

A Guide To
Handrearing
The Bare-Nosed
Wombat

By
Linda Sauvarin

A GUIDE TO HANDREARING THE BARE-NOSED WOMBAT

INTRODUCION

My name is Linda Sauvarin and today I have the pleasure in talking to you about my favourite of all our Australian Marsupials – The Bare-Nosed Wombat.

The Bare-Nosed Wombat, or Womie, is the most enchanting, bewitchingly naughty, destructive but most delightful joey to rear.

It is most important to remember that these notes are only a guide and should be used as such.

If you are ever in any doubt, when you receive on of these orphans into care, please never hesitate to contact **9844-5304** or **0418 537 506**. I am always available to help 24/7.

Little pink wombats need intensive, specialised care and really should be passed onto an experienced carer used to catering for all their specific needs.

Also remember that an undisturbed environment is essential during the critical first weeks that you have your new orphan in care. Stress alone can kill our native wildlife. Please keep your joey warm, dark and quiet, away from small children and very unsettling household noises and most importantly **ENJOY!**

ESSENTIAL EQUIPMENT FOR RAISING PINKIE WOMBATS

MONEY TREE!!! Up to \$400.00 in Formula alone

Very accurate scale (1 gram increments) Phillips Precision \$60.00

Electric Heat Pad (Riviera \$120.00 or Wombaroo \$50.00)

Temperature Alert (Dick Smiths \$25.00)

AC Power Inverter (\$80.00 Tandy)

Wheat Bags (for use whilst feeding)

Several Rio Picnic Baskets \$10.00 with Woollen Blanket inserts

Formula

Oral re-hydration fluid (Lectate or Vytrate)

Various sized Feeding Bottles

Teats (Wildlife Vic, Biolac and Wombaroo approx \$0.80c – 1.00 each)

Syringes (Basik – made in Denmark) 1ml, 2.5ml and 5ml (Order through vet)

Pouches (Wool), Flannelette Blankets (all various sizes and copious quantities)

Porta Cot or equivalent \$120.00

Strong Cage for transportation (Galvanised Dog Transport Cage-The Warehouse \$69.99)

A GOOD VET or ready to learn with you

ORPHAN COMING INTO CARE

Is your new pinkie orphan a Wombat? I have received many calls over the years from members of the public, shelter operators and foster carers very excited about their new orphan. However, after a brief discussion it is realised that the orphan is a rabbit not a wombat.

Distinguishing differences:-

WOMBAT

Pink

Ears small and flat

Tail (cone tail)

Rear feet (grooming claws)

RABBIT

Grey tinged

Ears considerably larger

Tail (flat and curled upwards)

absence of grooming claw (more defined padded rear foot)

Wombat joeys, in my experience, are always found with their mothers. Rabbit babies are often found in the middle of a paddock. Pink wombat joeys are unable to thermo regulate, rabbit babies are often quite warm to touch.

WARMTH

As all pinkie/unfurred marsupials cannot thermo-regulate (maintain their body temperature), they need a constant source of warmth.

An electric heat pad is ideal for this. Cover, with layers of blanket, and place pad in such a way as to provide a constant temperature, checking that the wombat is comfortably warm to touch (I use my lips against the orphans skin to check body temperature), not particularly scientific, however, it works for me. Keep checking (every 10-20 mins. Approx.) until you are sure the wombat is warm, allowing for variations in room temperature. A comfortably warm joey will be palm coloured (including soles of the feet).

A wombat's pouch is approximately 34-36 degrees C, any hotter than this and you might over heat your joey resulting in brain damage and probably death. I cannot stress enough how important the joeys temperature is and how difficult it is to maintain. Regrettably, many shelter operators can vouch for this. An overly warm or cool day, air conditioning, central heating and/or floor heating may also affect the temperature of the joey.

A temperature gauge is available from Dick Smiths called a "Temp Alert" retailing at approx. \$25.00. Many Wildlife Shelters use these successfully.

Always remember that it is better to under heat rather than over heat.

A soft flannelette baby rug is ideal to wrap the orphan in, followed by a soft bunny rug. Then place the joey in the substitute pouch, preferably made out of wool (synthetic fibres don't breathe and may promote fungal infections of the skin).

