NATIONAL WILDLIFE REHABILITATION COUNCIL - PAPER

When is a kangaroo release considered a 'Success'?

So what is the definition of a successful release? Is it when the kangaroo has been raised successfully, or when they take their first step into freedom, or is it perhaps when they are sighted one, two or 5 years later?

To be able to answer these questions, the steps leading towards the release stage need to be explained in detail. Emphasis is also on the reasons kangaroos do not survive being release into the wild and therefore why government departments can be of the opinion that it is 'cruel' or sadly that carers are 'not educated enough' – both common misconceptions.

Following the basic and most commonly used release programmes you will come to see the mistake made by the omission of a vital and frequently life saving step for kangaroos.

Other points briefly discussed are 'soft' and 'hard' releases – the where, when and how and what data, if any, should you be collecting and what to do with it!

By following the release stages, explaining the missing step, and providing examples will allow carers to walk away empowered with knowledge, setting them up for success through the opportunity to experience their own hand reared kangaroo's successful release.

BIO

Lynette has privately funded extensive research into kangaroo health, injury, disease, captive care and rehabilitation over the past 20 years. She is now Director of Kangaroo Research Pty Ltd and aiming to finalise the first book of a series based on factual research. Understanding the lack of factual research available on kangaroo, Lynette applied for and has been accepted into the Veterinary Science Degree Programme, where her goal is to continue to make a difference in the quality of life for kangaroos. She is supported by her husband and has a young son.

Audio-visual Requirements

Projector and pointer for power point presentation Microphone that adjusts for a smaller frame person or can be hand held

NATIONAL WILDLIFE REHABILITATION COUNCIL 2010

'When is a kangaroo release considered a Success'?

By Lynette Masters

Kangaroo Research Pty Ltd

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Kangaroo Research Pty Ltd is a privately funded non-government affiliated kangaroo research organisation. Lynette has privately funded extensive research into kangaroo health, injury, disease, captive care and rehabilitation over the past 20 years. She is now Director of Kangaroo Research Pty Ltd and aiming to finalise the first publication of a series based on factual research. Understanding the lack of factual research available on kangaroos, Lynette applied for and has been accepted into the Veterinary Science Degree Programme, where her goal is to continue to make a difference in the quality of life for kangaroos.

When is a kangaroo release considered a 'Success'?

During this presentation, I would like to explore the question, "how do we know when a release has been successful?" In answering this, we have to ask "what makes up a successful release?" How is it defined? Is it their first step into freedom, when they are sighted one, two or 5 years later, or when there's the arrival of a new joey?

To be able to answer these questions, the pre-release stage needs to be explained in detail starting with identifying common hand raising pre-release processes and touching on mandated government requirements. In addition, we'll discuss common misconceptions each of which contributes towards success or failure of your released kangaroo. Kangaroo Research's theories of how to 'raise the bar' leads us straight into how to measure success and finally the all important setting yourselves and your precious kangaroo's up for a scientifically based and successful release!

Common Release Systems

In essence there are two nationally government-sanctioned or mandated release systems that joeys travel in their journey from being in care (hand raised and/or rehabilitated) through to release:

The 'soft' release is when at an agreed time the joey goes into some form of large or pre-release enclosure with other joeys, then are either urged into a larger enclosure and/or released from there, or taken to a release site with slowly decreasing supplemental support such as frequent observation and providing some food and water.

The other system is the 'hard' release which is similar to the soft release with the only difference being that the joey is released directly into the wild either from the pre-release enclosure or taken to a release point with no additional support.

There are a variety of other routes towards freedom but for today's discussion we will focus on these two common systems and talk about what these release systems have and don't have in common.

Government endorsement of standards based on speculation

Looking at the idealology of these processes – both attempt to cater for the necessary, group interactions, environmental adjustments, many with a heavy focus on enclosure/yard size, all in preparation for entry into the wild. So why is it that government consensus, even government affiliated animal organisations and sadly some public consensus that kangaroos do not survive being released into the wild or be on the extreme opinion that carers are 'cruel' or 'not educated enough' to enable them to help kangaroos through these government mandated processes and onto successful releases.

