



Wombat Protection Society of Australia Ltd.

MANGE TREATMENT GUIDELINES

The Wombat Protection Society has been working for many years with groups and individuals to eradicate mange throughout Australia. This booklet covers many of the questions people want answered about mange and how it is treated.

Sarcoptic mange in wombats, caused by the parasitic mite *Sarcoptes scabiei* is possibly the biggest threat to the survival of the Bare-nosed wombat, and unfortunately is found in most areas where these wombats exist.

Mange is not a disease but an infestation of the mange mite. The female mites burrow under the skin where they deposit eggs, these hatch and trigger intense discomfort causing the wombat to scratch. Over time thick scabs and ridges form over the wombat's body. The scabs become dry and split open, the wounds can then become flyblown and infected. This is often a long and protracted process and unless treated, the infestation progresses and eventually the wombat is so severely compromised it dies.

Before treating the wombat, it needs to be established the wombat has mange and is not suffering from attack or another sort of wound. If you are unsure send us a photo to mange@wombatprotection.org.au

What does mange look like?



Mange usually presents with crusty scabs around the wombat's shoulders, sides, and legs and often around the eyes and ears. Hair is usually still seen down the middle of the wombats back and rump and is often referred to as a 'mohawk appearance' (*diag.a*)



Attack wounds are seen mainly on the wombat's rump or down the middle of the back and can look similar to mange due to the fur loss and/or open wounds (diag.b) However, the back on a mangy wombat is the healthiest area. Unfortunately, sometimes a wombat can be suffering from both conditions (diag. c)

Most wombats reported with mange are seen grazing in daylight hours and are easy to approach, generally appearing to be deaf and blind (*sight and hearing are the first things to return as the wombat recovers*). These severely infested wombats are extremely sick and need to be treated quickly with an effective dose to ensure a speedy recovery.

Free living adult wombats do not cope well with captivity usually dying within days from this additional stress, so treating the wombat in its home range is the best option. The recommended choices of treatment using the "pole and scoop" or "burrow flap" mean there is no stress involved as the wombat does not need to be handled or relocated.

In the past, wombats have been treated with a variety of products with inappropriate doses which has meant a far longer recovery time and in most cases the wombat disappears without knowing the outcome.

Treatment Methods

As these wombats are "free living" they will not always turn up at the same time and place which can make treatment problematic. Because of the difficulty in finding, treating, and re-treating wild free-living wombats, it is critical to use a dose regime that both kills the mite and ends its life cycle as quickly as possible.

At present the best known trialled and proven method to treat mange is with Cydectin "pour on" for cattle and red deer. It also comes in a variety of products labelled as Moxidectin Pour-On, Covine MOXY Pour-on, Cattleguard Pour-on, Moximax Pour-on, Maximus Pour-on. These products contain 5g/l moxidectin as the only active ingredient and 150 g/l Hydrocarbon Liquid. This product is APVMA approved.

Trials and research over a period of years has shown a more appropriate dose is needed to kill the mange mites. This process and why it is needed is described in the "**Treating Sarcoptic Mange using Moxidectin Manual**".

RECOMMENDED DOSE.

WPSA currently advise an 80ml – 100ml dose of Cydectin or moxidectin ‘pour on’ solution for ‘free living’ wombats with moderate to severe mange. Every wombat is different, and every situation is different, and this is why it is important to seek advice from an experienced mange treater. The dose needs to be applied every 5 – 7 days if achievable as this will eliminate the mange mite as quickly as possible and enable the wombat to recover.

Pole & Scoop Method



If the wombat is approachable the best method of treatment is with a ‘pole and scoop’ device, this way you are assured of dispensing the full dose.

The ‘pole & scoop’ device can be made from an extendable pole/old broom handle etc. with a scoop or bottle taped to one end (*see diag. 1*).

Approach slowly, stopping if the wombat lifts its head, then proceed when the wombat resumes grazing, be patient, this can sometimes take a little while. Starting at the neck, pour the Cydectin®/Moxidectin down the middle of the wombat’s back avoiding scabs if possible, as this is where it will be more easily dispersed through the coat and epidermis. Care should be taken to avoid scabs, open wounds, and eyes. (*diag.2*) Open wounds can be treated using Cetrigen, Chloromide or other anti-bacterial spray from a pump bottle, this will assist in the healing of the skin and deter flies. These products are available over the counter from most produce stores. Continue this way until all signs of mange are gone?

As the infestation progresses wombats become thirsty as their body becomes dehydrated. The wombat can expend a lot of energy trying to find water. If it is possible, set up a water supply that is easy to access.

As the wombat recovers it may no longer be approachable and treatment may need to be continued using a burrow flap.

The Burrow Flap is a good way to continue treatment when the wombat has reverted back to its nocturnal habits or is no longer approachable. The flap needs to be set in place appropriately to get the best results and so as not to disturb the wombat.