In my experience wombat joeys start to thermo-regulate between approximately 600 and 800 grams. Some of these wombats will have a good covering of fur – most will not (some are 2 kgs before their fur is “looking good”). I recently saw a 350 gram pinkie that was virtually fully furred. However, as the joey develops, the need for heat will be reduced. Constant vigilance is required. Remove the artificial heat source as soon as possible as this reduces the possibility of overheating and the joey will “fur up” better.

SKIN CARE

A pink furless wombat has skin that is very soft, transparent and very easily damaged. A lubricant will need to be applied to prevent the skin from drying out and to keep the skin soft and pliable.

There are several things you can use:-

Lucas Papaw ointment (very easily softened and warmed to skin temperature for easy use)

Pure Sorbolene (with no artificial additives or perfume)

Common sense should be used in how often this needs to be applied (usually once or twice daily), and once the wombat has a smooth covering of fur (a lubricant) won't be required.

I like to have a spare Rio Basket on hand when I am raising “Pinkies”. In this I have a heat pad with copious quantities of flannelette squares, woollen pouches and my pawpaw ointment. The heat generated from the heat pad keeps the pawpaw nicely melted for immediate use as well as all the spare “linen” pre-warmed for the “pinkie” for use when required!

MOTHERING

Mothering in the early stages is essential. Your orphan needs lots of gentle, quiet cuddles and attention, to simulate his relationship with his own mother. These can gradually be reduced as he grows and becomes more independent and more bonded to his companion wombat**. The length of time this all takes varies. For a wombat from the furless stage through to independence can take up to 2 – 2 1/2 years.

**** This raises the issue of one of the most important aspects of wombat rearing. They ideally should be paired. This enables them to bond with each other and reduces the orphans' dependence to their carer. When paired the wombats appear to be less stressed – more content – and seem to develop far fewer problems than those raised**

on their own. Their rehabilitation and final release is also greatly advantaged. Pairing is ideally achieved with another individual of approx. Same development or give or take 500-800 grams. Sex doesn't particularly matter. **.

One aspect of mothering which may or may not be necessary is stimulating your wombat to urinate. If stimulated they often pass faeces at the same time. Most joeys do this spontaneously, however if your new orphan is dehydrated and/or stressed, it may not pass urine for some time. If this is the case, after two **successful** feeds you may need to encourage it to urinate. To do this the fur around the rim of the cloaca may be gently tickled until urine is passed. A very soft damp cloth may facilitate this. Do not use any force or try for more than a few moments as this may cause a prolapse to occur. If no urine is passed after this brief attempt; try again after the next feed. In my experience our very young orphans find this whole process very stressful. (Their paws often indicate stress by becoming bright red in colour. Their paws should be palm coloured).

Most "pinkie" wombat joeys will back their rear end out of the pouch to urinate and defecate. When encouraging this, support the joeys' legs and gently blow on the cloaca. Urination and defecation is usually spontaneous.

For the older orphan that is climbing in and out of the pouch, you can encourage them to urinate outside the pouch, either on a newspaper or leaf litter in a tray or in a safe area outside in the garden, several times a day. This saves an incredible amount of washing, as all your orphans bedding needs to be changed when wet or soiled to prevent the warm, moist conditions that fungal infections thrive in. the hygiene aspect must also be considered too.

FEEDING

PATIENCE AND PERSERVERENCE is required for the first few days. Wombats (even little pink ones) are very strong and determined and may even require "blind" (coving their eyes) feeding for a few days. Remember also, your little orphan will "feel" YOUR stress.

I also can't stress enough on how slowly I feed these little orphans. It might take 10 minutes or so to feed 1 ml of formula initially. It is possible to move the plunger on the syringe so slowly that it is not visibly moving to your naked eye!

When feeding pinkies (approx. 60 grams to 150 grams) I use a cut off neo-natal feeding tube (made by Kendall – Argyle No: 5 or 8) attached to a 1 ml, 2.5ml or 5ml syringe (Basik). I only use Basik syringes as they are the only ones that are consistently smooth in their operation. With other syringes the plunger will stick or jump resulting in the aspiration of your orphan and probably death.

