

# Raising Resilient Wombats



*This is written from our perspective as wombat carers, who have been doing supported soft release of wombats for over 4 years. Warwick and I have been doing this full time, with numerous cameras on 3 locations, 2 wombatoriums at Rocklily and a remote supported soft release pen which is 4 km away. Four of the cameras have been at the remote location for the last 3.5 years. We have released 24 wombats this way, (2016) and continue to keep track with wildlife cameras and our own observations here and at the remote release location. This is not a care manual, but observations from the 'bunt end' in trying to release them.*

*We have been learning by observation and recording what's happening around us and to the wombats we have been raising and released for other carers. Who wants to waste time, energy and money without knowing that the wombats have a reasonable chance of survival? Dianna's years of wildlife caring with other animals have given invaluable insight into animal behaviour.*

*In 2009 on just 1/3 of our property there were 73 burrows and about 5-6 wombats. We successfully treated mange here, starting in 2009 and extended our experience to helping others treat many wombats for mange. Mange can re-occur as foxes come and go to areas, so it's ongoing, and being vigilant we can treat outbreaks straight away. The information from our cameras can alert us to wombats with the first signs of mange – this is easier to treat.*

**So we'd like to look at just what is a releasable wombat.  
And how best we can plan and act on this to ensure successful releases.**

*Stress from human imprinting and starvation appear to be the two most controllable issues that we have seen in releasing wombats, impacting how we raise our wombats. Other factors are predators such as snakes, dogs, goats, pigs and misadventure. And of course vehicle collisions.*

*Top Poppy surveys the world.  
Below; Supported Soft release pen  
Right; Main or release wombatorium*



By Dianna Bisset Feb 2017  
02 48435933 [rocklilywombats@gmail.com](mailto:rocklilywombats@gmail.com)  
[www.rocklilywombats.com](http://www.rocklilywombats.com)

## ***Stress: Humanising, imprinting and starvation***

Wombats can be easily humanised even as young as 8kg. It is then a long road to wild them up, if ever! Humanised wombats lead stressful lives as they have been trained to live in houses with people and then inexplicably are now not allowed to. When things get difficult out there in the wild, back they come if they ever completely left. It's too cold, too wet, too scary, and they're back, upset, stressed, cranky, angry and often aggressive, trying to get back to where they think they belong. Even if this was over 18 months ago and a different house and carer.

### ***They have been trained to fail in the wild***

They have starved, for fear of moving away from the houses and sheds, breaking in at any opportunity, scratching through doors, lived in and under buildings. Staying close to buildings to the point of starvation. We have had some at the remote release pen's ex-residents hanging around, getting very thin, afraid to venture far and we have had to continue support feeding with hay, grass and nuts for months and slowly wean them off.

They have inflicted terrible wounds on us, as they become angry when not allowed in. Imagine a 25 kg wombat wanting to be picked up, on his hind legs clawing and eventually nipping/biting when you won't.

To simply move them away to a release in a wild location will just be a slow and terrible death. But how many can we rear and rehabilitate?

Wombats as many other wildlife are easily imprinted by humans, so it's vital to their successful release to be mindful of this. Having a buddy as early as possible is really helpful in lessening their dependence on us.

Think about it, if the wombat sleeps on your lounge, with the kids, in the house for its life so far, this is what he believes is normal and it is his "burrow" and could reasonably expect to do this for the next 10 years! Why dig a burrow that often is wet and cold when he can have a warm bed, doona, food and tummy rub.

We have seen wombats starve, simply because they are too afraid to leave their burrow where they are released, and if available moving into or under a shed or house. The wild wombats and the big world frighten them, they have lost their comfy burrow.

Other issues is their gut flora. If they're not used to a diet of just grass, they are in trouble. The healthy wombat has 80-90% grass and minimal supplementary food.

Resilient wombats get fat quickly when released on grass, roots, bark, moss, selecting the choicest bits as they graze, moving off and only appearing occasionally on camera

It's very sad to see, a wombat failing to get on with life in the wild and a nightmare to attempt to sort out. Most carers would never know if they're not able to monitor what's happening to their beloved wombat once released. Out of sight out of mind?

Some, releasing from their properties are very tolerant of wombats living in their shed, coming for a visit inside with a cuddle on the lounge, or feeding in large groups near the house, as they just have not moved away, and will they ever? Is this really living wild?

***Long term this is not a solution for an animal that deserves the right to live a fully wild life with all its ups and downs.***

### ***Stress the silent killer:***

How will a wild wombat show it's stressed? Wild animals cannot show they are sick or injured as this will make them prey to those further up the food chain. So naturally they will look ok till the moment they drop dead.

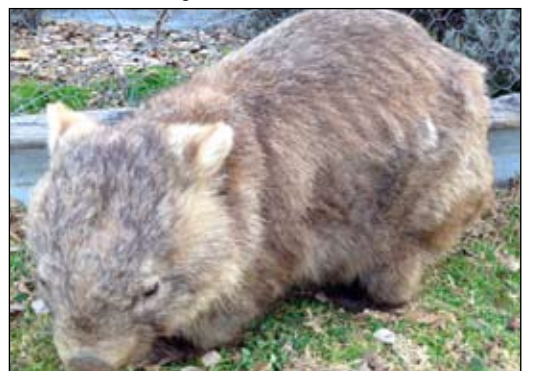
We have many cases of this, taking 'sick' wombats to vets whom check them over pass them as good to go only for them to die that night or a few days later. Vets are trained on domestic animal's who are more likley to show pain etc.