As no professional non-biased, non government affiliated kangaroo-release research has been carried out to date – this naturally begs the question: How would they know? How would anyone know? Is it by mortality rate from the inebriated weekend shooter who tells you of a kangaroo they shot 5 times and then looking at her up close says, 'jeez it looked a lot like the one you had', or is it the number brought in to a veterinarian or perhaps generally coming back into care. As individuals, organisations or government agencies - how could anyone factually know the success or failure rate?

It's important to note that Kangaroo Carers are some of the most dedicated, compassionate, educated and skilled people in the community and are the most valuable asset Australia has. It's also important to note that many of these mandated Codes or Standards ie. Release Standards are discussed at length, sometimes with community consultation and often by good intentioned and termed 'highly qualified' consult groups often with government affiliated animal welfare organisations. SO, knowing this, has it occurred to anyone that perhaps Carers are doing a great job yet the government mandated processes in place across Australia are simply not working to achieve the best maximum outcome for kangaroos? The question really is: 'Why is this?'

With all the 'discussion, consultations, experts, and such, making these mandated decisions, why is it then that these processes and systems are not working? The answer is simple and will surprise you. It's because: 'You don't know what you don't know and you bring to the table what you bring to the table.' To explain this here is an example: A person goes through a university degree ie. veterinary, medical or engineering degree. This 4 or more year degree provides them with a starting point and the tools that you learn allow you to progress from that starting point. The direction you progress in depends upon where your focus is for example a veterinary degree is commonly domestic animals. This does not necessarily have allowed you to develop the specific skills and knowledge base when working with wildlife or able to provide 'expert' advice. So making the assumption that by having a veterinarian's degree and taking a career that makes you an expert in domestic animals would directly transfer to wildlife care would be incorrect. Another example is that you wouldn't expect a heart surgeon to perform brain surgery!

The same hold true from policy holders, who are titled 'experts' in all areas of wildlife yet whose expertise may be with domestic animals, (ie RSPCA and veterinarians), or ecologist who's expertise is naturally ecology, and wildlife carers who's expertise is perhaps a specific species of wildlife with a specific focus, or zoo keepers caring for 'permanently' enclosed wildlife. Yet, as policy makers they are being termed 'experts in kangaroos' and making decisions when they don't know what they don't know and are only able to bring to the table what they bring to the table.

As a Carer with a theory

As a carer you may have a theory that the these Codes/Standards directly affect your release and that are in fact setting you and your charge up for failure, without any factual data you can't 'prove' your theories and must continue following these mandated systems. Ironically, what you are in fact doing is continually proving the negative opinion that not many kangaroos survive release. Kangaroos are in fact being set up to fail, as are their carers.

For example: If on average 14 days after your joeys are released they were being run over – then the release point is not acceptable. Change locations and you may switch the timeframe of survival to way over the right end of the curve ie. 14 days now 5 years. In this broad example, government restrictions on where to release would be identified as a major contributing factor for mortality and release failures.

I spent only a few minutes and skimmed through some states Codes of Practice or Standards in regards to kangaroos and release sites and some words really stood out, although I am not going to go into detail here are some examples:

Oueensland

"Kangaroos are required to be released "as near as possible to place of origin' or within 5km of capture site".

What if this animal came into care because it was hit by a car due to being land locked from urban development? The Carer is now required to re-release this animal back into this unsafe environment.

New South Wales

10.2. Release site selection- Objectives

- The primary concern when selecting a release site is the <u>impact the release will have on the wild population</u> and the natural environment.
- The welfare of the rehabilitated animal after release is a secondary consideration.

So, where do Carers obtain the current up to date wild population assessment for that particular area and that particular mob, seeing as the kangaroos you are releasing are a secondary consideration! A kangaroo can be released up to 100km from the point of encounter yet there is still a statement that euthanasia is an option? There is no mention of 'alternatives'.

Victoria

Release Procedures - 'Case Assessment':

• If there are <u>limited resources</u> available at the release site (for example, due to large numbers of conspecifics or vegetation removal), the cost of release to the existing population <u>must be justified</u> in terms of competition for food and shelter.

Who and when does this 'limited resources' assessment. To who's standard? Is there a standard? Where is the raw factual non-biased data as to the existing population. How many justification forms has anyone done? Yet there is a mandated 'expectation' that Carers will do all this!

