

ATTAINING VICTORY FOR PHASCOLARCTOS CINEREUS VICTOR

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For the past seventeen years I have accumulated information first hand by working with the Victorian koala (24 hours a day, 7 days per week) as well networking statewide and nationally, with all associated with this iconic animal.

They are a truly fascinating species to care for, to understand – responding well to familiarity, routine and motivational techniques. Their problems are cryptic and the outcome can be quiet unpredictable. Patience, persistence and consistency is required with the care of a koala.

They depict the qualities and size of a 2 year old child – with a non threatening, helpless, curled up disposition.

The koala received its scientific name in 1816 from the French naturalist de Blainwill, *Phascolarctos*, from the Greek words for 'leather pouch' and 'bear'. German naturalist Goldfuss later, gave it the specific name *cinereus*, meaning 'ash-coloured', which was after the colour of the original specimen. Subspecies *Victor* (Troughton, 1935) derived from Victoria.

A healthy Victorian koala should present with grey fur. Unfortunately being a wildlife carer operating a busy, established koala hospital, mostly, we deal with unkempt brown furred koalas that under our exceptional care do moult and gradually develop lush, grey fur.

Victoria's koalas are renowned for being genetically inbred as an indirect result of the fur trade that almost diminished the mainland population. Where, in order to repopulate the mainland, a handful of individuals that had bred up on the islands (French Island, Philip Island, Snake Island, and Raymond Island) were re introduced to various regions in Victoria. Constantly we now see genetical issues as a result of inbreeding (*reduced genetic diversity and vigour*), arising from these populations, with a number of the issues still awaiting proper diagnosis.

Translocation in Victoria today is no longer successful; it proceeds with a high morbidity, death rate. This ill fated result could be due to the process, selected habitat, or disease. We know first hand though that the current methodology is set up for failure. Past management practises have only continued to contribute to the decline and disturbance to the existing population with the transmission of genetical and bacterial problems from the islands to the very fragmented mainland.

Our only exception is to the genetically unique Strzelecki/South Gippsland koala, that in appearance is larger, heavier, muscular, solid and robust and respond well to treatment. They are not as readily stressed as the Island koalas – with a strong fight and immune response although it struggles with what minimal habitat remains – trying to co exist with fire, mining and tree harvesting, leading to disease and renal failure.

We already suspect genetical issues occurring within the Strzelecki population e.g. spinal scoliosis, and we are observing areas within the Strzelecki/South Gippsland boundary where localised extinction is occurring, due to habitat fragmentation as a result of urbanisation, tree felling, and climate change leading to poor quality habitat/feed source.

These individuals however do take priority in our care regiment.

Eucalyptus – hard labour

One of the most strenuous physical aspects of caring for koalas is providing their twice daily feed source of fresh eucalyptus leaves/branches. Koalas visit trees less frequently if foliage contains either high concentrations of deterrent PSMs (*formylated*

phloroglucinol compounds), or low concentrations of nitrogen. Consequently, plant chemistry restricts the use of trees by this herbivore, and thus limits the food available to koalas and potentially influences koala populations. Therefore it is important we offer a variation of gum, and that koalas are released back to the site where found or released where we know they will readily eat the eucalypt. We ensure leaf is checked for any hosts e.g. ticks, spittfires or caterpillars which could cause unnecessary injury to either the distributor or the koala.

Just like humans, koalas have not only unique fingerprints, but unique palates - with individuals favouring certain gums over others. It is also interesting to note that although koalas might have limited choice given their home range, that it doesn't deter them from altering their preferences when given the option. For instance French Island koalas, which during their short island lifespan, only have a limited choice of island gum e.g. Messmate and Manna Gum, readily consume, and thrive on, completely new varied gum species if they enter care at the shelter.

The Strzelecki/South Gippsland koalas are much more selective about their gum preferences.

I am fortunate enough, to have permission and permits to assess gum plantations etc within metres of the shelter - we could not care for so many individuals otherwise.

