

# Thirty years of rehab – experiences of a wildlife veterinarian

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## ABSTRACT

The experiences and observations of a zoo and wildlife veterinarian over the last 30 years highlight the changes that have occurred in human/wildlife interactions and the progress that still has to be made. In Australia the issue of native animals as pets is raised from time to time among biologists, conservationists and ecologists. Rarely are the professionals invited that are best placed to comment – practising wildlife veterinarians. In the past there seems to have been an ecological and environmental bias to the dialogue. It is imperative that the human side of the discussion is also put. A brief synopsis of the legal issues involved in the keeping of native animals in captivity in New South Wales is presented as well as, from a veterinary perspective, the advantages and disadvantages of keeping various species. The nature of the human-companion animal bond is also discussed.

Veterinarians, wildlife carers, researchers and regulating authorities need to work together to achieve the best outcomes for captive and free living native fauna.

**Key words:** veterinarian, pets, wildlife, domestication, animal welfare, rehabilitation.

*“It would appear that every wild animal has had its chance of being domesticated, that [a] few...were domesticated long ago, but that the large remainder, who failed sometimes in only one small particular, are destined to perpetual wildness” - Francis Galton<sup>1</sup>*

## Introduction

As an observer of human-wildlife interaction for over 30 years it is very evident to me that veterinarians can make significant contributions to the dialogue surrounding our contact with native fauna.

Commonly discussed themes include native animals as pets, licensing laws, welfare issues surrounding free living and captive species and the rescue and rehabilitation of wildlife. All are interrelated. All should involve veterinarians.

How do humans relate to animals in our care? Are native animals in foster care just substitute pets? Are the countless reptiles owned by many herpetologists, trophy items or zoological specimens?

Regardless of human perceptions as to whether it is right to have a native animal as a pet, whether injured or diseased native fauna should be treated and released or whether the collection and keeping of certain species is allowable; it is vital that veterinarians' involvement is invited and their contributions considered.

## Background

For thousands of years humans have felt the need to have a companion other than their own species. What purpose do these animals serve and how have they evolved to this present day? The domestication of animals has taken some time; and why have the cat, the dog and increasingly the bird been chosen as worthy companions? In the 21<sup>st</sup> century can we achieve in a short time with native animals what has taken humans thousands of years to do with the domestic dog?

Francis Galton, a pioneer of modern thinking about domestication pointed out that relatively few species were suitable. Species capable of being domesticated had to be hardy, survive with very little care and attention and have an inherent liking for mankind. They should breed readily, be gregarious and easy to control in groups.<sup>2</sup>

In Australia the issue of native animals as pets is raised from time to time among biologists, conservationists and ecologists, but rarely among wildlife veterinarians who can contribute to both sides of the debate. Refine the discussion by including only zoo or wildlife veterinarians that have a substantial amount of experience in small animal pet practice and observation of the human-companion animal bond, and you will diminish the field of well-balanced comment even further.

In the past there seems to have been an ecological and environmental bias to the dialogue. It is imperative that the human side of the discussion is also put. A brief synopsis of the legal issues involved in the keeping of native animals in captivity in New South Wales is presented as well as, from a veterinary perspective, the advantages and disadvantages of keeping various species. There will be an emphasis on the nature of the human-companion animal bond.

As researchers, wildlife carers and other interested parties become more aware of the welfare needs of native species, both captive and free-living, veterinarians are being asked to make contributions related to such issues as the treatment of injured and diseased wildlife, captive management, quarantine, epidemiology and animal welfare. Veterinarians are also seen as playing a significant role in the education of their veterinary peers, wildlife carers and tertiary students.

## Legal issues

### *Native fauna keepers - the current situation in New South Wales*<sup>3</sup>

The licensing of bird, reptile and mammal keepers in New South Wales is regulated by the Department of Environment and Climate Change (National Parks and Wildlife Service [NPWS]).

The dingo is the only native mammal that is not protected in NSW and can be kept without a licence. Only two species of native mammals may be kept as pets in NSW under a NPWS licence: the spinifex hopping-mouse and the plains rat.