Very small wombats will often have their mouths fused at the sides when they come into care, making feeding extremely difficult. This is because they are under developed and have permanently attached to the mothers' teat. This fusion usually separates after a few days, probably because they joey starts exercising its jaw (yawning).

Once the fusion has separated, and the wombat is larger probably approx. 150 – 200 grams, I then use a Mothering Teat (Mikki – purchase through Wildlife Vic) attached to the syringe.

Between 400 and 500 grams I transfer them onto the bottle with a rubber teat (possum, wallaby or small wombat). Once the wombat joey is sucking the use of the correct teat is essential. It is the correct length and texture to enable the wombat to take it as far into the mouth as required, pressing it against the roof of the mouth without damaging gums or teeth.

Remember, always place the feeding tube, mothering teat or teat attached to bottle or syringe above the wombat's tongue. Positioning is very important so as the joey can suck efficiently. If positioned incorrectly the milk will either run out of the side of its mouth or it will be unable to suck.

With the larger wombat joey, it may be easier, for the first few days to feed your orphan with a longer kangaroo teat, very **gently** squeezing the bottle so there is just enough milk to satisfy the wombat. Gently rocking or giggling also helps the orphan to relax whilst feeding.

Before feeding can be attempted your joey (pinkie or furred) must be weighed. I use Phillip Precision Scales. They are 1 gram increments and weigh up to 5kgs. They retail at approx. \$60.00.

Amount per feed varies according to age/weight of the wombat. A guide that I have used (when using Digestalact or Biolac) is to feed to 10% of body weight to sustain life and 15% of body weight for growth and development – then converted to mls per day. I like to weigh my pinkies daily and larger joeys every week thus checking growth and then being able to increase volume accurately.

If using Wombaroo follow the instructions on the label.

For a 1 kg Wombat (using Digestalact or Biolac):

10% of Body weight is 100 grams + 5% of Body weight is 50 grams = 150 grams total
Convert 150 grams to mls = 150mls and that is the total amount of formula required per day then divided by the number of feeds 5 = 30mls per feed every four hours or so.

FORMULAS

There are several low lactose formulas available that have been successfully used on Wombats.

Digestelact (Human Formula)
Divitelact (Animal equivalent of Digestelact)
Biolac (M100), (M150) and (M200)
Wombaroo <0.4, 0.4 and >0.6

I have used **Digestelact and Biolac** as formulas for my **pinkie** wombats, with 100% success. Using Digestelact and Biolac also reduces the need to supplementary feed lactade or equivalent to re-hydrate a dehydrated joey as re-hydration is achieved simultaneously. I have **NEVER** had to sub-cut a wombat (pinkie or furred) for re-hydration, therefore reducing stress and discomfort to the joey.

Digestelact

The strengths used to make up Digestelact alter as the joey grows and develops et:

All pinkies to just furring – 1 scoop to 70mls water – increasing to 1 scoop to 60 mls after 48 hours (adding 1 drop Fish Oil (Omega 3), Flaxseed Oil or Canola Oil) to every or every other feed.

1kg – 1.5kg 1 scoop to 50mls

2.5kg – 3kg – 1 scoop to 40mls

Biolac

M100 is used for all pinkies up to approx. 1kg in weight (add 1 drop fish oil (omega 3) for every 50ml)

M150 for joeys 1kg to approx. 2kg in weight

M200 for joeys 2 kg and over (with dense fur and eating solids)

Wombaroo

As with Biolac there are three different milks available in the Wombaroo range of Wombat replacement milks:

<0.4 early lactation (pinkies)

0.4 mid lactation

>0.6 late lactation to weaning

When using Wombaroo follow the instruction booklet for transition times – available from Wombaroo.

When making up formulas always use pre-boiled water, strictly adhering to the manufacturers' directions for dilution rates as shown on the labels. Always warm your wombats' bottles to blood temperature (as you would for a human infant). Please don't microwave the milk formula as this process destroys some of the nutritional content of the formula and could scald your joey.

From 1.5kg onwards is the time that the orphan is beginning to explore its environment, regularly coming out of its pouch and beginning to play, consequently needing more food, calories.

It is very important to maintain high blood sugar at this time because in the past we have had our joey wombats FITTING (not a pleasant experience). Very distressing for both orphan and carer.

