

DESERT KNOWLEDGE CRC

Key stakeholder perceptions
of feral camels:
Aboriginal community survey

P Vaarzon-Morel

Report
49

2008



Australian Government



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Desert Knowledge CRC Report Number 49

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ISBN: 1 74158 096 X (Online copy)

ISSN: 1832 6684

Citation

Vaarzon-Morel P. 2008. *Key stakeholder perceptions of feral camels: Aboriginal community survey*. DKCRC Report 49. Desert Knowledge Cooperative Research Centre, Alice Springs. Available at <http://www.desertknowledgecrc.com.au/publications/contractresearch.html>

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The project was funded by Australian Government. The views expressed herein do not necessarily represent the views of Desert Knowledge CRC or its participants.

Contents

Tables	IV
Figures and graphs	IV
List of shortened forms	V
Acknowledgements	VI
1. Summary	1
1.1 Conclusion	4
1.2 Recommendations	4
2. Introduction	7
2.1 The structure of the report	7
3. Method	9
3.1 Selection of survey areas	9
3.2 Characteristics of the survey population	10
3.3 The survey questions	11
3.4 Survey delivery and sharing of information	12
3.5 Selection of interviewees	12
3.6 Data collection and analysis	13
3.7 Survey coverage	14
3.8 Challenges and limitations	15
4. Findings	17
4.1 Introduction	17
4.2 The case studies	17
5. Discussion of differences in perspectives among and within Aboriginal communities	31
5.1 Observations on camel presence	31
5.2 Perspectives on camel impacts	33
5.3 Perspectives on camel management	44
5.4 Implications	58
6. Conclusion	65
7. Recommendations	67
8. References	69
Appendix 1: Wide range survey information	73
1.1 The Western Australian communities	73
1.2 The South Australian communities	85
1.3 The Northern Territory communities	96
Appendix 2: Focus questions for survey with local Aboriginal communities	131

Tables

Table 1: Community survey coverage	23
Table 2: Observations of camel presence and perceived population trends by community	39
Table 3: Summary of observations on camel presence and perceived population trends in surveyed communities	40
Table 4: Negative impacts on broader landscape values mentioned by people in survey communities	41
Table 5: Number of communities by state/territory where interviewees mentioned negative impacts on broader landscape values	42
Table 6: Positive impacts of feral camels mentioned by some interviewees in survey communities	48
Table 7: Positive impacts of camels: type of positive impact by number of settlements in each state/territory	51
Table 8: Attitudes to feral camel management in the survey communities	57
Table 9: Attitudes to feral camel management by number of communities in each state/territory	58
Table 10: Main sources of information on feral camels and their management by number of communities in each state/territory	58
Table 11: Perceived need for assistance and support to manage feral camels, noting types of activities suggested	65

Figures and graphs

Figure 1: Map of Aboriginal communities surveyed	21
Figure 2: Aboriginal communities' perceptions of camel management	51

List of shortened forms

APY	Anangu Pitjantjatjara Land Management
ARRI	Aboriginal Rural Resources Initiative
ATNS	<i>Agreements, Treaties and Negotiated Settlements</i>
CAAMA	Central Australian Aboriginal Media Association
CEO	Chief Executive Officer
CLC	Central Land Council
DKCRC	Desert Knowledge Cooperative Research Centre
GBM	Government Business Manager
ILC	Indigenous Land Corporation
IPA	Indigenous Protected Areas
LT	Land Trust
MSO	municipal services officer
NCR	Natural and Cultural Resources
NGO	Non Government Organisation
NITV	National Indigenous Television
NSW	New South Wales
NPY	Ngaanyatjarra Pitjantjatjara Yankunytjatjara
NT	Northern Territory
PL	Pastoral Lease
SA	South Australia
TO	Traditional Owners
UKTNP	Uluru-Kata Tjuta National Park
WA	Western Australia

