

Wombat Protection Society

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This month the Bulletin is focusing on release options for hand reared wombats. The topic is important because it bridges a number of philosophies and potential methodologies. In a recently misquoted debate concerning a cub abandoned by its mother in a zoo, outcry occurred when an 'environmentalist' was said to have stated that the cub should have been euthanised. While this was a misquote, there are some who feel that if an animal can't be reared naturally by its parent it doesn't have the same advantages as one that does and is therefore seriously disadvantaged when released into a naturally reared population.

A wombat joey needs specialized care
at all developmental stages



Photograph courtesy of Sue Hay

It would have to be conceded that there is a degree of common sense to this way of thinking. If a wombat is considered, from the moment it is "at heel" (following its mother after it is too big to be carried in her pouch) , it is taught to map and understand a territory. Earlier still, while still in the pouch, it learns from smell and milk content that mother feeding in certain areas and on certain types of grasses leads to differences in its food intake. It learns that certain sounds and smells causes mum's body to change, either to stand, sentential still and sniff the air, or to bolt and take cover. As an older animal it learns socialization skills by observing mothers' responses when another wombat comes near or when another animal enters a burrow. It learns to vocalize and keep audio contact with its mother, both by listening to her steady munching or her soft huh huh contact calls, through to her loud gruff call of danger. It is very difficult for even the most dedicated human being, to adequately replicate all these behavioral

lessons. Add to these difficulties, the problems with rearing an animal on an unnatural diet, which all our milk mixes are, and you are certainly presenting the animal with a challenge.

Wombats can be and have been hand reared by humans successfully for many years. In general they are a fairly tough and resilient orphans, but they need specialized care, from differing milk mixes at different ages to different contact and activity options at different developmental stages. It also appears to be the case that while in general wombats follow a similar developmental pattern, there are quite obvious individual differences between wombats. Some youngsters thrive on one type of milk replacement while others do better on another type.

Other differences include preferences for teat type and shape, milk temperature, awake versus asleep times and levels of playfulness, chewing and suckling. Some seem oblivious to noisy households while others seem to suffer extreme stress under noisy conditions. Some seem to want to leave home and live outside or independently earlier than others and some become more bonded to their human carers than others, seeking them out at night and appearing to want contact (cuddles and play) rather than food or any other needs met.

Some groups use formula rearing as a method. In this method wombats are changed from one milk mix to another at a certain age or weight, put into outside "pre release" pens at a certain age or weight and let out to fend for themselves at a particular age or weight. There are benefits in these methods but sometimes those benefits are for the system rather than the individual wombat. For example, a care group that takes in orphaned wombats has a set number of carers able to raise young joeys. It therefore needs to "move them on" as soon as practical so that the carers aren't "taken up" with older animals that could potentially be independent.

A young wombat needs intensive care and feeds as frequently as every two hours, but an older wombat can need to be taken for a walk every few hours depending on its housing situation so each age needs a human with available time.

There are other practicalities that groups take into account. A big wombat wanting to be inside the house is a totally different proposition to a little one. Wombats will learn to use a litter tray but they always need to chew. This can make houses a very dangerous place for the wombat to explore. Electrical cords are a favorite chewing toy as is anything wooden, chair legs and door mouldings being prized, but shoes, cupboards, children's toys and mats and carpets will also be tested and chewed. Many of these things can be dangerous to the young wombat, causing deaths from electrocution or bowel obstruction when inedible material is consumed.

Wombats around houses are also at risk of injury from moving vehicles and other human activity. The wombat in the wild chews sticks and logs, crunches up clay and charcoal and consumes a variety of grasses and herbaceous food so meets its need to chew in ways which don't cause risk to its well being.



A wombat needs to chew

It digs in dirt rather than in the cupboard and if it gets scared and bolts, usually this is to a burrow and not into the car backing out of the driveway or the glass door.

The ideal world for a wombat is one where it is reared by its natural parent. A wombat will stay around or within its mother's territory for up to two years and it has been reported that mother's will often leave the natal burrow to a young wombat rather than chasing it off as some other animals do when it is time for their young to leave home. By this time the young wombat has explored its mother's territory and is familiar with all the burrows she uses and all the bolt holes within that territory. It has a place to call home and its mother has protected it from any other wombats in the overlapping territories and taught it how to behave when confronted by one of these visitors. The nearest replica humans can develop is where the carer that rears a wombat, has a suitable place to release the wombat, beginning with an outside "soft release pen" where the wombat has a safe haven and an all weather burrow.

From the soft release pen, the human carer walks the wombat all over what is to become its territory and this should be at least as big as a wombat's range multiplied by however many wombats have been or are to be released plus any naturally reared ones already there. If a wombat needs five hectares in a particular area and there are already three resident wombats, and the wombat for release has been "buddied" then you have five wombats each needing five hectares so ideally land of at least 25 hectares is wanted.

In poorer feed areas with limited access to water or good burrowing areas, more land may be needed. Wombats will become territorial and a previously released wombat may object to a later one being released in what it now considers its home range. This has been documented a number of times and happens with both male and female wombats being territorial and both sexes chasing out the same or a different sex wombat.