All he wanted was a cuddle, 12 mts after release.! Below warwick's shadow some days 18 mouths after release at 26kg



Below: Refusing to go further than sight of house or shed. Stress taking it's toll on him.





## Stress very much under rated in wildlife:

*Even if you have lots of experience with wildlife and had the animal in care for some time and you're really in tune with it you should or you might be able to tell if your animal is stressed.*

Generally you will only know a wombat is becoming stressed if it wants to stay hidden in its bag, fails to gain weight, gets the runs, bites and is aggressive, refuses to drink, hair loss, stays awake for long periods, or sleeps too much, gets death hollows (above its eyes in its head - obvious in unfurred joeys) also being out in daylight and other inappropriate behaviour.

Sometimes it's not obvious till he's suddenly 17kg and still behaving like he's 5kg and not becoming wild as he should. They are not something to keep the kids entertained with, they need to keep some wildness so it's easy for them to become the wild wombat they deserve to be. Young children should not be feeding wombats, inhalation pneumonia kills, they can be too rough quite unintentionally and must be supervised. Wildlife seem naturally afraid of young children and their sudden movements, another stressor.

**Will you realise if you're teaching it human dependant bad habits? So follow the guidelines.**

### Make sure your training them NOT to fail in the wild

Things that stress wombats: Strong smells, loud noise, TV, multiple caregivers or visitors, other pets, small children, infrequent feeding, being handled roughly, no proper place to sleep, no bag, living in your house, carted around like a handbag for show and tell. Kept with their natural predators so keep their noise and smells away from them. Snake's and dogs are their main predators.

### Stressed joeys if they get sick have a much harder time of getting better.

Many of these things you have control of. You might think it cute and funny great on facebook to have a wombat living with the family doing as it pleases in the house, but later on, poor wombat won't recognise the burrow as his preferred home, will want to be with you. He's become human dependant and has some bad habits that will need to be undone. I'm talking about wombats as small as 8kg up to 25kg that have come to us, pretty well ruined. They're in for a tough ride, and are not releasable until they have been retrained, which seem like it will take a few years, of stress if ever.

**Smells is a subtle one** - perfumes, after-shave, candles, room freshener, strong laundry powder, strong liquid soaps, strong hand sanitiser at rescue, become attuned to how many and varied the smells are in a house of today. What do you wash your wildlife bags in?

Remember they live in the wild, in a dark quiet burrow, and they're out with the sounds of nature (no you don't need to play nature cd's!) Please keep your animals out of your main living areas with the whole family, but not isolated in a room so quiet they feel alone. They're not show and tell for every visitor, they are not your handbag when you go out. Wombats are seen as a 'sexy' animal for wildlife caregivers and are in high demand. Sadly these tend to have the most stress and problems once they are reaching adulthood and release. Yes there needs to be an 'animal' room in the house, for when they are young or weather is extreme as you start to settle them into outdoor life.

New wombats are already stressed. They've just lost mum - that in itself, then being alone, and need introduction to you as mum in the gentlest way. All have different personalities, some more stressed than others. Be mindful of where it's come from and what your place is like. They are not something to keep the kids entertained with, they need to keep some wildness so it's easy for them to become the wild wombat they deserve to be. Don't pass them around even to other carers, it's stressful.

### Wombats 3-8 kg: Gradual adaption to outdoor housing now, reduce handling.

We develop ulcers when we are stressed, a small hole develops that gets larger eventually puncturing the stomach wall. We feel pain and do something about it. The acid in the stomach is protected from the stomach lining by the mucous, with a hole (ulcer small tear on initial orphan event?) the acid creates havoc in the stomach/ intestines / bowel. Often leading to death 6 weeks after they come in.

We have just had the sad case of a little wombat whom had 1/3 of it's stomach gone thru ulceration yet showed no outwards sign of pain, was actually given a full checkup by a vet 36 hrs before he had a grand mall fit and died. Necropsy (Animal autopsy) showed a terrible mess of puss, milk in the stomach cavity, etc Dr Howard Ralph was shocked, yet as any wild animal will do they will not show they are debilitated for fear of a predator having them for supper.



All he wants is to be inside on the lounge! a year later he just breaks in! lives in shed just sleeping on the floor. Out in day, following, wanting company and attacking everyone. Wombat sneaking up at midday!



A house pet, fed dogfood, never outside. took 6 weeks before eating cut grass, then further 8 months to eat growing grass. Biting towels in anger very aggressive.



Sarah 6 months after release, caught on wildlife camera

**Bags:** All wombats must have bags from the beginning. I cannot stress strongly enough how important bags are, they need to be always available to hop into and they make a much more secure wombat, happy to face the world.

When they first come into care at 100gms or 10kg right up to the time they move permanently into a burrow, or when they just stop using them, a bag should be available. They will quickly relax hidden in a bag. Feed better in a bag to start with and just hanging out in a bag seems very calming. The great de-stressor. Bags can be all sorts of shapes and sizes.

Don't be in a hurry to remove bags as they get bigger and appear to stop using them. I've found quite big wombats sleeping on their bag in summer or with their head in it on a hot night, it's a security thing, they lost mum so give them that.