Acknowledgements

I wish to thank the Aboriginal people with whom I worked on this project. Without their generosity, humour, and patience this work could not have been done. I especially thank the Nintiringtjaku workers, Kate Lawrence, Waltja Tjuṭangu Palyapayi Aboriginal Association, and the community administrators who provided valuable support and assistance throughout my fieldwork. The report has benefited from discussions with Gordon Sanders (Ngaanyatjarra Council), Tom Holyoake (Youth Worker, Kintore), Thalie Partridge (Threatened Species Officer, Anangu Pitjantjatjara Yankunytjatjara Land Management), Ian Conway (Kings Creek Station), Don Rowlands (Ranger, Parks and Wildlife, Queensland, and Wangkanguru descendant and traditional owner of lower Simpson Desert), Kerryne Liddle (Malpa [mentor] for the Project Manager, stakeholders and workers of Kuka Kanyini), Peter Bartlett (Earth-Bound Consultants), Jeannie Devitt, David Brooks (Principal Anthropologist Ngaanyatjarra Council), and Diana James (independent anthropologist). I want to thank Marcelis and David Avery for their ongoing support and good humour. For her comments on drafts of this report, I am deeply grateful to Jocelyn Davies (Principal Research Scientist – Geographer, CSIRO Sustainable Ecosystems, Alice Springs, Desert Knowledge Cooperative Research Centre). The support of my colleagues Glenn Edwards, Benxiang Zeng, and Keith Saalfeld is much appreciated. They shared their knowledge generously and it has been a pleasure working with them.

The work reported in this publication was supported by funding from the Australian Government Cooperative Research Centres Program through the Desert Knowledge CRC; the views expressed herein do not necessarily represent the views of the Desert Knowledge CRC or its participants.

1. Summary

As part of the survey of stakeholder perspectives on camel management, a survey was conducted on Aboriginal community perspectives on feral camels, their impacts and management. The objective was:

- to identify the range of perspectives among selected Aboriginal communities
- to enable an effective participatory camel management strategy to be developed
- to promote education on camel issues.

The research was carried out using qualitative methods involving two case studies and a wide-ranging survey. The main data collection method was face-to-face semi-structured interviews. Questions used as the basis for the interviews addressed people's:

- perceptions of feral camels and their presence
- perspectives on the impacts of feral camels (including environmental, socio-cultural and economic dimensions)
- involvement in, and attitudes towards, different camel management options.

The methods drew upon community-based participatory research principles, with local people assisting in the research process. *The Camel Book*, produced by Tangentyere Landcare, was used to give community members information about camel numbers, impacts and management options.

Although there was a stronger focus on communities in areas known to have large camel populations, the survey has achieved a reasonably wide coverage of the Aboriginal communities within the feral camel range. Approximately 5.6% of Aboriginal communities within the camel range were surveyed, giving an estimated survey sample of 22.6% of the population in that area. In total, 27 communities were surveyed. It is estimated that approximately 490 Aboriginal people participated in discussions concerning the project. One hundred and fifty-eight formal interviews were conducted with individuals and small groups of people.

Interviewees from all the communities surveyed reported that they had feral camels in the region surrounding their communities, with most perceiving that camel numbers were increasing. However, different areas had varying perceptions of the camel population: several communities reported only occasional sightings, indicating that camel numbers in their areas were low. Camels are seen near half of the communities surveyed; they have been sighted near cattle and horse troughs, tanks, taps and water points, local airstrips, waste disposal plants, and buildings. The responses of many Aboriginal people reveal their close observations and intimate knowledge of country.

In areas of high camel density many Aboriginal people indicated that feral camels negatively impact the broader landscape environment. Feral camel impacts on natural and cultural resources were the most significant issues of concern. Many people were concerned about camels 'messing up' or damaging naturally occurring water sources such as rockholes, soakages, and other wetlands. Feral camels were said to pollute and deplete water and degrade the area surrounding the water source, as well as dying in and near water sources. People's concerns about camel impacts were multi-faceted and encompassed religious as well as aesthetic, practical, and physical dimensions. Many interviewees in areas of high camel density commented that where they once would have freely camped near water sources and used them, they are now much less likely to do so because of feral camels. These matters were not of particular concern to people in communities on the edge of the feral camel range, or in communities surrounded by cattle stations where culling had occurred.

