
Trial treatment of sarcoptic mange in wild wombats in Victoria

Mange Management

Abstract

Mange Management is a Victorian based group of dedicated and concerned volunteers keen to treat and reduce the impact of mange on "Free Living wombats". There had been an ongoing concern that nothing was being done to treat wombats with mange let alone euthanize to stop the suffering. The group was formed in 2012 after members attended the 2011 Wombat Conference where they became aware of the Wombat Protection Society's Burrow Flap Device. As adult wombats do not cope well in captivity this approach seemed ideal with no stress involved as the wombats are unaware they are being treated.

In February 2015 we concluded the three year trial of the treatment using the burrow flap method approved by DEPI/DELWP Animal Ethics Committee. Our final report was accepted in May 2015. The program was designed to educate and support people with the right information and equipment to treat wombats with mange on their properties.

Number of cases: over 650 cases

Landcare and Friends Groups initially were targeted as this is where many enquiries came from. Now as the word has spread Workshops and "In Field" Training sessions are held in various locations. An informative website with treatment information and contact details is available. Enquiries are dealt with by phone or email with feedback via photos of the recovery process. Free Treatment Kits are available at various pickup points around the state.

Biographical Statement

Jen Mattingley has operated a busy wildlife shelter in West Gippsland Victoria since 1987. During this time she cared for a variety of wildlife, specializing in wombats, echidnas, wallabies and a variety of birds. Jen has presented various workshops for new wildlife carers and as a refresher course. She has liaised with Healesville Sanctuary and with their support enabled a positive outcome for many wildlife. After learning about the Burrow Flap method we set about developing a program that would enable members of the public to help wombats with mange. In Feb 2012 Mange Management Inc. was formed with a group of dedicated likeminded volunteers.

The purpose of this paper is to present observations of the trial.

Introduction

The Mange Management group was formed by dedicated and concerned volunteers from varying backgrounds keen to treat and reduce the impact of mange on wombats. With information already gathered by the Wombat Protection Society the group worked hard consulting with researchers, veterinarians and others to develop a detailed submission for approval by Victoria's Department of Primary Industries Animal Ethics committee.

Subsequently, a three year trial period was approved to treat "free living" wombats with mange using the "burrow flap method". The program has developed social networking by involving groups, organizations and individuals to come on board and assist in the fight against mange. In 2015 the trial concluded and was accepted. Currently Mange Management is liaising with DELWP for ongoing approval of the program.

Background

Mange is an infestation of the mange mite which burrows under the skin where it deposits eggs, this causes intense discomfort as the wombat has no option but to continually scratch. Overtime thick plaques that look like scabs form over the wombat's body. These scabs become dry, then crack and split open, the wounds can then become infected and flyblown. Unless treated the wombat becomes so severely compromised it dies a slow and painful death.

How is mange spread? Where mange came from has been a mystery until recently. Researchers have discovered that it was introduced by early settlers as scabies or with the introduction of domestic dogs. Our Bare Nosed wombats in particular seem to be severely affected by it.

Wombats with mange are usually not noticed until the mange is at an advanced stage. These wombats are often observed grazing during daylight hours. The wombat may or may not be alert and it is sometimes thought that they are blind and deaf. Dry crusty plaque like scabs are usually evident around the eyes, ears, sides of body and legs. At this point the mange would still be treatable as long as the wounds haven't become infected. This would be evident by a rotting dead smell and the wounds would likely be flyblown. This usually indicates the infestation has progressed too far and secondary infection has developed. At this stage it is recommended to euthanize to avoid prolonged suffering.

In the past as a wildlife shelter, we tried bringing adult wombats with mange into care but this proved unsuccessful as these wombats with an already suppressed immune system usually died within a few days due to the stress of being in captivity. Even if this method was successful most wildlife shelters are not set up to deal with this type of treatment as these wombats will be in care for many months. There is also the added problem of releasing these wombats later, as their territory would most likely be unavailable to them.

As a busy wildlife shelter we had many enquiries from land owners about wombats on their property with mange and what could be done to help them. This was extremely distressing and frustrating as there was nothing positive to offer other than to euthanize to stop the suffering.

The “Burrow Flap” Method

The burrow flap method is simple and easy to do. The flaps can be placed and monitored during daylight hours and can be carried out by trained volunteers. There is no stress involved as there is no need for the wombat to be caught or handled. The wombat is unaware it is being treated. It just starts to feel better. The wombat is treated with a dose of Cydectin when it leaves or returns to its burrow. The solution only needs to be checked and replaced once a week.



Direct Application using Pole & Scoop



If a wombat with mange is seen out grazing during daylight and is easy to approach we suggest applying the Cydectin with a pole and scoop. The pole can be an old broom handle with a laundry detergent scoop taped to one end. This enables you to get the solution straight onto the wombats back. It is best applied to an area that is least affected by mange as it will be more easily absorbed into the blood stream. This method is ideal if you are able to get close enough as the wombat will not feel threatened. Once the wombat is no longer easy to approach, the burrow flap can be used to continue the weekly treatments.