Bags must increase in size so they can still use them, even a blanket sewn up and hooked up, they still crawl in when it's cold and wet and the wombatorium/ pen burrow is flooded, remember they would be sleeping next to mum so allow them this comfort for a more secure calm wombat. Box's with bags in them or small sheds are their temporary burrow's not your bed or lounge and house! A wombat inside without access to a burrow, bag and box can turn into a stressed wombat who won't know where he is meant to live, and is a real problem to release.

Hang the pouch where wombat can jump straight in if feeling stressed. It's easier to handle a wiggling wombat in a pouch or bag than on its own. Have winter and summer pouches. Hang a pouch inside a woollen bag hooked over a short wooden coat hanger, they can get into both if they are cold. There are any number of styles of bag or pouch from a sewn up thick vests, for winter and lightweight summer pouches made from cut off baby singlets and kids T-shirts. It's up to your imagination. Simply have a wooden coat hanger in the top, hooks over the rim or use various hooks in or on the outside of your box.

Bags can be made from many materials: Summer bags can be light cotton and used as inner bags as well. Think cut up pillowcases, sheets, baby singlets and T-shirts - sewn armholes and neck closed. Winter - vests and jumpers, sew up old woollen blankets or specially made bags they can snuggle into and peek outside. Hang using bulldog clips or wooden coat hangers, you can slip a woollen bag over the hook to give added warmth.

***Wombats do NOT belong down your front, a place to start to warm them up if an Unprepared rescue, but not warm enough for unfurred joeys and a way to humanising.***

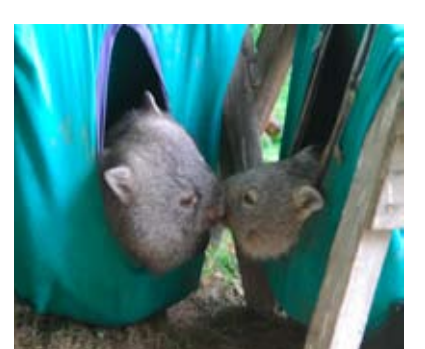
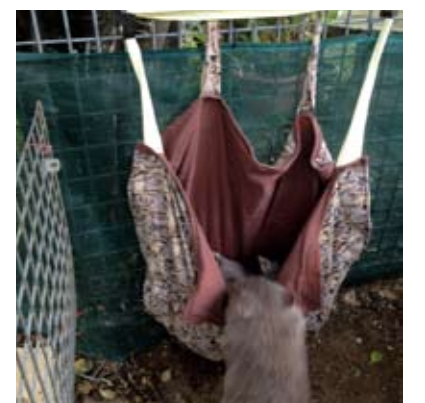
**Buddies:** Wombats need a buddy as soon as possible. This is one of the keys to helping them learn wombat behaviours and not become dependent on you.

Wombats are easily imprinted by humans, so it's vital to their successful release to be mindful of this. Our aim is to bring up resilient well-nourished wild ready wombats. Buddied wombats can be a happy wiggling playful tribe, a delight to see them playing learning together while you watch from a distance.

**Quarantine** your new wombats whether they are from another career or the wild for about 3 weeks to let you know if anything is wrong, you would want to see normal poo during this time, drinking well and acting appropriate for their age.

Buddies can be from 100gms up, it's not so easy to buddy once they hit 8kg but is doable with compliant wombats and taking your time. So, important to be looking for a buddie straight away.

Squeezing into one small bag is a clue they are buddies and need a separate big bag to sleep together, as well as at least one individual bag to start with or they just sleep in a pile in box or burrow. A 'wombat safe' soft toy might do as a surrogate buddy till you get one if wombat is unsettled. (No fur to chew swallow & block things up, no eyes that will come off etc.)





## Buddies cont :

Put bags side by side in their basket box or cot or for bigger wombats you might need to start with a mesh divider in your box, they can see and smell each other, hang bags side by side in play area so they can see each other. If it's not going well, just limit time together to reduce stress, and slowly increase.

Play attacking can be a bit rough to start with but they generally settle down and they become mates. They would be doing play attacking with mum. Are they drawing blood? Taking off bits of fur? Is it running away and hiding, not coming out looking stressed. You might need to sit in the middle and let them play around you and get to know each other. Increase time together gradually. Withdraw as soon as you can. Out in the wild it can be tough, they need to learn to defend themselves and not spend all their time hiding in a burrow or trying to break into the nearest building for human company and a bed or lounge to sleep on. If they target you with biting, attacking, push them away and speak firmly NO, yes they will and do learn not to be rough with you. Who needs 20kg 'play attacking'. So do as their mum would if she's had enough, some gentle redirection back to playing with their buddy. Get up and leave them to play with each other, you are not their buddy!

They are learning how to defend themselves and some of this is mating behaviour as well, Wombats have quite thick skin, it's no easy job to give them injections, so don't panic. Be mindful of any injuries they might already have that might preclude them from rough play. Sometimes missing fur is just how it is, we know Wiggles is still buddied up with Charlie girl over 18 months later, as he still has his patchy length fur from their play.