In areas where camels numbers were high, roughly half of the interviewees were concerned about feral camels stomping, eating and/or otherwise destroying some types of bush tucker; for example, quandongs (*Santalum acuminatum*). Some interviewees also mentioned that camels are sometimes 'getting in the

way of hunting' by frightening kangaroos and other game, or by being in the way of the hunter and his prey. Some people were also concerned about camel impacts on other culturally significant resources such as Jukurrpa (Dreaming) trees, trees which provide shade for animals, bean trees (*Erythrina vespertilio*), bush medicine plants, and native tobacco (*Nicotiana* spp.). However, not all Aboriginal people shared these perceptions. Some people were of the view that camels were just passing through and that the damage was relatively insignificant. Most people who were concerned about camel impacts on bush tucker indicated that the problems were associated with large numbers of camels and were greater during dry periods, such as experienced during the period of the interviews. In terms of impacts on vegetation, interviewees in communities surrounded by cattle stations were more likely to compare camels favourably to cattle than were interviewees at other places.

Concern about the risk camels posed to people's safety ranked second to people's concerns about negative impacts on culturally significant resources. Fear or wariness of camels is beginning to impact on people's use of country and patterns of exploitation. In nine areas of high camel density more than half of the interviewees indicated that camels affected their use and enjoyment of country, particularly when camels were in large numbers or during the mating season when bull camels were present. Other key issues were road safety and camels wandering onto airstrips. One third of interviewees perceived that feral camels affected native animals by competing for water and food and/or scaring animals away. Most people thought that camels kept to themselves and did not interfere with other animals. In roughly half the communities, people observed that feral camels damaged fences, though this was not a matter of great concern, particularly where the fences were not their responsibility. In roughly a third of the communities, people associated with outstations claimed that feral camels were damaging the outstations. Feral camel damage to community infrastructure (including buildings, associated hardware and airstrips) was reported in eight communities.

Most Aboriginal interviewees found it difficult to estimate the economic impact that camels had caused in their community and country in the last two years. This does not mean that people are not concerned about impacts, but rather that they are not used to applying a dollar value to culturally significant resources and experiences, nor indeed to objects in the built environment.

A large number of Aboriginal people perceive that feral camels are a resource that could be used. Positive benefits that they perceive as being associated with camels include income from jobs such as capturing and mustering; pet meat operations; opportunities for involvement in the sale of camels; tourism enterprises such as camel farms, rides and safaris; meat for human and pet consumption; and products such as camel wool. Although not perhaps an impact, other positive aspects ascribed to feral camels include the enjoyment derived from the use of feral camels as family pets, and the excitement and pleasure many people feel in seeing feral camels (although at the same time they may be wary of them). In addition to the positive impacts already listed, many interviewees have strong historical associations with camels and feel empathy for them.

Importantly, it is not just income that is valued in relation to camel work but also the opportunity for meaningful and productive activity that camels can provide. To date, the number of interviewees who have benefited economically from feral camels is not large; however, the widespread and varying engagement Aboriginal people have with camels is impressive. In a few communities youth involvement in the capturing and butchering of camels provides meaningful activity, which is claimed to help prevent substance misuse. It also results in an ongoing, if small scale, local supply of cheap and healthy meat. Camel meat is gaining a reputation among Aboriginal people as a health food and the number of people who eat it is increasing, although there are still people in many communities who are unaccustomed to eating it. Some people are opposed to eating camel meat due to moral considerations. A minority of people have participated in camel mustering and selling activities, with the scale of operations ranging from sales of a few camels to much larger and more organised activities. Some Aboriginal people have been involved in the camel tourist industry.

With the exception of communities on the edge of the feral camel range, many interviewees thought that feral camel numbers and impacts need to be managed, particularly where camel numbers were high. In only two communities, both outstations, were interviewees comfortable with the idea of culling. Interviewees in four communities were prepared to consider aerial culling, provided that it was the only option and it was undertaken away from roads and communities. Three of these communities were in WA where people had been involved in, or had observed, a pet meat operation. However, the interviewee sample size in these communities was small and further consultations may reveal a different attitude. What is significant is that there are people who accept culling as a viable option and that Aboriginal attitudes are not homogenous. Some other interviewees said that they would accept culling if the carcasses were buried or burnt. In general people were worried about the sight of dead camel bodies, associated disease and smell, and an increase in the dingo population.

For the majority of Aboriginal people the preferred camel management strategy was live removal. However, most wanted local people to be involved in mustering and live removal projects and expected that the workers and local community would derive income from the activities. Significantly, even among many Aboriginal people who do not like to eat camel meat, the killing of feral camels to obtain meat for pet and human consumption is widely accepted. The majority of people thought that it was a desirable way to manage camels, particularly if it occurred as part of a commercial operation. Opposition to this option was found in communities that had little experience of eating camel meat and where camel numbers were still relatively low.