Australians have kept native birds, reptiles and frogs as pets for many years. According to the NPWS there are several reasons why this practice cannot be extended to the holding of native mammals as pets in NSW:

### Animal Welfare concerns

The NPWS believes that animal welfare considerations are very important in the keeping of any animal as a pet. The housing and husbandry needs of many native mammals are not well understood by the general public and there are many issues to consider when assessing the suitability of a species as a pet, for example:

- Some native mammals, particularly wallabies and kangaroos, are very prone to stress-related diseases.
- Many species need large outdoor enclosures.
- Most native mammals are nocturnal and as such can only be kept in fully enclosed outdoor aviaries.
- Some carnivorous species, such as quolls, have a huge home range in the wild.
- Due to intraspecific aggression the same gender of some species, such as quolls and antechinus, cannot be housed together for much of the year.
- Upon reaching sexual maturity larger macropods such as male wallabies and kangaroos may become aggressive towards humans.
- Some native species have a very short life cycle and can become inbred quickly.
- Most native mammal species do not domesticate well.

### Conservation concerns

- There could be illegal trapping from local populations to support a growing local pet trade and interstate export.
- If species not naturally found in NSW escaped, or were intentionally released, they could cause conservation problems.
- Any species that is allowed to be kept privately in NSW should have minimal potential to become a threat to the state's native environments.

### Administrative concerns

Trapping and illegal trade in protected and threatened native birds, reptiles and frogs already drains NPWS resources in administration and law enforcement. A system allowing the keeping of a wide variety of native mammal species would place increasing stress on these services.

## Licensing and animal welfare

Records of amphibians, reptiles, birds and some native mammals kept in captivity by private individuals must be submitted annually. Restrictions apply in many cases, for example, venomous reptiles may only be kept by reptile keepers with a Class 2 licence. Holders of such a licence must provide a list of referees and show experience in the keeping of reptiles. The glaring anomaly of this legislation is that classification of licences appears to be based on the conservation status of a species and whether it is venomous or not. Animal welfare does not appear to be considered. Why should inexperienced people be allowed to keep eastern water dragons, a species very prone to metabolic bone disease? It is imperative that licence holders should be aware of the specific husbandry needs of the particular animal that is being kept.

## A veterinary perspective

### Australian Veterinary Association - National policy level<sup>4</sup>

Recently the Australian Veterinary Association formulated a position statement on the keeping of native animals as pets, which states:

*The Australian Veterinary Association (AVA) supports the keeping of native animals as pets by private individuals only where it is legally permitted. The AVA believes that the welfare of the animals kept as pets must not be compromised, nor should the welfare of wild populations be compromised by the taking of wild animals or the release back to the wild of pet animals.*

*The AVA does not support or condone the capture and removal of native animals from the wild for the pet trade or for use as domestic pets.*

*The AVA would only support an increase in the number of species currently in the pet trade if it could be demonstrated that there would be a positive long-term benefit to that species or the environment.*

### Practitioner level

*Is the veterinary profession prepared to treat pet native animals?*

The first textbook on medicine of Australian mammals has not yet been published. Many experienced zoo and wildlife veterinarians would agree that Australian mammals are among the most problematic to treat. Conditions such as caecal stasis in the common ringtail possum, *Pseudocheirus peregrinus*, toxoplasmosis in marsupials, koala retroviral infections, koala chlamyphilosis, feather picking in birds, metabolic bone disease in sugar gliders and oral necrobacillosis (lumpy jaw) in macropods are challenging and difficult to treat.

### *Social aspects of owning a pet, grief and loss*

Grief and loss are issues which constantly confront pet owners and veterinarians. Other issues include responsible pet ownership, the delivery of good quality

veterinary care to native animals and understanding the complexity of the human-companion animal bond. The care and husbandry of Australian animals is a constantly evolving practice and in most instances more demanding than keeping a dog or cat.

Coping with the death of a much-loved pet is something that the average dog owner must face every 12-15 years or the cat owner every 15-18 years. How is the antechinus owner or their veterinarian going to manage with the demise of their chosen pet every 12 months?

Native species will never be a “dog or cat substitute”. Increasingly overseas, and particularly in the United States, some Australian mammals such as the sugar glider and the Bennett’s wallaby are becoming popular pets. Such animals subsequently suffer from diseases and conditions that do not normally occur in zoo animals or free-living wildlife. For example, nutritional secondary hyperparathyroidism has not been recorded in sugar gliders other than those raised as companion animals. These unusual pets are too freely available and the husbandry and health advice seems to be of a poor standard.