***It's often only your need to cuddle the wombats as they get bigger - resist for their sake.***

## Start being hands off, at the size they leave mums pouch 3 - 4 kg:

*I cannot emphasise this strongly enough. A humanised wombat is not releasable, we don't want them seeking out houses, and becoming a problem, probably shot or poisoned by an upset farmer.*

This is when they normally emerge from mums pouch. They really should have buddy/s by now. You might have to hand the joey to someone else so he has a buddy it's about the wombat's needs not yours.

Observe them playing with each other, resist the temptation to cuddle so much and take them out under the shade of a tree to experience some grass, and jumping in and out of pouch, and rumbling together. Make a secure place outside for them to hang in their bag, so they can start wombat life outside. Give them bigger logs, to play and chew with perhaps an old dog house to get out of wind and rain.

Once they are asleep after a feed, place them in their bag with their buddy, resist cuddling them once asleep now so by 8 Kg they are not played with at all, by all means watch them playing together and there must be a burrow to use.

This contact is at feed time only and kept minimal, you will still want to be able to handle them for medical issues etc for as long as possible. They are not toy's, pets or playthings and entertainment for the kids, consider a dog or cat if you feel you need this.

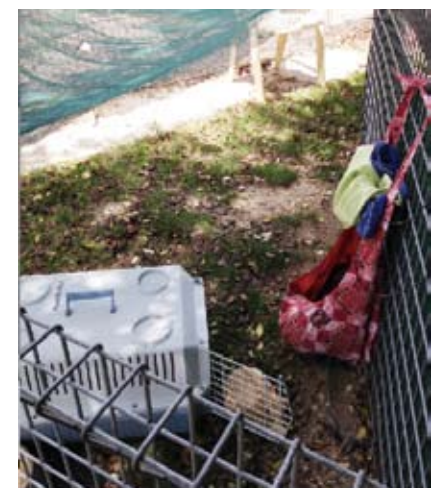
***They must NEVER sleep in your bed, or in the house anywhere but their Box, basket or cot enclosure. Wombats easily believe the house is their burrow!***



Meeting her new buddy at 8kg! Just took more time and care to achieve. Sat and looked safe in her bag, slowly increased till she wanted to come out



Old primary school fencing, shade cloth on sides and under fence to stop stakes and also for sun and eagles! Sit in a chair and read till they get used to the space, leave them out for longer, till it's all day. A pet cage old dog house is great place out of the wind or light drizzle. When it rains I use a tarp over 1/2 the enclosure, as long as they have a dry snug place. Hose down when it's hot.





## Baskets, Boxes and enclosures:

**What sized wombats can you keep? What will work at your place? The sizes below are from the wombat code of practice. They are a MINIMUM and as they get bigger personally I feel not big enough. The smaller the enclosure, the quicker they will eat the grass, and become board trying to dig out.**

Ideally we would have a wombat go thru just 2 careers before release. One career to a max size of around 5kg working together with the next career so they get wombats ready from the facilities they have. The second career with 2 sized outside yards. One for 5-10 kg with a shed or covered area for the box attached to secure yard with a burrow. Then there is the main large wombatium type enclosure. Eventual release not always from there but from a dedicated supported soft release enclosures. There needs to be at least 6kg difference at least if the second career has 2 groups of wombats so they can move up when the big wombats are released!

**Plastic rescue basket to larger basket** will work fine for a small wombat up to 600g on heat, not getting out of its bag yet. Kept somewhere quite away from TV, pets and children. Do not use solid plastic crates, they sweat, and are cold. Think about your daily clean-ups, wombats climbing out and falling. 'Warm a pet' for your heating supplies. Cuddles before and after bottles, once asleep put them in their basket, you need to let them sleep between bottles so they can digest milk and grow. Set up a routine, remember they are not pets, or the entertainment for children.

**Smaller sized wooden box or large covered basket** can be used as a wombat transport / hospital box as well as for when they are small and just starting to move around. Simple or fancy ensure there are plenty of holes, preferably mesh in the lid if used as transport box. Can be covered with a blanket in colder weather. Organise it so bag /pouch can hang inside for wombats to get in and out of. Inside still in a quiet room. Wombats 600-1kg (nursery sized) must be contained in a pouch and can be one or two wombats in a box 60 cm x 90cm. Use an appropriate heat supply. Personally I do not like waist high baby cot's, they are hard to clean, and the wombats are injured if climbing out and falling, catching their claw's in fabrics and breaking legs.

**The larger size box:** Wombats 1-3 kg inside house and must be contained in a pouch, in a secured, well ventilated enclosure (minimum 1200 mm x 1800 mm) So if your box its say 700mm wide x 700mm high x 1200 mm long you need to have an small fenced enclosure (inside next to box) the box flap opens into this for play to meet standards. Leave this open for unsupervised playtime during the day. With time outside with you under a shady tree, or with a shade cloth or fabric cover, the big wide sky is naturally scary as that's where their predators fly in from. (Crow's Eagles)

**Wombats 3-5 kg** kept inside in a secure, well ventilated enclosure 2.4 x 1.2m with suitable sleeping material such as straw (not hay because of dust) **Gradual adaption to outdoor housing now.** So moving box outside in a protected shed, veranda with pen attached. Recommend shrubs or shade cloth for areas of security in outdoor pens. If your house and yard is small making a portable safe enclosure that you can move around onto fresh grass can work, at this size they can dig out quickly and needs mesh floor around edges and overhead protection. You then have your large night box on a covered veranda or shed, preferable NOT in the house anymore. The box closely imitates a burrow and moves with the wombats till they move into their burrow permately.