If using Biolac or Wombaroo the formula is modified to cope with growth so follow instructions on the labels religiously.

If using Wombaroo, in very hot weather a little boiled water between feeds could be of use.

If using Digestelact/Divetelact then additives must be used. For example when making up Milk Formula **gradually** include a teaspoon of High Protein Baby Cereal per 100mls of Milk Formula, also adding several drops of Canola Oil/Flaxseed Oil.

FREQUENCY OF FEEDS

There are no set guidelines; it all depends on the size and development of the pinkie. However, regardless of the weight, I will feed a “new arrival” on 1, 2 or 3 hourly regime until the joey is stabilised and drinking the full amount of formula each day.

These little pinkies would only be receiving a trickle of milk at a given time from their mothers teat, so time and patience is required to build them up to our full amount of formula over a given 24 hour period.

I prefer to take them very slowly and feed them more often until they are stabilised. When they are stabilised and drinking the full amount of formula I usually use either a 3 hour or 4 hour regime over a 24 hour period. Once they are furring up I would normally do away with the 2am feed and give their tummies a rest period.

HYGIENE

As with all Australian Wildlife a very strict regime is essential. Cleanliness is of the utmost importance – remembering that in all pinkies their immune system has been compromised.

Prior to every feed wash hands thoroughly with soap and water, rinsing carefully.

Immediately after every feed, wash and rinse bottle thoroughly in cold running water, then wash bottle and teat with warm, soapy water and rinse again so that no soapy residue is remaining. I then scald them with boiling water. Bottles and teats may then be store in an air tight container in the fridge until the next feed. You may prefer to use a sterilisation solution such as Miltons or Johnsons. Follow their directions, however, always rinse thoroughly before use.

In the laundry I use “Purity Sensitive” washing liquid after all the “linen” has been Napisaned. This product leaves no harsh chemical residue or perfumes that could irritate a pinkies delicate skin. It is manufactured for human infants through to adults with sensitive skins, is perfume free, enzyme free, phosphate free, dye free and uses no animal ingredients.

HOUSING

My very small pinkie wombats are always kept in a Rio Basket until they are approx. 600 – 800 grams, after that time I like to use a Port-a-Cot with hanging pouches positioned so if someone goes “walkabout” they can easily access a pouch quickly.

By the time they are 2kg they are beginning to explore outside the pouch on a more regular basis. I do like to provide a “teddy” to climb on and perhaps a small log of wood to chew on. At this stage of their development we also have playtime on the floor – very closely supervised. Wombats are extremely adventurous and exuberant in the “play”.

By the time my wombats are 6-8kg they have usually worn out their welcome inside at night. We have all heard about that thing that goes ‘bump’ in the night – well usually a wombat – consistently going bump!!! So my wombat are usually sleeping in an outside pen (or in the garage) depending on the weather (still with lots of inside playtime) but for us, there are not so many bumps in the night.

INTRODUCING SOLIDS

From 1.5kg onwards is the time I like to start introducing solids.

I like to start with fresh grass. Introduce a small amount, preferably with the roots that still have some dirt attached. This helps to develop and maintain a bacterial level in the gut and allows the wombat to digest its food properly. A small amount of “Inner Health Powder” also assists this process.

Too much fresh grass can cause diarrhoea, so take care not to offer too much too soon. Pick the grass 24 hours prior to feeding as this allows some of the moisture to evaporate – as damp, wet grass can also cause diarrhoea.

Peg the grass on the pouch and your orphan will soon show some interest. As he adjusts to this new food in his diet, gradually introduce small amounts of hay, horse Thurra, unsweetened muesli, cooking oats, apple, clover flowers, carrot and sweet potato. Wombats also have a passion for bamboo leaves!

At this stage take great care that your wombat doesn't ingest foreign substances like carpet, newspaper, as these can cause blockages. It is not necessary to add any vitamins or minerals to their diet – in fact that may lead to problems.