In Australia the existing struggle of trying to get pet owners to pay for quality veterinary care for unusual pets such as rats, mice and guinea pigs exists already. It may be difficult extending that battle to native fauna.

## The human side

*Why do people want native animals as pets?*

It is possible to satisfy the urge to care for a native animal by joining a wildlife rescue organisation and becoming a foster carer. Many people seem content to limit their contact with fauna to foster caring and not have a desire to make pets out of these creatures. Carers are advised not to be too friendly with their animals, not to name them and to remain emotionally detached. This goes against all our instincts. Hediger<sup>5</sup> notes that man can be regarded as significant to animals in at least five ways: as an enemy, as prey, a symbiont, a piece of inanimate environment or a member of its own species. From the human perspective he feels that humanisation of the animal is the main obstacle to acquiring knowledge of captive animals.<sup>6</sup>

## Treatment of sick and injured wildlife

Trust must exist between veterinarians and wildlife carers in order to achieve the best outcome for animals. Adequate resources must be available for veterinarians and carers. Good and regular feedback from carers is mandatory not only in building a relationship between the two groups but for determining treatment and release protocols. For example, many freshwater turtles are rescued in the Sydney region during summer, often requiring extensive repairs to fractured shells but few wildlife care agencies are able to care for these commonly occurring reptiles for extended periods.

## Community level participants

**The following ‘characters’ are all participants in the human-wildlife interaction:**

*The Wildlife Carer*

In the mid to late 1970s the wildlife carer was often an isolated individual with more joeys than friends. The few wildlife care organisations in existence were run by groups of well intended, enthusiastic amateurs often with poor levels of management and limited standard procedures and protocols. Since then the knowledge base from which wildlife rescuers, foster carers and rehabilitators can draw has grown considerably. Diets and hand-rearing formulae are now available for a wide variety of species and wildlife care at basic and advanced levels is taught at training courses run by wildlife care organisations and TAFE colleges. Peer reviewed husbandry manuals for a multitude of species are freely available.

Just like the best dairy hands, most carers of small mammals and joeys are female. If there is a male involved he is usually part of a partnership, often dispatched to build the possum nest boxes or act as chauffeur. Reptile foster carers are the exception, with a predominantly male representation. It’s a “bloke’s domain” that has extended from the “herping” background of many of these people. They are traditionally viewed with suspicion by many as suspect individuals who may acquire rescued animals for their own collections. This is of course a fallacy.

*The Veterinarian*

The veterinarian may be involved at many levels, from treating sick and injured fauna on a daily basis to interaction with wildlife care groups, operating captive animal consultancies and representation on animal care and ethics advice committees. Specialist veterinarians in zoo, wildlife, bird and reptile practice serve as major players in developing protocols and advising stakeholders in many situations from research to court appearances as expert witnesses.

A commonly occurring topic of discussion among veterinary practitioners is the *pro bono* work provided by the profession. The economics of providing a veterinary service to these organisations is complex but it need not be. The solution is simple; veterinarians can donate their time, however, drugs used and other consumables can be kept in a dedicated pharmacy within the clinic. Wildlife rehabilitation organisations just pay to keep the shelves stocked.

*What qualities can veterinarians provide?*

- Clinical skills
- Veterinary practice interaction with the general public on a daily basis
- Education – informal and formal
- Interpretation of the human–animal bond
- Expert interpretation of companion animal behaviour
- Mediatory services between the Department of Environment and Climate Change (DECC) and the RSPCA

### Welfare agencies

The Royal Society for the Prevention of Cruelty to Animals (RSPCA) is the major provider of expertise, advice and law enforcement from the animal welfare perspective. This organisation is actively involved in monitoring the welfare of native fauna kept in private hands. Appearances in court are unfortunately a regular occurrence, especially with regard to confiscations.

### State government

DECC is involved in administration of the estate, research, licensing, and law enforcement. Frequently they call upon other agencies and individuals to assist them in their role, including the RSPCA, zoos, Department of Primary Industries (DPI), Australian Quarantine Inspection Service (AQIS) and private veterinarians.