Start walking wombats now at 3kg they follow and will allow them to graze and get to know the outside world. . Note walking wombats in forests, so feeling safe from predators (birds of prey). Have summer and winter weight bags in box, cover in colder weather.



Old clean dog kennel for wind protection shade cloth for share and predator protection





## Intermediate care enclosures for wombats of 5–10 kg :

The code of practice says : *Must have floor dimensions of at least 3.6 m long x 3.6 m wide x 1.2 m for one to two wombats and there must be access to secure outdoor grazing for a minimum of four hours per day. Intermediate care housing must contain habitat that enables the wombat to perform a range of natural behaviours. Wombats require bark, branches, rocks, stumps and dirt that mimic a natural environment. It allow them to dig! Burrows rarely come up as in an escape tunnel!*

This is for 1 or 2 wombats, but with the numbers of wombats coming into care, we are having groups of 3 or 4 wombats so would recommend at least 25m sq, the bigger the better, the longer the grass will stay!. We use the large box still for this size, in a shed attached to a smaller wombatorium allowing the wombat choice between burrow or box depending on weather, and if burrow is wet. When small you can lock them in the shed, especially if it's got a burrow where they can stay cool. Having a gutter feeding a water drum/tank with a water self feeder makes having fresh water avail easy, especially if the feeder is firmly attached to a wall with pip out of wombat range!

Consider using sloping land, just bury your fencing (free roller doors make it cheap and easy) up to 1m in the ground or if you cannot burry it have mesh at least 80cm inside and 30 cm outside from the wall, and attach the bottom of the metal non climb fence to the mesh skirting at regular intervals. Cheapest is \$50 for a 6m x 1.2m sheep mesh from rural suppliers. Roller doors from companies that install new ones . Primary school fencing needs corrugated iron to stop them climbing and is harder to make a snake proof enclosure.

Dig a starter burrow, and put a roof over it to help stop flooding, and provide shade. We converted old chook and milking shed's and ended up dividing the area in 2 to house more wombats. As the area was so big it's still 15m x 3.5 m each side.

Wombat box in shed with straw, large bail stopping draft into box door that end, bags still in box, it's a large woollen bag hanging on a hook. Box faces away from door in winter with more covers, draped over wombat door as well.



The temporary mesh divider was soon replaced with a non climb solid corrugated iron internal wall.



### Toileting:

Some do some do not, don't stress, don't over do trying you will give them a prolapse. Try a few times when there little. They like a dark place to hide to do their poo so provide this when there in and out of the pouch. Plastic tray of dirt with 1/2 garden pot. When bigger these big Ag 1/2 pipes work well, in a shed or in their enclosure.





**Wombats 10kg to Adults** : Code of practice says they must have floor dimensions 7m x 5m (35sqm) x 1.5m high fence and access to secure outdoor grazing for a min of 6 hrs a day. Small tree's shrubs and other local natural growth for wombats to learn natural behaviour. THIS IS TOO SMALL I FEEL

**Adults and sub adults:** Code of Practice says a minimum surface area 1 wombat is 20 sqm and 2 wombats 30sqm. Preferred 20m x 20m see more in the code of practice.

*Personally the bigger the better, you can section off area's to re grass, and gives room for a water system, trees for shade a number of burrows and plenty of room if you have a group of 4 wombats. If you have to you can divide it in half if need be. Your doing well if you can continue to walk them at 10-15 plus kg they love running off, but generally return. If their not walkable any more the wombat-orium is big enough to keep them fit and growing. Put grass small about of nuts in bird proof feeder in afternoon (solid roof for shade and rainproof when they are not up and use a wildlife camera to monitor them.*



Roller doors dropped into 1m deep hole in ground, overlaped and bolted together and backfilled. Rolerdoors come with handles and internal spring and pole needs removing, its scrap metal. Show your local roller door seller what and why you want them and they will keep them for you for free!



Bird and macropod proof self feeder with swinging wombat doors. Usefull inside and outside release pen's, move it slowly away into forest for suport feed. You can stand on it!



Hinged wombat flap for release, with simple sliding 18mm ply door lock. They broke all the sliding bolts!

Second hand carport roof for feeding and shade, large log to dig under play on, and a burrow cover. Between wombats it's re-grassed and weeded. Entry door big enough to slide a wombat box or trap in and out if. Plus closeable wombat flap for release. We should have put in a solid perspex window for wombats to see outside, would still keep enclosure snakeproof. Will do soon.

Sloping ground works



Enrichment toys



Self feeding water bowl water collected from roof, enough to water grass in dry times.





**Walking wombats** keeps them fit? And less afraid of the outside world. Start training them at 3 kg, be prepared to carry them back if they wear out. They can run off but generally come back.



## Dogs, Snakes, Cats:

Wombats should be fearful of all dogs, snakes and cats. They should be afraid of ALL DOGS and not at all used to their smell. You can still have dogs, cats or even snakes as careers – you're animal lovers so you probably do. They just don't mix them. Cats carry Toxoplasmosis death for wildlife and Snakes are wombats enemy's. Hence snake proof enclosures.

In the wild ALL DOGS, snakes and cats are a threat, how can your wombat tell who is friendly who is not. They are the normal predator. Keep your wombats well away from them in a separate room, Out of sight from pens and definitely away from constant barking. There is nothing sadder to see than a wombat run up to befriend a random dog, poor wombat won't have a long life in the wild.