GAINING INDEPENDENCE

By this time your orphan is fully furred, maintaining its own body heat, eating a variety of foods he is ready to experience life in the outside world. One warm, sunny days you can place the pouch outside in a safe area, staying with the joey at first, but gradually increasing the time and leaving the joey for brief periods. A sheltered wired-in enclosure with sleeping quarters is an excellent half-way situation. I believe that a concreted floor is also a good idea (in suburbia), very wombat proof! Always have a pouch available. Even for well grown wombats, their instinct tells them that this is their safe, secure place. In time they will be able to leave the pouch and graze quite happily for longer and longer periods, until a pouch is no longer necessary. Then they will enjoy a hay lined shed at night. Make sure your wombat is safe from predatory animals alike neighbouring dogs and foxes. Place some logs of wood in the enclosure for the wombat to chew, claw and rub up against.

WOMBAT ENCLOSURE

To make a wombat-proof enclosure, wire should be put about 30cms under ground and then about 40cms at right angles back into the enclosure and then covered with a deep layer of soil. A suitable fencing material is the pool type fence that wombats can't climb or an inter-locking wire variety!

Fortunately our Bare-Nosed Wombat usually only digs a one entrance burrow so they rarely escape via their burrow within the enclosure.

PROBLEMS

Wombats do appear to present with various ailments, however, they are hardy, robust animals and invariably these health issues are quiet successfully treated. Only a few of the more common health issues are listed below.

BLOCKED NOSES – Not a particularly technical description, however, all my pinkie wombats appear to suffer from this. A small amount of warmed saline water dabbed on the nostrils will moisten the dried mucous which even a very small pinkie will then sneeze out. (Don't ever pick at their nostrils – just purely loosen the dried material for removal).

ALLERGIC REACTIONS – Over the years I have had several pinkie wombats suffer from allergic reactions (to what I have never established). They very quickly present with red welts and liquid filled blisters over their entire bodies and are overly warm to touch. A sodium Bicarbonate sponge bath seems to rectify the problem very effectively. I use 1tspn of sodium bicarbonate to 100mls warmed water.

Remember the warmer the pinkie is the more it will scratch, however, a pinkie must be kept warm, a real catch 22 situation.

A larger wombat could have a Cortisone injection with possibly some anti-histamine (Histanol) to alleviate the problem.

FITTING/NEONATAL HYPOGLYCAEMIA – lowered blood sugar/glucose level. Usually believed to be the reaction of pouch young that are used to living in a temperature controlled environment (pouch) with food on demand (teat) being thrust into fluctuating temperatures (our home), intermittent feeding and all the other stresses associated with being orphaned.

Regular feeding 4 – 5 hourly, stable temperature control and peace and quiet usually helps. Supplementary feeding between Milk Formula feeds with a glucose solution will usually help and the orphan appears to grow out of this problem.

MANGE – This is very common occurrence in wombats of all ages. It is caused by the SARCOPTIC MITE. It tends to attack animals that have a reduced immune system. This mite causes severe eroding of the skin with redness and huge scabs eventuating in alopecia (hair loss), ulceration and an ever persistent itch. The wombat will become blind and be quite deaf. The animal becomes severely debilitated, emaciated, flyblown and usually has pneumonia. This is the same mange that affects Foxes.

Treatment can be very effective if the animal is young. Use ‘Revolution’ systemic ‘spot on’ solution after a wash to remove the scabs. The mites die and the scabs eventually drop off. If the wombat is fully grown, wild and in the advanced stages of mange, it is strongly recommended that the animal be kindly euthanased.

HYPOTHERMIA – lowered body temperature/excessive heat loss/inadequate heat production. Possible causes: pouch young unable to thermo regulate, inadequate supplementary heat, exposure, shock, infectious disease.

Primarily warm the animal, then look at the other causes and if infection present seek veterinary assistance.

HYPERTHERMIA – excessive heat absorption or heat production. Possible causes; pouch young kept too warm/heat pad too warm or artificial pouch too hot and stress. Larger wombats possibly stress, over exertion or bacterial infection.

Best treatment to lower body temperature quickly with wet towels or similar – remove from heat source and if needed immersion in tepid water. If bacterial, veterinary assistance will be required for antibiotic treatment.

DIARRHOEA – Loose droppings come in a variety of shades and textures. A general rule is that if your wombat has loose droppings but appears bright, active and retains their

appetite, it may be related to a change in their diet or environment and will probably rectify itself quickly. However, if your wombat refuses his bottle, appears lethargic (tired) and feels cold (hypothermic) and is passing offensive liquid – you probably have a major problem needing veterinary assistance.