Cydectin Dosage Rates

The product recommended is Cydectin which is a cattle and red deer pour on drench used for controlling a variety of internal and external parasites including mange mites.

Based on the mite life cycle, “free living” wombats need to be treated **weekly for 8 weeks, then 4 fortnightly treatments**. Making a total of 12 treatments.

Continued **monthly treatments** are a good idea if the infestation has been severe and there is more than one wombat involved. Remember mange can take many months to develop to the stage where a wombat is sighted grazing during daylight hours. Therefore, the treatment may take many weeks before a visual improvement is noticed. The first sign is the wombat will be more alert. Six weeks is generally the time needed and sometimes the wombat may seem to get worse before it gets better. This is due to the scabs being scratched off, exposing more fur loss. To stop the mange mite cycle you need to be consistent and complete the 12 treatments.

Motion sensor night cameras can be used to monitor progress once the wombat has reverted back to its nocturnal behavior.

Many people are unaware that mange mites can remain active for 3 weeks after a wombat dies. Disposal needs to be carried out immediately or the mange cycle continues. If a wombat with mange dies or is euthanized the body needs to be buried, burnt or bagged and taken to the local vet for disposal. Some vets supply this service free of charge, check with your vet first.

“In Field” Volunteers

The program has been so successful that we now need more volunteers. Many of the land owners are more than keen to help to treat these poor wombats with mange but sometimes they need a hand to get started. Volunteers can assist by helping to locate active burrows, set up burrow flaps and in some cases motion sensor cameras. A short training session is required to acquaint volunteers with the program. This involves a detailed power point presentation as well as some hands on “in field” training. Volunteers work in pairs and report back to their area coordinator. In rural areas Council reserves and parks can also be monitored by “In Field” volunteers.

Treatment of wombats with mange differs from State to State

The issue of wombats with mange and how to deal with this problem differs from State to State. Some states will only allow registered wildlife shelters to treat and deal with mange in wombats and although this would be an ideal situation most Wildlife Shelters and wildlife groups are already overloaded treating orphaned and injured wildlife and there is no time available to undertake the treatment of wombats with mange. This is where a specialist group can assist.

The Mange Management Group operates independently of wildlife shelters and reports direct to DELWP annually on its progress and activities. Treating mange is a specialist field as it takes many weeks for a wombat to fully recover.

The Mange Management group has worked hard consulting with researchers, veterinarians and others to develop a detailed program to treat wombats with mange. From our experience we have found that treating “in field” has the best outcome. The fact that wombats are nocturnal and live underground has made it difficult to overcome the mange problem. Currently the best way of dealing with the mange is through education and the use of the “Burrow Flap” method.

The Mange Management program enables many more wombats to be treated as anyone who has an interest in our wildlife can be involved.

An informative website www.mangemanagement.org.au is available with detailed information about the treatment procedure and the availability of free treatment kits, training workshops and volunteer assistance. Enquiries are dealt with via phone call or email. Participants are asked to send a photo so the wombat can be assessed. In most cases we are able to diagnose whether the wombat's skin condition is a result of wombat attack or a severe case of mange.

We receive feedback and photos of the recovery process as people start to take ownership of their wombat. Regular contact is maintained through email as to the progress of the wombat. Motion sensor cameras are also lent out to record the condition of the wombat after it has returned to its nocturnal behavior.

As the program developed we saw the need to expand our pick up depots at convenient locations around the state. This has further developed social networking by involving more groups and organizations to come on board and assist in the fight against mange.

Free Treatment Kits with detailed instructions – record sheet, Cydectin, Burrow Flap, Wire Frame etc. are available at various pickup points across Victoria. These have been distributed to various wildlife shelters, vets, Landcare groups, and DELWP and Parks Victoria Offices.

A quarterly newsletter is also published and sent to participants to keep them updated with new techniques, success stories, current photos and news within the program. This is proving to be a great way of keeping people involved. Posters and information leaflets are another way we inform the public of our treatment program and these are displayed in various locations.

SUMMARY

The trial program involves three elements:

- **Burrow Flap and Pole & Scoop Methods** are simple and can be undertaken by informed volunteers with minimum training and without disturbing the wombat.
- **Empowering People through Education** - workshops and website
- **“In Field” volunteers** – hands on training workshop

Conclusion

Mange Management is negotiating with DELWP for final approval for the ongoing treatment program. Authorities and researchers are now taking more interest in finding a better solution for wombats with mange. With Social inclusion and motivating the concerned public, we will continue to tip the scales in the Bare-nosed Wombats favour and create a better outlook.

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