South Australia

I was unable to locate any precise documentation on the government website in regards to releasing wildlife in South Australia. In my brief review I couldn't locate any wording for or against releasing of wildlife. There was a lot of information on licensing and licence processes. Although it appears common knowledge that wildlife can't be released, (without permission), I could not find a statement to that effect.

Western Australia

Chapter 5 – Where to Release

Rehabilitated animals and birds must, where possible, be released where the animal originated from, within the animal's normal home. If information regarding the location where the animal originates from is not available, or the site is no longer suitable due to habitat loss or other reasons, an alternative suitable site must be selected.

- Mammals Soft and Hard Release Considerations
- Minimum Standards: Hand-reared marsupials are better suited to a soft release program.

This gives soft and hard release considerations, where to release and no mention of euthanasia due to habitat loss with alternatives being suggested. The minimum standard is for a soft release.

Kangaroo Research Release Process - Raising the Bar

The best comparison I can give you is to look at Kangaroo Research's Release Programme and discuss the missing links that we identified and have overcome.

The main points are:

- Must be psychologically ready and release selection not based on age, size or weight
- Minimal stress capture, re and trans location techniques
- Higher standard of care than 'basic animal welfare' standard of care being equivalent to a human premature child
 - o (NB Not treated as human child substitutes but instead applying the same quality and standard of health care that would apply to a human premature child or infant).
 - o Nothing to do with the 'amount' or degree of 'love'
 - Released in their own familiar group (often mob) with their own social structure already in place
- Socialised as a mob

Other points

- Released into their natural habitat range within natural ecosystems
- Can do hard releases as soft releases not necessary
- Happy, healthy and non-human imprinted
- Quality of carers willingness to learn, discover new things, open mindedness, freely and openly share information
- Hand Raised as individuals

Most carers have been educated or have personal beliefs as to the 'age', 'size' or 'weight' joeys need to be before being moved to or going into a pre-release programme. Majority of these beliefs have come from experience with your own joeys over time and from others who use the same methodologies and it appears to work. In comparison, we assess each as individual and will wait until all members of the mob are psychologically ready, then release the whole mob.

Higher standard of care and inclusion of mob dynamics

Our theories presented here are based on what we have achieved due to the vast numbers of kangaroos and joeys that we have had the privilege to either care for or assist others with in over a 15 year time span together with behavioural information gathered on large scale captive kept mob dynamics.

So, lets simplify Mob dynamics – there is at least one regular alpha male, a nursing mothers association, teenage bachelor groups, joey play groups and most likely a couple of adolescent stirrers!

Two important issues were identified and both are 'presumptions'. Where we as carers, automatically presume something to be true. Eg. We can grow up to believe that all veterinarians love animals, although no one has ever told us this, yet we 'presume' it to be true.

<u>Presumption</u> – hand raised joeys or kangaroos in your pre-release yard are referred to and understood to be 'a mob'. These include joeys orphaned and/or injured and juvenile kangaroos and can average in number from 3 to over 50 as an example.

To Clarify: Joeys/kangaroos in your pre-release yard is a Group you don't have a mob. Interestingly, this presumption leads directly into the next presumption.

Presumption – Pre-release yards are a complete Socialisation Programme

This is probably the most significant incorrect presumption: that having joeys together is the complete socialisation programme. They are playing together; perhaps challenging each other, there is one or more dominant characters in the group and perhaps a 'pecking order'. But they lack the essential mob dynamics.

The difference being that they have no social structure eg. Parent/child cues of look, listen and learn. They lack having the essential 'natural leaders' teach them the essentials. When to look closely, how to listen to everything and to learn when to stand and when to flee. An essential element missing in both captive socialisation programmes is the lack of education as to this particular individual's role within a mob through the 'respect system' or the 'rules of engagement' – how to live as a mob member in the wild. So as human carers we can 'teach' them what grass is, and then its 'good luck finding some more kid'!

So knowing now what you know - you can understand that the actual release in itself it is not a measure of success but a measure of successful hand-rearing and socialisation. The actual release is the starting point to measure for success.

How do you Measure for Success?

