

“ROOS AND RAPTORS”
A MANAGEMENT PROJECT BETWEEN WILDCARE INC. ALICE SPRINGS
AND PARKS & WILDLIFE COMMISSION NORTHERN TERRITORY

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Wildcare Inc. Alice Springs (Wildcare A/S) and the Parks and Wildlife Commission Northern Territory (PWCNT) work co-operatively in managing wildlife rescue, rehabilitation and release in Central Australia. Two major collaborative projects that are now running with great success are the Macropod and Bird of Prey rehabilitation and release management projects. This paper will deal with the challenges and benefits of having a structured support and management system in place for difficult species in captivity.

BACKGROUND:

Wildcare A/S was formed in 1996, taking over the majority of wildlife call out responsibilities and actions from PWCNT. Wildcare A/S is funded through PWCNT and overseen by a representative from the Wildlife Management Unit.

Since the formation of Wildcare A/S several projects and areas of management have been identified and implemented by the co-contributing organisations.

PWCNT offers a large multi-purpose wildlife holding facility at their Southern Region head quarters, located south of Alice Springs, for Wildcare A/S utilisation. The use of this facility has enabled the birth of two major projects, specifically managing Macropod and Bird of Prey rehabilitation and release. The large complex offered by PWCNT was originally built to accommodate the commissions Mala *Lagorchestes hirsutus* and Bilby *Macrotis lagotis* recovery programs. A number of modifications have been undertaken for the new role of the complex, including enlarging pen sizes and installation of screening to provide privacy for rehabilitating wildlife. The complex now boasts 1 large fully enclosed macropod pen (40m x 50m), 2 small multipurpose flights (8m x 8m), and 6 large multipurpose flights (10m x 20m). This complex complements a second facility also located at PWCNT head quarters (100m x 50m), which accommodates large macropods and animals completing the final stages of rehabilitation. The second complex can be divided into two medium sized yards and offers naturalistic landscaping and foraging opportunities. Facilities are managed and funded by both organisations and working bees are held to achieve major work at the complexes as required.

The facility aims to alleviate the difficulties and risks associated with large and potentially dangerous animals in captivity, such as Birds of Prey, Emus and large macropods. Utilisation of these facilities ensures that large and difficult animals are not kept under inappropriate conditions in residential areas and in many cases enables a more efficient and smoother rehabilitation and release. The development of these projects has also minimised the strain on carers and improved overall support and morale within the wildlife carer community.

MACROPOD MANAGEMENT:

Macropods form the majority of mammals that are received into care, contributing to 25-30% of all calls to Wildcare A/S. Animals come into care primarily as victims of vehicle accidents or as a result of being orphaned. There are three species of macropod in Central Australia, the Red Kangaroo *Macropus rufus*, Euro *Macropus robustus erubescens* and Black-Footed Rock Wallaby *Petrogale lateralis*. Red Kangaroos count for approximately 90% of macropods requiring care, with Euros making up a further 9%. Black-Footed Rock wallabies are rarely received into care, largely due to their shy nature and preference for mountainous habitat, which receive minimal interference from humans.

PWCNT does not condone long term housing of rescued macropods due to the associated dangers of housing large wild kangaroos. The structured management system that has been developed for macropods enables close monitoring and efficient rehabilitation and release to occur, ensuring resources and efforts are maximised.

1. Injured/orphaned macropod found	2. Macropod is received into care by Wildcare A/S	3a. Orphans are raised by Wildcare A/S members	4a. Orphans are weaned and moved to PWCNT complex at 14-16 months of age	5. Macropods are introduced to other macropods and form small pre-release groups of similar aged animals	6. Macropods are released in small groups into near by National Parks and private property
		3b. Injured macropods are placed with Wildcare A/S members	4b. Injured macropods are moved to PWCNT complex when recovered		

TABLE 1: ACTION STEPS FOR PWCNT MACROPOD MANAGEMENT

There are six basic steps involved in the PWCNT macropod management project (see TABLE 1); the initial three steps are co-ordinated by Wildcare A/S across a number of properties and the final three steps are all managed by PWCNT staff at their headquarters. This uniformed structure has enabled this project to be successful, with all efforts and resources directed into a uniformed management project.

