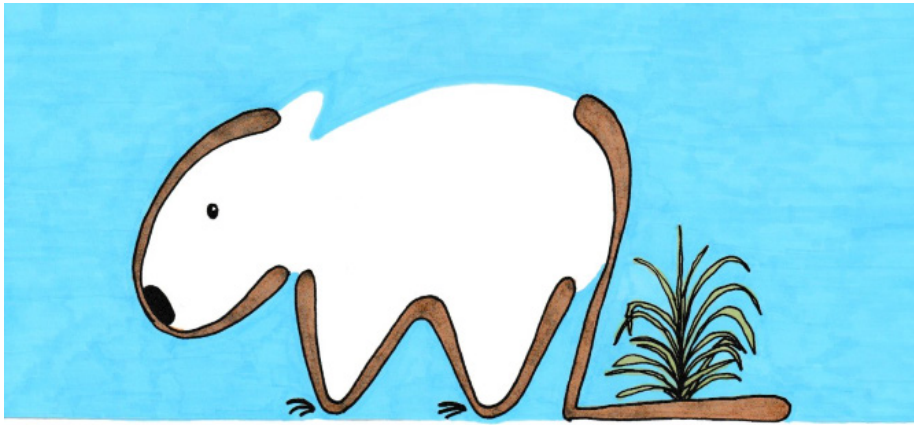
A bare-nosed wombat (*Vombatus ursinus*) receives a dose of anti-parasitic medication (Cydectin) from a mange treatment flap as it exits its burrow. Image: Remote wildlife camera, TRAILCAMOD.



A bare-nosed wombat (*Vombatus ursinus*) suffering the deadly effects of mange. Image: Mel Johnstone.



Remote cameras help monitor and identify any wombats suffering from mange with minimal stress to the animals. Image: Remote wildlife camera, RECONYX HyperFire 2™ Covert IR Camera.



Camden Wombats Landcare

Camden Wombats Landcare Inc. logo. Image: Laura Hill.



A patch of Camden white gums (*Eucalyptus benthamii*) overgrown by the exotic weed, green cestrum (*Cestrum parqui*). Image: Laura Hill.

sustainable land practices in which native wildlife is a key feature, promoting healthy ecosystems and improving biodiversity. In the future, we hope to offer site tours that demonstrate the benefits of wombats as landcarers, and involve the community in interactive workshops and demonstrations to gain knowledge and an appreciation of the amazing contributions of our iconic bare-nosed wombats.

Camden Wombats Landcare would like to thank the generous support of the Australian Wildlife Society. Funds provided by the Society supported Camden Wombats Landcare in purchasing Cydectin and a drenching gun to treat mange in infected wombats, remote sensor cameras, SD cards, rechargeable batteries, and a GPS to map burrows. We would also like to thank Greater Sydney Local Land Services, Landcare NSW, Camden Airport (Aeria Management Group), the Wombat Protection Society of Australia (WPSA), and all our wonderful volunteers. We also acknowledge the publicly available training and support for community mange treatment of all wombats in New South Wales by Wildlife Information Rescue and Education Service (WIRES Inc.).

For more information about the work of Camden Wombats Landcare, please visit <https://bit.ly/CWLInc>



After removal of the weed green cestrum (*Cestrum parqui*), native grasses can thrive and be accessed by wombats and other native wildlife. Image: Laura Hill.