The wombat code of practice states

***The failure to recognise pet species as predators will preclude rehabilitated fauna from being released into the wild.***

How do you know what happens to them, give them the best chance you can.

## Thoughts about large box's:

Doors on box's in the end or side? We find wombat doors opening down as a ramp work best. Depends how it works best for you in your house, make sure they fit thru door's and are on wheels with handles to lift each end . Slots added inside for dividing mesh when buddying up.

Two secure strong locks each end of lid, something to hold lid up with' so your not killed when it closes on you. Strong enough to sit on? Will big bulldog clips or coat hangers fit over edge so you can easily hang bags anywhere! And will it fit in your car or trailer if used to transport? We use 17mm CD ply strong enough not to need a frame, screw and

## Supported soft release pen

Designed to hold the wombat for at least a week, preferably 2 to be a refuge to come and go from as they find their place in the wild world. They dig out or open the wombat flap after 2 weeks. Camera inside pen, on the wombat flap and local unused burrows to see whats happening. External self feeder for released wombats and with a high water bowl for Roo's. Ideal for treating mange in dry area's and camera monitored. Brings local wildlife for wombats to see and interact with. Mesh on ground, wombat doors for release. Large size **at least** 9 m x 9 m to allow minimal feeding and for grass re growth. Starter burrow, roofed. Bird proof feeder small roof to feed a self feeding water tank. Wildlife cameras to monitor . Stays in position for some years wombats often return if injured and hopefully helped.



Releasing one group of wombats per summer. Support fed hay (teach them to eat hay young) thru the winter, wombat flap allows just wombats entry so grass can grow back. And be available for hungry released wombats. . Some thrive straight away on release others lose weight and need support for some months. There needs to be good grass avail for them and Dry hay if season is not great and water always available.



## Biolac feeding instructions. See separate wombaroo feeding instructions from Wombaroo

M100	16gms to make 100 mls milk	used on all furless macropods, wombats and koalas.
M150	18gms to make 100mls milk	should be used when dense fur has developed.
M200	24gms to make 100ml milk	used when the animal produces solid, dark pellet droppings.

General rule is feed 10% of body weight, up to a max of 15% **Over 10% must only be done in consultation with your co-ordinator**  
**Some wombats needs a little more than 10% especially in hot weather, this needs to be discussed with co-ordinator first.**

- 3 kg is where the maximum intake of milk stays at 300 mls per day maximum, water avail in bowl and increase in grass eating.
- 100 mls is the maximum in any one feed. New joeys coming in from mum will take some days to get to 10% per day, you need to stretch their stomach they were used to a constant feed. Never force milk into joeys mouth. **Try again later**, joey might just need to settle in your arms before a feed. *Keep to set times for feeding irregular feeding can lead to problems and a stressed joey.*
- Feeding often and regularly will give a sleepy well nourished and contented joey. Too little feed's and he's awake, fidgeting, getting stressed and not growing as he should. Too many feeds and joey won't have time to digest milk properly and get enough sleep.
- Joey will self wean anything from around 10-12 kg upwards.

**Slowly increase milk qty as joey grows each week so your always matching his weight with milk intake till 3kg. weigh twice a week when small to help you slowly adjust qty of milk. Just a few mls a bottle every few days.**

weight	200 gms	300 gms	400 gms	500gms	600 gms	700 gms	800 gms	900gms	1 kg
mls 24 hrs	20mls	30 mls	40 mls	50 mls	60 mls	70 mls	80 mls	90 mls	100 mls
feeds per 24 hrs	12 in 24hr exp carer	10 in 24hr exp carer	8 per 24 hrs	7 per 24 hrs	6 per 24 hrs	6 per 24 hrs	6 per 24 hrs	6 per 24 hrs	5 per 24 hrs

1.2 kg	1.4kg	1.6 kg	1.8 kg	2 kg	3 kg	4 kg	5 kg	6 kg	8 kg	10 kg	12 kg
120 mls	140 mls	160 mls	180 mls	200 mls	300 mls	300 mls	300 mls	200 mls	200 mls	100 mls	100 mls
4 per 24 hrs	4 per 24 hrs	4 per 24 hrs	4 per 24 hrs	4 per 24 hrs	3 per 24 hrs	3 per 24 hrs	3 per 24 hrs	2 per 24 hrs	2 per 24 hrs	1 per 24 hrs	1 per 24 hrs

### Handy Hints and what you need.

- Scales to weigh your milk about \$10 bargain shop. Needed for 3 weighings weekly then weekly weights of little wombats, so milk feeds are correct.
- Food wisk to mix milk - Jugs with measurements on side. - Bottle cleaning brush
- Bottles, I prefer glass as easier to sterlilise and see when clean - Assorted teat's silicone, as they can be boiled, and hold their shape and last longer, also easier to slip into unwilling mouths.
- Bags, lots of bags and small blankets, and towels etc.
- Heatpad with variable control and preferably with a additional inverter if you have power fluctuations.
- Inside outside thermometer \$10 from bargain shop. Allows you to see what temp your joey is if placed under joey, not in his inner bag as he will chew it.



Weight your joey to get correct amount of milk to feed.