Lets talk about measuring success. How does one go about measuring success? What does that mean? How do you determine if your release has been successful?

A scholarly presumption is that:

It is widely thought that an animal has only been successfully released if it becomes integrated into the breeding population and produces offspring. However, in natural populations not all adults contribute to reproduction and in many species there is a constant surplus of non breeding animals (Csermely 2000).

Yet, interestingly, all the carers that I have asked this question to have replied 'simply to just see them again'. So, general consensus is success = life.

Currently, there is no good, or one way, to measure the success of your joey once released into the wild but excitingly, for the first time, we are looking at having a starting point.

$Kangaroo\ Research's\ Post\ Release\ Tracking\ System\ -\ To\ gather\ factual\ non-biased\ non-government\ affiliated\ data$

- Detailed studies are required to understand whether or not a release is successful and to identify key processes or elements which have contributed to the success or failure. In effect, carry out release tracking to prove our theory that the success of releasing starts with the hand raising processes incorporating social structure through mob dynamics, and ends with release into safe and natural ecosystems.
- The goal is to have the results of the study on socialisation and release strategies publicised and available to all kangaroo carers. In particular, to be able to provide a voice and influencing government decision makers and wildlife organisations to enable sound factually based decisions, ensuring the success for both carer and kangaroo alike.

Summary

So coming back to the original question of 'when is a kangaroo release considered a 'Success'?

What we would suggest is that the life of a kangaroo up to the time of release could be regarded as 'successful hand raising'. The joey then goes through either a soft or hard release, with government mandated processes being major contributing factors to the success or failure of a released kangaroo. After that we have no way of understanding for how long the kangaroo survives.

So, we don't know what we don't know and we need to put the science into it to understand it. There has been no closed loop research from the acquisition of a joey all the way through to its long term survival. There are a whole range of variables that need to be understood through carrying out properly designed research.

Kangaroo Research proposes two misconceptions that contribute towards success or failure of your released kangaroo being kangaroo group vs. mob dynamics and kangaroo groups not providing the complete socialisation programme. This means to 'raise the bar' we must know how to measure success and the practices leading up to the release must have a scientific base.

So for now, without any scientific data, a kangaroo release is considered a success once they are released and their long term success is unknown.

Our goal is to create the best environment while preparing them for release as well as understanding the variables and pressures that need to be managed in order to maximise their chances of long term survival, once released. To do this, we are working towards an implementation of a post release tracking system to be incorporated into a set of carefully designed experiments. We are looking for individuals to collaborate with in the experimental phase once the approvals come through. Please feel free to contact me personally for more information on 0427 603 131 or email kangaroo-research@bigpond.com.

For Information

Kangaroo Research is planning a new website to provide information on research projects and where available, provide factual information on all aspects of kangaroo caring and health, legal rights of carers, and allow for public participation into research projects, including being a resource for recording kangaroo carers concerns and complaints in an effort to better understand kangaroo carers concerns through the collection of data, assisting in future research projects.

In addition, Kangaroo Research is also sponsoring web site hosting of the **Kangaroo Sanctuaries and Education Association** with a new and exciting website which is currently under construction. This site will be a valuable resource for any carer with a kangaroo and are putting into action factually based research. They warmly welcome new kangaroo carer members. Their vision is:

"Integrate kangaroo, wildlife and human populations by changing cultural values to recognise and protect the importance of the natural world through factual research and education".

Go to: www.kangaroosanctuaries.com.au for a sneak peak.

The web site is being beautifully designed by the innovative designer of **Koala Diaries** which offers fantastic opportunities for community participation to enter sightings of koalas anywhere in Australia into a single database available to everyone. We strongly encourage community participation to this free, outstanding and engaging web site.

Contact Information

Kangaroo Research Pty Ltd

Lynette Masters Ph: 0427 603 131

Web: www.kangarooresearch.com.au. Email: kangaroo-research@bigpond.com

Kangaroo Sanctuaries and Education Association (Inc.)

Alanda Spoonheim

Web: www.kangaroosanctuaries.com.au
Email: kangaroosanctuaries@bigpond.com
Donations and new members warmly welcomed

Koala Diaries

Alex Harris

Web: www.koaladiaries.com.au Email: alex@koaladiaries.com.au