There are a number of critical factors that contribute to the projects success, including early socialising of macropods, minimal exposure to 'human environments', structured release groups, managed release sites and monitoring of macropod numbers in care. These factors and benefits are discussed further below.

EARLY SOCIALISING:

Allowing macropods to have social experiences with their own species is vital in preparing an animal for release. Integrating animals at a young age is preferably done while they are still in the pouch, either by a carer raising multiple joeys of the same age together, involvement in a buddy system with another carer or by sending the joey to the PWCNT facility as soon as it has been weaned off milk. Early socialising allows animals to recognise their own species and promotes natural social and behavioural skill development. Educating carers on the importance of early socialising has proven to be challenging, with some carers reluctant to 'let go' of their joeys at this early age.

MINIMISING 'HUMAN' EXPOSURE:

Exposure to humans is inevitable when raising macropods, however the degree of contact or exposure that a young animal has will greatly affect its chances of survival. Euros and wallabies are generally much scattier and less likely to alter behaviour due to human exposure. Red Kangaroos however can be extremely susceptible to human exposure, often behaving more like domestic pets than wild kangaroos when over exposed to humans¹. Through active education and discouraging carers to 'humanise' their macropod charges we have been able to achieve a marked improvement in macropod suitability for release. This improvement has also been attributed to the shorter period that animals are spending in suburban backyards and high human traffic areas. Minimising human exposure also results in animals passing through the rehabilitation yards faster, as there is less work required to break down human recognition and bonds with macropods.

Raising awareness of this issue has been the most difficult element of the project, with some carers refusing to alter there behaviour when dealing with hand raising joeys. Persistence and compromise have been the best tools for educating carers on this issue, which has also included organising personalised tours around the PWCNT facility to highlight the benefits of the program.

RELEASE GROUP STRUCTURE:

Dingos and wild dogs are found throughout Central Australia, presenting a challenge for rehabilitated macropods and their chance of survival. A kangaroo released solo quickly becomes stressed and scared, often falling victim to predators within 48hours². However animals that are released in small units are more likely to stay together during the early stages of release, increasing survival odds. Macropods that are received into the PWCNT release program are housed in small groups in preparation for a communal

¹ Personal Observation (2006)

² Personal Observation, unpublished data (2005-2006)

release. Groups are formed of between three to eight macropods, normally consisting of mixed sex animals of similar ages. Animals completing rehabilitation in small groups are released into surrounding National Parks and private properties where they receive protection and progress monitoring. A tagging program has previously been used to identify animals, but is currently idle due to suitability issues of ear tags used. It is hoped that in the near future this issue can be resolved and monitoring of released kangaroos can be explored further.

MANAGED RELEASE SITES:

All releases are coordinated by PWCNT staff and take place on National Parks or private properties that are willing to provide protected wildlife areas. Release sites are assessed on a number of criteria including; availability of water and food, predator densities, existing macropod populations, proximity to human activity (roads and dwellings) and the carrying capacity of the release area. Sites are rotated and considerable effort is invested into not over exploiting release sites. Travel time and ease of accessibility is also taken into account when selecting release sites to minimise potential stress levels and associated health issues for the animals.

Inevitably not all animals thrive and survive to be released through the program, however the bodies are utilised in a number of ways. Kangaroos and other common animals are processed and used as Bird of Prey and large reptile food, not only for rescued wildlife, but also for use at Alice Springs Desert Park and Alice Springs Reptile Centre.