In a recent case a previously released wombat not seen in eighteen months returned to what it considered its "home ground" as soon as a youngster began to be walked around and "beat up" the younger wombat. In another case a resident male of a number of years refused to have a new male in his territory despite the new male being in a pre-release pen, both dug furiously each from their own side of the pen to get at one another.

The younger male was ejected from the territory and traveled fifteen kilometres in less than a night to find his own territory. It was fortunate that this younger male was a big strong wombat, well beyond the age some groups

recommend for release. Had he been younger, it is unlikely he would have survived this ejection and beating. In the other case, the younger female wombat "beaten up" by the older female wombat was fortunate to have escaped back to the safety of her wombatorium (soft release pen) where she was found by her human carer because she would not have survived had she been left without treatment.

These stories are told to indicate that it is not just the wombat being released that has to be factored in, but the prevailing environmental conditions.

Food, shelter and other wombats and the individual wombat's disposition should all be considered when developing a release plan.

Finally, there is the people factor.

A wombat wakes up at night and a wombat determined to have human companionship at night can be a force to be reckoned with. He or she will win and unless the humans are prepared for this the wombat can again be placed at risk. This is another reason many groups insist on having their carers rear orphans to a certain age and then put orphans together as a group somewhere else pre release.

While there is some suggestion that this helps break down the dependency on people, this is not absolute, we note some wombats in such situations follow the replacement carers around as they would have their original ones, where others are happy to hide out in the pre release pen with their new mates.

Very few groups document long term the outcomes for their released orphans and more reliable data is available from individuals who observe released animals on their properties over time.

Some groups have another young wombat reared with any orphan ("Buddied" to it) to keep it company and help lessen their dependency on human interaction. It seems this is helpful, young wombats do love to sleep cuddled up together and enjoy chewing, suckling and playing with one another. It also seems to give them some protection at release time when two bonded wombats are released together. This seems to make them less vulnerable to being attacked by older territorial wombats.

They do eventually go their separate ways, and this seems to be around the 20-25 kilo weight if allowed to choose. Often earlier than this one wombat will begin to practice "attack play" with the other and people often separate them because one is getting injured.

Generally the injuries are slight and milder than any that would be received from a wild wombat so it can be debated re which is more stressful for the youngsters, separation to ensure neither is injured or letting them remain together and accepting that there will be rough play between them.

Young wombats are "buddied" to provide comfort and contact and to reduce dependency on their human carers.



Photograph courtesy of Suzanne and David Alder

The ideal at this time is to ensure each can get out and away from the other to separate burrows if things are getting too rough, rather than the more stressful option of completely severing their contact. It does seem that the boys are rougher in general than the girls, learning to do the wombat "lunge" (where he or she jumps up on their hind legs and comes down on the back or shins of the nearest wombat or human teeth first) earlier and enjoying this game more. This play is protective for the wombat later on in its life and while not ideal if you are the practice "dummy", it is essential for their development. Enrichment toys like balls can often serve the "test dummy" role and minimize damage to their buddy or to their human.



Enrichment toys such as a ball replace shins or backs for wombats learning the "wombat lunge". This 15 kilo female wombat still shows bald spots from where she was attacked when 10 kilos by a territorial adult female previously Released, but not seen in 18 months.



JOEYS' NEWSPAGE

Welcome to your second Joeys' Newspaper.

Congratulations to all of you who guessed what the picture in last month's newspaper was. It was a wombat hair under a microscope. A wombat feels rough when you pat it, unlike a cat which feels smooth. A wombat hair has rough plates along it and you can see these as the uneven surface on the hair under the microscope. A cat's hair has smaller plates and looks straight and smooth. Forensic scientists learn about hair types so they can identify animals and humans from how their hairs look.

A Naked-Nose or "Common Wombat"



The Naked-Nose or Common Wombat wombats' scientific name is *Vombatus ursinus*. *Ursinus* means "bear like" and early scientists named them this because of their very short tail, compact body, head and limbs. They have a lovely big nose which hasn't any hair on it. Their nose is dry, unlike a healthy dog's nose which is wet.

Southern Hairy Nose Wombat



The Southern Hairy-Nosed Wombats' scientific name is *Lasiorhinus latrifrons*. *Lasio* means hairy and *rhinus* nose. *Latri* is from the Latin for broad (*latus*) and *frons* for forehead. So the early scientists who named the animal were telling us this wombat has a hairy nose and a wide forehead.

Photograph courtesy of Jan and Bob Cleaver

Last time we mentioned the third type of wombat, the **Northern Hairy-Nosed Wombat**.



Their scientific name is *Lasiorhinus krefftii*. The Krefftii comes from Gerard Krefft who looked after the Australian museum in 1861. There are only 115 of these wombats left in the whole world. They have a website all to themselves. Your job for the month is to mark the map with where wombats live. Use a different colour for each type of wombat. The best map will be used on the Society's webpage for everyone to look at.