### Mixing milk.

You MUST use scales to make milk. Try using a wisk to mix milk, don't froth it, just mix keep wisk in milk when stirring. NEVER use anything but cold or very mildly warm water less than 20 degrees. If the water's too warm, it will cook the milk and your animal will get nothing much from the milk, so will be thinner than it should be, not grow so well, be fidgety and not as happy and possibly runny poo. Always Keep milk powder dry and out of sunlight. Powder can be frozen if sealed well in 2 plastic bags.

- **add a small amount of cold/luke warm boiled water to jug and place on scales. (say 30mls if making 100mls)**
- **zero scales**
- **add milk as per what your mixing (say 24gms if your making 100mls of biolac 200)**
- **Stir in milk powder, without making lots of bubbles, airating it.**
- **add rest of cool water bringing milk up to the desired mark (100mls in total)**

Never heat the milk using boiling water, or hot water, heat it slowly with water at not much more than your body temp.

Wombats body temp is 32 degrees (we are 37 degrees) so something that feels warm to us is TOO HOT. test on yourself you should not be able to feel it, that will actually be warm for them

So making 300 mls biolac 100: 3 x 16gms (per 100mls) = 48gms powder mixed to make a total of 300mls

So making 400 mls biolac 100: 4 x 16gms (per 100mls) = 64gms powder mixed to make a total of 400mls

So making 300mls of Biolac 150: 3 x 18gms (per 100mls) = 54gms of powder mixed to make a total of 300mls

So making 300mls of biolac 200: 3 x 24gms (per 100mls) = 72gms powder mixed to make a total of 300mls



## Feed and growth chart bare nosed wombats

weight & age	feed amount for 10%	heat	stage of growth	milk
Up to 150 gms 3 months	Feed every 2 hrs Experienced carers only	on heat 32 degrees	ears fully unfolded lips still joined. hairless. . weighed daily rescue basket with heat.	Biolac 100
200 to 250gms 3.5 months	Feed every 4 hrs 20 to 25mls in 24hrs 10% is 6 feeds of 3 to 4mls	on heat 32 degrees	Fine fur coming.eyes opening stll attached to teat, hairless Experienced carers only weighed daily	Biolac 100
380 to 400 gms 4 months	Feed every 4 hours 10% is 6 feeds of 6.4 to 6.6mls	on heat 32 degrees	eyes open lips begining to seperate. Hairless. weighed daily. Experienced carers.	Biolac 100
500 to 600 gms 4.5 months	Every 4 hrs 10% is 6 feeds of 8.3mls to 10mls	on heat 32 degrees	fine layer of fur on underside of limbs, lips seperated not permately on teat. lower teeth erupting Basically still hairless, some colour showing, weighed 3 times per week.	Biolac 100
700 to 800 gms 5 months	Every 4 hrs 10% is 6 feeds of 11.6 to 13.3 mls	on heat 29 degrees*		Biolac 150
<p>Moving to larger basket still with heat if needed or small wooden box with holes. Hang as soon as possible in bag positioned so joey can get in and out as hes getting active. . Must be able to move away from heat, as they too hot = less fur</p>				
900 to 1kg 5.5 months	Every 4.8 hrs 10% is 5 feeds of 15mls to 20mls	on heat 29 degrees	fine fur about 1mm long over most of body, skin of nose and soles of feet still pink, first molars visible, upper incisors erupting. Head out of pouch occasionally not thermoregulating yet, Some fur up earlier. weighed twice weekly.	Biolac 150
1.2 kg to 1,4 kg 6 months	Every 4.8 hrs 10% is 5 feeds of 24 mls to 28mls have grass and dirt available	on heat 29 degrees / no heat		
2.2 to 3 kg 7 - 8 months	Every 6 hrs 10% o is 4 feeds of 25mls to 30mls Fresh water native roots, dirt and grass Maximum is 300mls daily	no heat	Fur thicker, premolars and second molars erupt.ventures out of pouch in burrow. Move to Biolac 200 when dark pellet droppings are evident. Water and grass and dirt available Weighed weekly.	Biolac 200
<p>Should be buddied up by now, so they have each other. Fur not dense enough if kept too warm. Be aware Animals coming in from colder area's will have more fur at an earlier stage. so adjust heat, soles of feet should not be red. Must always have option away from heat. Better they have a choice of hanging bags, ie a warmer one than too hot. Overheating is implicated in delevoping cateracts with some wildlife. Use towels or Straw (not hay too dusty) with newspaper under in box to collect wee/poo. Must clean out daily. Time outside on grass, under shelter of trees shrubs with you.</p>				
3 to 4.6 kg 8- 9 months	Every 8 hrs 10% is 3 feeds of 100 mls to 300 mls increasing weekly by weight <b>max is 3 bottles at 100mls.</b>	starting to take on short walks	Fully furred but rudimentary, Nose still narrow, ears appear too large for head out of pouch more often to fully out of pouch. Weighed weekly	Biolac 200
<p>Still in box and hanging pouch still available, access to grass and even burrow. Box Inside shed, allow to move back and forth from burrow outside area and box/shed especially in cold wet weather. Joey will eventually move completly into burrow. Time to start helping them become resiliant wild wombats that will cope in wild. Start reducing handeling. These are NOT house pets.</p>				
5.5kg 9.5 months	Every 8 hrs 3 x 100ml bottles a day	walks increasing in length to allow grazing , fitness and discovery of other wombat and animal smells. Becoming comfortable inthe wild.	Leaves mums poch permanently, soles of feet darkening, also skin on nose, suckles from elongated teat, stays close to mother eats more and more grass. Probably eats mums scats to establish gut flora. Moving outside now, with coverd burrow availabel Minimal contact just walks and feeds. weighed weekly.	Biolac 200
6.5 to 10 kg 10 months	Every 12 hrs 2 x 100ml bottles make large qty grass available fresh-water roots, dirt and burrow.			
11.3 to 16kg 12- 15 months	Every 24 hrs (Daily till weaned) now Self weaning 10-12 kg 1 x 100ml bottle only. Large qty grass and some medow hay available		Moved to large wombatorium by now Weaned during this period remains with mother for variable time after weaning. No real contact, just put feed in wombatorium. Weighed twice per month. Are they physically and behaviourly becoming suitable for release	Biolac 200
17 to 22 kg	Large qty grass & medow hay available		becoming indepenant soft release when wombat is ready. can take some time, weigh when required.	