RAPTOR MANAGEMENT:

There has been a steady increase in Birds of Prey handled by Wildcare A/S over the past three years (see TABLE 2). The reason for the increase is unknown, but may be attributed to increased public awareness and education on wildlife or may be indicative of natural occurrences. Falcons are the most common Bird of Prey to enter care, with the majority of them being Brown Falcon *Falco berigora* chicks/juveniles. Often these chicks have been interfered with or actively removed from the nest and then passed onto Wildcare A/S as birds get too big to manage or have suffered an injury.

The Bird of Prey management project was developed to counteract a number of issues that were facing Wildcare A/S, as well as enabling effective handling of increasing numbers of Birds of Prey. Alice Springs has a high transitional rate which at times hinders Wildcare A/S, with high turn over rates with members, resulting in occasional gaps in knowledge and experience amongst carers.

Birds of Prey are considered to be one of the more difficult groups of wildlife to rehabilitate in captivity due to the potential dangers and extensive infrastructure required to house them appropriately, so a specific project was launched to help resolve some of these difficulties. The management project provides a central location for Bird of Prey rehabilitation and pooling of resources and effort.

Flights of various sizes were erected and modified at the PWCNT complex to cater for a range of species and rehabilitation stages (confinement pens, flight aviaries). The program has also brought together the skills of Wildcare A/S raptor carers/coordinator (Tania McFadden), PWCNT staff and Alice Springs Desert Park raptor trainers ensuring that Birds of Prey receive appropriate attention from experienced professionals.

TABLE 2: BIRD OF PREY NUMBERS RECEIVED BY WILDCARE ALICE SPRINGS

SPECIES:		2004	2005	2006	TOTAL
FALCONS	ADULT	3	3	1	19
	JUVENILE	4	7	1	
KITES	ADULT	2	2	1	5
	JUVENILE	0	0	0	
SPARROW HAWKS	ADULT	0	1	2	5
	JUVENILE	0	2	0	
KESTRELS & HOBBIES	ADULT	2	0	2	9
	JUVENILE	0	2	3	
OWLS	ADULT	1	0	0	1
	JUVENILE	0	0	0	
WEDGE-TAILED EAGLE	ADULT	1	2	3	8
	JUVENILE	1	1	0	

Birds of Prey are now only kept at private premises if the bird is in a critical state or being hand raised, otherwise it is housed at the PWCNT facility. The benefit of having a central location of minimal disturbance for Birds of Prey has enabled improved training and skill sharing amongst interested groups and individuals. The facility has also allowed for improved efficiency in managing large species, such as eagles, which require extensive housing requirements.

The Birds of Prey at the facility are fed on a range of natural whole foods, including Turtle Doves, which are supplied through the commissions Feral Dove Eradication Program, further reducing rehabilitation costs (A single adult Wedge-tailed Eagle can cost upwards of \$80 per week to feed).

Once a bird is ready for release and is deemed to have appropriate fitness, it is returned to its location of origin if possible or moved to an appropriate area, often within a National Park. Considerable assessment of the release area is undertaken in a similar manner to the macropod project, specific attention is given to Birds of Prey already existing in the area and selecting sites that will reduce the likelihood of the animal returning to care (away from humans and

roads). Occasionally birds are released directly from the PWCNT facility; this option is explored if an animal is not considered to be suitable to travel distances without inflicting damage to itself (often small falcons and goshawks are released in this manner).

Significant species that do not complete rehabilitation or those that are euthanized are preserved for education and training workshops held by Wildcare A/S. These specimens are able to be used for raptor handling training and identification without the risks associated with using a live specimen. Specimens are also donated to the Museum of Central Australian and PWCNT for education, research and exhibition.

SUMMARY:

The success of these projects has been largely due to the cooperation and commitment of the two organisations, working together to achieve common goals. These management projects not only benefit the wildlife, but also build strong relationships within the community and allow for effective knowledge and skill sharing across the board. Amalgamating resources and providing management structure within the community have allowed for improved Bird of Prey and macropod rehabilitation and release management.

It is hoped that further projects can be developed between the agencies, including a cooperative education program that will target Central Australian residents through informative displays and interactive community programs.