## DECC and RSPCA seizures

The seizure of illegally held animals, usually reptiles or birds is becoming increasingly common. Many of these animals are not only kept contrary to licensing laws but in substandard conditions. There seems to be confusion between the major stakeholders in this interaction; the DECC, DPI, AQIS and often the RSPCA. A less reactionary approach to these seizures is needed. Protocols need to be set in place for the housing of these animals after confiscation. Many animals, especially reptiles, have quite specific husbandry requirements. Record keeping also needs to be standardised. All agencies should strive to build partnerships with veterinarians who have expertise in the area.

## Discussion

Whether the topic is native animals as pets, wildlife rescue and rehabilitation or wildlife confiscations it is vital that the interests of the animals are first and foremost.

Why do people foster native animals? Is it a need to care for something; the need to socialise and feel useful; a concern for animals and the environment?

Some people may say that regardless of the type of animal being cared for, there are those that cannot look after anything properly. For example, the blue-tongued lizard, *Tiliqua scincoides scincoides*, eats snails in the wild. There are many who cannot even look after a lizard with such simple needs, preferring to feed them calcium deficient diets and failing to provide adequate husbandry. Overhandling is a key factor in contributing to stress in many reptile species. They cannot be treated like a dog or cat that “likes cuddles”.

Some questions need to be posed and are yet to be answered:

*Why are there no traditional companion animals, apart from birds, of Australian origin?*

*Who will supply the indigenous animal pet trade?*

*If these pets become popular will they be exported?*

*What if native animals as pets are released into the wild by*

*irresponsible owners, will they be introducing disease into wild populations?*

*Will joeys be sold just as puppies and kittens are – in a pet shop?*

*How many eastern grey kangaroo joeys need to die of coccidiosis before we get it right?*

Hopefully we will not get to the situation where the antechinus owner makes the following request of a veterinarian, “We don’t want him to breed yet. He’s bound to get adrenal exhaustion. The family aren’t ready to cope.”

## Conclusion

As the owner of carpet python and a Jack Russell terrier I may appear to have a foot in both camps. Pet selection is the important factor. People must show great care in choosing pets, be they native fauna or domestic animals. I would rather have a red bellied black snake as a pet than a Rottweiler; and a cat (kept indoors of course) rather than a tiger quoll *Dasyurus maculatus*. The tiger quoll is an intrinsically attractive and spunky animal, of which I am very fond. I would, however never contemplate having one as a pet. They don’t live for long - 4 to 6 years in captivity - are tumour prone, smelly and antisocial.

The role of the veterinarian at the human-wildlife interface is that of an advisor. Society and its regulators determine what pets are kept. Veterinarians should make recommendations. The concept that pets are kept to help conserve a species is fallacious. For example the budgerigar has diverged remarkably from the original small green and yellow bird taken from the wild 100-150 years ago. If animal species only exists in captivity is it in essence extinct?<sup>7</sup>

If some selected species are to be sold through pet shops there must be strict regulation of the process and interested parties should work together with the same aims - animal welfare and preservation and protection of the species. Veterinarians can work in conjunction with the pet industry to give advice on the suitability of certain animals as pets and on guidelines for their sale. It is essential that as well as selling their skills as clinicians, veterinarians should stand up as educators and communicators in this process.

Veterinarians need to be more involved in the decision-making processes involving wildlife issues. More veterinary input is required in wildlife foster caring and the education and training of carers. Veterinarians need to upgrade their skills in the treatment of wildlife and be more receptive to offers of assistance in training from wildlife care agencies.

Participation in zoo and captive wildlife consultancies encourages veterinarians to gain skills in the discipline of wildlife medicine. They need to ensure ownership of the delivery of health care to wildlife and charge a fair fee for their services, creating value for what they do.

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## APPENDIX I



**Figure 1.** A hand-raised eastern quoll *Dasyurus viverrinus* does not stay at the "cuddly" stage for more than a few months.

Photo: R. Johnson



**Figure 2.** The inland bearded dragon *Pogona vitticeps* is fast becoming the most popular reptile pet in Australia.

Photo: R. Johnson





**Figure 3.** Veterinarians often work in consultation with organisations such as the RSPCA to ensure the welfare of captive native species.

Photo: R. Johnson



**Figure 4.** Captive eastern water dragons *Physignathus lesueurii* are prone to metabolic bone disease.

Photo: R. Johnson



Figure 5. Wildlife foster carers and veterinarians contribute to maintaining the health and survival of our native species.

Photo: R. Johnson



Figure 6. Cartoon – Robert Johnson.