# What do wombats eat? *Grass , dirt, rock's, bark, moss, grass and more grass.*

This should be 80-90% of their diet. From a bowl with clumps of grass with dirt and roots in with them at 1.5 kg, and up till release. Just be aware of weed sprays (can take 4-5 days to show signs) and toxoplasmosis and only pick away from built up area's and cats. Toxo lasts 18mths in the soil and can be washed into paddocks and creeks. Fence off an area and grow your own !

You will be picking big bundles of grass to feed your wombats, also ensure they have Gum tree branches with bark to chew and scratch and play with, give new branches often,

Feed Meadow hay, you can have this available under cover all the time, mouldy hay has toxins in it.. Feed only very small amount of nuts max 1/4 cup at 6 kg and 1/2 cup a day at 10kg.

**NEVER feed carrots**, it's used to bait bunnies and are even dropped from the air in parks.

It's useful to feed **Meadow hay** to wombats as this can be left as a support food under shelter in a release pen, especially over winter and in times of drought. Ensure there is no or minimum of lucerne (too much salistic acid) in the mix or hard sharp seed heads. Start feeding small amounts of meadow hay when you introduce fresh grass and you will find they wont be quite as fussy on the fresh grass and eat it when it's dried off, very useful in summer when they are released.

The only pellet we feed is "Xtra Cool " horse nuts in very small quantities. These are also handy in times of drought, at release of after wombats are no longer on a bottle to put medication on or even to be offered to suspected hand raised wombats to determine if they are. Wild ones wont generally eat them. Small amounts only. Wombats DO NOT need home cooked wombat biscuits or any other man made food this is lazy caring. When you see how they fatten up only on a wide selection of grass upon release.

## **Wombat code of practice states the following.**

A variety of native grasses should be offered to a wombat in intermediate and pre-release stages and should comprise the bulk of the diet. If supplementary feed (e.g. a pellet) is deemed necessary for recovery it should only comprise a small proportion of the diet (e.g. less than 20%). Products that mimic the nutrient composition of the wild diet as closely as possible are preferred (i.e. forage-based, high fibre pellets manufactured for native herbivores such as kangaroos with low- moderate protein (less than 14%) and low Vitamin D levels). Foods such as dog biscuits, oats, muesli, sweet potato and other high energy foods should not be given as they do not mimic the wild diet and as such do not promote normal dental wear and the development of normal gastrointestinal and nutritional health.

**Bottles and teats:** There are many types around, the neoprene at 50c each that don't last long ad Silicone, 2 main brands Burston Blue and Critter teats. I just cant get Burston blues on bottles, hands are getting stiff. We use the critter teats here. Pointy teats are good for getting into a closed mouth, shorter teats are good if they chew, wont reach the molars so easily. Glass bottles are preferred, you can see when they are clean and no built up residue like in plastic. Do not restrict yourself to teat's labelled for 'wombats' as my favourites are often macropod teats. Trial and error!

Burston blue teats from [www. maroowildliferefuge.com](http://www.maroowildliferefuge.com)

Coloured teats are Helen's (QLD wildlife carer) ' baby critter teats' silicone, \$4 ea bottle brsh set \$3 and bottles 25 ml round 50 mil flat 100 ml flat  
Contact helen on 07 4789 0573 or message on facebook ' baby critter teats'



**Wildlife camera's** Are an important aid in wildlife caring. You do not need to spend a lot around \$130 will get you a great camera. The features you are looking for is a quick time for shutter activation. .035 second is about the best at \$500 but .08 works really well, you just need to be clever in camera placement. Black light is a big thing, this just means people cant see anything. Normally a small red light comes on when a photo is taken, this isn't a worry to wildlife buy if your afraid people will see and steal the camera then that's what the black light is designed for.

**This guide is only intended as a supplement and hopefully thought provoking document in your increasing knowledge and skill in the care of bare-nosed wombats.**

I recommend Linda Dennis 'care of bare-nosed wombats' care guide free down load from her web site [www.fourthcrossingwildlife.com](http://www.fourthcrossingwildlife.com)

**Please refer also to the code of practice for injured and sick and orphaned wombats by The Office of Environment Oct 2015**

Copyright no part can be copied scanned etc without prior permission Raising Resilient Wombats By Dianna Bisset 2017