Increased temperatures and carbon dioxide levels are a threat to the koala, particularly in Victoria where the burning regime is now a lot more intense – there is much less available habitat available for koalas regarding releases and translocations. Continually we are dealing with anaemic, malnourished and renal failed koalas. It is recorded that koalas eat one kilo of gum each night, whether this based on the smaller sub species or not, we can assume that the Victorian koalas would need to consume more to maintain their larger body mass.

Weighed down - Average Weights Victorian Koala

Males 12.0kg (range 9.5 – 14.9kg)

Females 8.5kg (range 7.0 - 11.0kg)

This being said we have recorded adult females at 13kilo in weight.

Caring for koalas – a labour of love

The reasons koalas enter care in Victoria is due to being:

- Found abandoned
- Orphan
- Renal failure
- Translocation
- Road hit
- Dog attacked
- Diseased
- Fire
- Cow attack
- Tree felling
- Other displaced, malnourished, starving etc

Handling – the Victorian way

If a koala needs to be picked up – you need to be calm but quick (koalas sense fear)

We use the hand on head technique to lower a koala from a stand or tree. It is important you don't ever pull a koala off whatever it is grasping as nail damage can and will result. Once the koala is on the ground it can be picked up from behind by lifting the koalas' upper arms/shoulders; wrap a jacket/blanket around koala if feisty to ensure their hind legs catch in the material and I recommend to swing side to side to disorientate the back legs.

If the koala has an obvious leg/shoulder injury pick up by supporting the neck and using your opposing hand to support the rump. Koalas often chose their flight response when injured, and will dissipate high up into a canopy for protection. If left unattended, infection and fly blow will occur.

For tree rescues we utilise Nigel Williamson from Nigel's Animal Rescue, not only is he capable of reaching the very tall height of our trees in Victoria, but he has an understanding of this species and it shows in his determined, yet gentle way he guides an injured or sick koala down.

Oh My! - Assessment of a koala

On arrival into care koalas are aged by teeth wear aging and blood taken for full blood analysis, with triaging also including -

- Coat should be checked to make sure it is in good condition.
- Scapular felt for muscle condition
- Check for any discharges from the nose, eyes or cloaca
- Wrinkles on the nose, suggesting dehydration should be examined.
- Appetite
- Faecal pellet assessment
- Demeanour changes.
- Climbing ability using of all four limbs.
- Wetness of the cloaca and rump.
- Injuries.
- Mucous membrane colour – checking cheek pockets and breath.
- Presence and development of pouch young
- Rectal temperature taken via cloaca (35.5-36.5oC).
- Pulse Rate - Taken over the femoral artery (65-90 per minute)
- Respiratory Rate - Normally 10-15 per minute

Koalas are bisymmetrical – you should be able to compare one side with the other

- × Do not attempt to rehabilitate a koala is you are not set up to do so, nor if you cannot commit to the full duration of its care

Dribble, dribble - Supplement feeding

At Southern Ash Wildlife Shelter we use Biolac Formula for both hand raising and supplement feeding. We only supplement feed those that are malnourished. We have also successfully used Oxbows Critical Care Herbivore on failure to thrive koalas, although only a minimal amount of any supplement is required. Koalas can be messy feeders so faces are wiped clean to ensure no build up of any resin which may lead to dermatitis or a bacterial infection.

Our large, heavily forked, koala pens are cleaned daily – with faecal pellets being sifted through sieves, fresh water placed in large bowls for drinking, and fresh eucalypt branches distributed.

Our PVC water containers that hold the gum are scrubbed clean weekly with diluted bleach, to prevent any resin build up. The pens are all set up with a drip system so over the hotter months the eucalypt can remain fresh throughout the day.

Locating a koala

A koala can be located by sight, sound and smell

Look for:

- Oval faecal pellets -fresh ones have a 'glossy sheen' to them
- Paw prints in sandy soil
- Scratch/pin marks up trees

- Teeth-chew marks on tree
- Large body mass slumped halfway up or on outer limb of tree
- Broken chewed branches dropped from tree

Hear:

- Vocalisations
- Thudding up tree

Smell:

- Koala urine
- Scent gland marking

Costings

Estimated cost for rehabilitation varies, depending on injuries and how thorough a carer rehabilitates.