Is it a management problem (stress, hygiene) or an infection problem (bacterial/viral)?

Diarrhoea is by far the most common problem with hand raised wombats. There are many reasons for this, often involving a combination of causes.

Is it stress – being newly orphaned, handling by humans and change in environment or just purely diet related? It can usually be corrected if you follow the guidelines already set out in these notes. However, diarrhoea may also indicate serious fungal or bacterial infections where only the expertise of your Veterinary Surgeon can assist. Make sure you take a fresh, sterile faecal sample with you.

A joey wombat only receiving milk formula usually passes mustard coloured paste, gradually forming small pellets. Once they are eating grass and other solids the droppings formed are dark and firm (pellets).

CONSTIPATION – can occur. Best treatment is Tympanol, giving one to two mls daily.

INTERNAL PARASITES/WORMS – symptoms often include diarrhoea, lethargy and failure to thrive and gain weight. Faeces may appear as gritty.

Always get prognosis confirmed by your Vet. Best treatment is Panacur.

RINGWORM – (external fungal infection) Orphan will present with red, circular, itchy patches on skin. Hair loss is present. Veterinary treatment is required. Best treatment Lamisil cream (very expensive and used over a long period of time).

THRUSH – Thrush (a fungal/yeast overgrowth) is a common problem in orphaned young especially following antibiotic treatment which kills intestinal bacteria.

Wombat may present with greyish/white patches affecting mouth and throat. In advanced stages may also present around the cloaca. Your baby may be reluctant to suck and there is sometimes a rusty stain around the mouth. Faeces may become green, loose and smelly.

Best treatment Mycostatin Oral Drops or Nilstat Oral Drops, which are quite palatable (cherry flavour) given 3 times a day for 7 – 14 days. A rapid improvement will be seen, however, always finish the entire course, as with all drugs, or a relapse will occur.

PNEUMONIA (aspiration/bacterial) – This is a very common problem with our orphaned joeys. This is usually due to unskilled or impatient feeding techniques. Joey will present with laboured (raspy) breathing, there may be a cough or a clicking sound in the back of the throat, or sometimes milk appearing out of the nostrils after feeding. Breathing will deteriorate as the condition worsens, hyperthermia or hypothermia may present, joey will become weak, listless, go off all food and sadly die.

Don't delay with treatment (time is the essence), antibiotics must be administered quickly (I like Baytril IM, however, Clavulox and Amoxil (orally) are also often used).

Aspiration Pneumonia – Care when feeding and knowledge. Bacterial Pneumonia – hygiene.

CONCLUSION

The success rate of rearing or orphaned joeys is as circumstantial as rearing any other marsupial. Orphaned wombats are often rescued by individuals with little or no experience in caring for native animals, so many do not survive. If you are ever in doubt regarding any aspect of care for your orphan, please never hesitate to seek help as soon as possible.

Very small wombats of about 60 grams have been successfully raised by experienced carers, although it is possible to raise even smaller ones (37 grams), so if in doubt, contact should be made with a more experienced carer, when one of these “pinkie” joeys comes into care.

Rearing an orphaned wombat takes a great deal of time and expense involved is considerable, so decisions have to be made as to whether you are able to make this long term commitment (up to 2 to 3 years). If not, help is only a phone call away.

ACKNOWLEDGEMENTS

A huge thankyou to Clare Davis, my dear friend and mentor, for all her assistance, over the years, with all my Wombats.

If any further information is required I am only too happy to assist or supply the number of someone who can.

LINDA SAUVARIN (03)9844-5304 or 0418 537-506

FURTHER READING

“The Wombat” by Barbara Triggs

“Dairy of a Wombat” by Jackie French

“The Secret Life of Wombats” by James Woodford

ON A PERSONAL NOTE

My great love affair with this most enchanting, bewitching, uniquely Australian Marsupial began when I was six years old when I announced to my family that I was going to look after these animals, after watching a program on Healesville Sanctuary. They all sniggered! Some 30 years later my dream became a reality and many womies wiser I am still smitten and my fingers go quite graspy when I hear the word “**WOMIE**”.