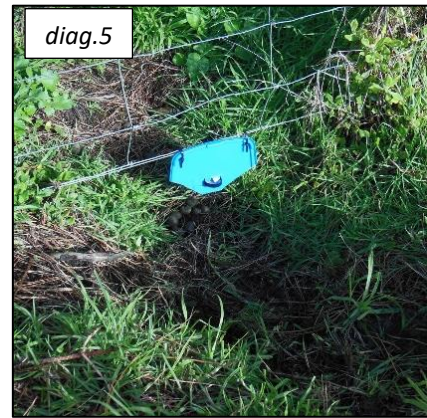
Burrow flaps can be made in a variety of ways as shown in this brochure. This is where you can be inventive and come up with your own design.



diag.3



diag.4



diag.5

A wire frame is positioned at the entrance to the burrow. A distance of 25- 30cm from bottom of flap is ideal and means the wombat just has to duck its head to go under. Make sure the cable ties are pulled tight to stop the flap from moving around on the wire frame but be sure the flap can swing forward & back without disturbance (*diag.3*). The wire frame can also be pushed into the top of the burrow (*diag.4*).

A dose of Cydectin® is placed in the container which is mounted in the flap. As the wombat enters or leaves the burrow, the flap tilts and the Cydectin® trickles onto the wombat's back. The "Cydectin®" solution needs to be checked and replaced once every 5 – 7 days.

Burrow flaps can also be set up on well-worn tracks under fences. The burrow flap may need to be shortened to allow easier access (*diag.5*).

When the burrow flap is in place, fill the container with Cydectin®/Moxidectin "pour on". This should be repeated every 5-7 days until signs of mange have disappeared.



diag.6

If you see the wombat disappear down a burrow is the ideal time to set up a “flap”. This way there is a good possibility the wombat will receive a dose when it leaves the burrow (*diag.6*)



If this is not possible, tracking and mapping burrows in an area is the next best approach. In areas where there are too many burrows to treat all of them, working out which burrows are active and treating those will be the best option. This can be done by placing sticks across the burrow entrance (*diag.7*) or placing bracken in the entrance (*diag.8*) which will be pushed out of the way if the burrow is being used.

Wombats feeding on roadside verges often take shelter in under-ground pipes and this could be another option to set up a burrow flap. (*diag.9*).

Healing Process

You may notice scabs starting to come away within a week of the first treatment. This will steadily increase over the next few weeks as the mites die. In fact, the wombat may look worse, before it gets better, this is all part of the healing process. Sometimes raw skin is exposed, which may bleed, it is usually superficial and heals on its own within a couple of days (*diag.10*). Products like Cetrigen or Chloromide which are antibacterial and fly repellent can be used if necessary and may assist with the healing of the skin and deter flies. These products are readily available from Produce Stores.



Not getting worse is a good sign and each wombat will have its own individual response to recovery. Hair growth is the last thing to develop.

Infra-red sensor cameras are an additional tool to give an idea of who and how many animals are visiting a particular burrow. These can be set up for a period of days or weeks at a time.



This wombat is now mange free as all the scabs have been removed and new hair is starting to grow. New hair growth can take a number of weeks.

If at any stage, you have concerns with regard to the wombat's health do not hesitate to get in touch with WPSA mange@wombatprotection.org.au or a registered mange treatment group in your area.

For more information you can also check out the WPSA website www.wombatprotection.org.au/mange-disease

Younger Wombats

Every situation is different, and assessment has to be made accordingly. The wombat should not be chased or stressed in any way. If you can simply approach the joey and pick it up is usually an indication the wombat needs to come into care. (see *"Treating Sarcoptic Mange with Moxidectin Manual"* for more information). Abandoned young, orphaned joeys under 10 kgs should be taken into care and treated under Veterinary advice.

How you can stop the spread of mange.

When a mange infested wombat has died, the mange mites can be active for a period of time and will be looking for a new host. Do not leave an infected carcass in the paddock, ditch, or gully. Proper disposal needs to be carried out immediately as an infected carcass can be the means of the mites spreading to another wombat (*animal*). Remember any animal that investigates the infected carcass is likely to become infested with the mites and **the cycle will start all over again.**

Cydetin®/Moxidectin

First Aid Directions: If poisoning occurs, contact a doctor or Poisons Information Centre. Phone 13 11 26.

Safety Directions: Poisonous if swallowed. Will irritate eyes and skin. Avoid contact with eyes and skin. Wash hands after use. Do not inhale. May irritate the nose and throat. You should exercise personal safety when handling this product by always wearing gloves.

We need to hear from you – With your help we can secure a brighter future for our wombats. Take photos if you can during the treatment period. Record number of treatments and observations. All information collected will assist wombat research in the future. Contact us via email mange@wombatprotection.org.au