I estimate \$300-\$1000 per koala (taking into account blood pathology which is now a standard part of my care).

We conduct post mortems with along pathology for any deaths (to gain knowledge and documentation on each individual), and utilise the resources of both Melbourne and Sydney Universities.

We are supported by a local brilliant veterinary team, lead by Dr John Butler, Greencross Vets, whose knowledge and dedication ensures the best chance/outcome for this animal.

In Victoria, koalas can be cared for by any licensed shelter or foster carer. Victoria's Koala Management Strategy has listed as high priority that the koala is dealt with by specialised carers.

It is imperative that the koala be listed with wildlife shelters and carers in Victoria as a specialised care species and this would make it much easier to correlate information and pinpoint any trends as they present. This species needs specialist assessment in addition to specialised care. Incorrect ageing or diagnosis, and/or poor management, in the long-term is a waste of time, money, as survivorship of individuals is greatly reduced, not to mention the suffering of all individuals involved. Constantly I deal with mis managed koalas, with the outcome not always good.

A review of the Code of Practise for the Welfare of Wildlife during Rehab, is what is required, with koalas only being offered to authorised shelters who could demonstrate levels of care and/experience required and form a condition to there pre existing permit. The other states already have renowned established koala hospitals.

Welfare awareness

Southern Ash Wildlife Shelter has begun creating awareness for the plight of the Victorian koala, particularly that of the Strzelecki koala, by giving informative koala workshops to Land care groups, the timber industry, educational school presentations, wildlife parks, wildlife care groups and Department of Sustainability & Environment.

We attempt to liaise, present the problems and are involved with finding solutions Information abounding the Victorian koala is old. We are dependant upon the scientific research findings from the other koala sub species in NSW and Qld.

There is little financial funding available into what is perceived as our over abundant isolate populations – which have not been re assessed nor adequately researched for years.

Our Victorian population is merely an estimated number and I care for the koala because it is a complex and compromised iconic species that needs all the help it can receive. The Victorian koala should have been listed as 'Vulnerable' alongside the other states.

COLLEEN WOOD: Colleen's passion for koalas started early in life at her parents holiday house on Phillip Island where, when she was five, she had her first encounter

with an adult koala, who perched himself on a fence post. She was enchanted by its teddy bear appearance, beauty and uniqueness – too awestruck to reach out and feel its grey, soft fur.

After leaving school Colleen did veterinary work and studied zoology. Life's course led her to regional Gippsland where injured wildlife began to venture across her path. She became licensed by Dept of Sustainability & Environment (DSE) as a wildlife carer and due to the diversity and uniqueness of fauna in the region; her experience soon began to expand beyond that of those around her. Koalas are not easy to rehabilitate. They are a complex animal, requiring specialised understanding, treatment and care.

The care regime is very time consuming, requires considerable resources to support, and is very physically demanding with feeding regimes and the twice-daily collection of eucalyptus.

Colleen has established a substantial reputation for her expertise and understanding of koalas and their particular needs. The success of her establishment of Southern Ash Wildlife Shelter (SAWS) is a measure of extraordinary dedication, capacity for hard work, expertise to interpret and manage the challenges of each animal, and talent to inspire and maintain a strong support team of family and volunteers. The role of SAWS is to care for and rehabilitate injured, sick and orphaned native wildlife, specialising in koalas, and enable their successful release back to suitable habitats. SAWS specialises in burns injuries and accepts difficult koalas and fire victims from across Victoria. Sam the Koala was cared for at SAWS.

SAWS is typical of the voluntary, unpaid wildlife shelters across Victoria. It operates as a not-for-profit, volunteer organisation. Southern Ash Wildlife Shelter is incorporated and the SAWS Inc. Public Fund is overseen by a Committee of Management.