Although many people possess skills that could be used in camel management programs, they lack the resources and infrastructure to undertake such programs. Apart from one interviewee who had been involved in feral camel culling on Aboriginal land for a cattle operation, feral camel management was largely restricted to hunting for food, the fencing of culturally significant resources, and the fencing of property. While some individuals had been involved in mustering and selling camels in the recent past, this activity was undertaken for European pastoralists.

There was widespread interest in receiving more support than is presently available to manage camels in association with the protection and management of natural and cultural resources on Aboriginal land. Many interviewees specifically mentioned the need for more paid positions to protect sacred rockholes and other culturally significant resources, with a number stating they wanted more ranger type work. A small number of interviewees from different communities were interested in developing independent tourist operations using camels.

Most Aboriginal people indicated that they lacked access to information about feral camel management. For the most part the information they were able to obtain was said to be from non-government organisations such as Central Land Council and land care groups in the Northern Territory, Anangu Pitjantjatjara Yankunytjatjara Land Management in South Australia, and Ngaanyatjarra Council in Western Australia. Many people indicated that they wanted more detailed information about a wide range of issues, including opportunities for commercial use and employment in feral camel management, information on the rate of increase of the feral camel population, and impacts being experienced in areas of high camel density. Many people felt that they could not make properly informed decisions about feral camel management without such information. People asked for feedback on this camel project, in particular information about economically viable management strategies. Many people said that they hear conflicting stories about the money to be made from selling camels. They want to know what the situation is and how they can engage with opportunities. Given that traditional Aboriginal society had an oral tradition, that many people today are not functionally literate, and many speak English as a second language, it is important to ensure that information is made available in accessible and culturally meaningful forms.

1.1 Conclusion

- Aboriginal people are key stakeholders in the management of feral camels and their impacts.
- Many Aboriginal people, particularly those who live in high density camel areas, see a need to harvest feral camels and control their impacts.
- Few Aboriginal people are currently involved in camel management. However, a small number have broad experience working with camels and have relevant skills and knowledge, which they are keen to use in feral camel management programs on Aboriginal land. It is important to both recognise and build on this knowledge and interest base when developing and implementing feral camel management plans.
- Aboriginal people lack the necessary support and resources required to play a greater role in feral camel management.
- Generally, Aboriginal people lack detailed and accessible information about feral camel management issues. They therefore cannot make fully informed decisions about management options and ways to develop and implement management programs and activities. They are keen to obtain more information on these matters as well as associated training.
- Most of the Aboriginal people interviewed were not comfortable with killing animals to waste (culling). However, the Aboriginal 'community' is not homogenous. There are diverse perspectives emerging in response to transformations being brought about by feral camels on Aboriginal land.
- The research shows that people with greater camel management experience tend to have different attitudes to others. At the present time, the full range of camel management approaches (see Section 5.3) is not generally available to Aboriginal communities.
- Aboriginal people are interested and willing to engage in collaborative management programs. However, interest varies within communities and among communities throughout the feral camel range. It is also predicated on the meaningful engagement of Aboriginal people in the programs and on the creation of opportunities, support, and investment in areas such as jobs, income, resources, and training.
- It is essential that government agencies engage with Aboriginal people, communities, and organisations representing Aboriginal land interests in developing and implementing a cross-jurisdictional management framework for managing feral camels and their impacts.

1.2 Recommendations

- Provide Aboriginal people with accessible and relevant information on camel management issues.
- Provide community survey participants with feedback on the findings of this camel project in the form of meetings and workshops.
- Facilitate the sharing of knowledge and information among the different stakeholder groups within a two-way learning framework.
- Undertake coordinated follow-up consultations to determine appropriate and acceptable feral management strategies for the different Aboriginal communities. Consultations involving people with customary interest in land and involving other community members to be undertaken and coordinated by representative bodies charged with managing Aboriginal land.
- Provide Aboriginal people and communities interested in feral camel management projects with support and assistance in the form of information, resources, training, and capacity building. This should include support for Aboriginal groups who want to operate independent 'flexible capture' programs.

- Harness the willingness and capacity of Aboriginal people to engage in feral camel management as well as their intimate knowledge about camel impacts and presence when developing and implementing a cross-jurisdictional management approach by undertaking appropriate consultations and providing necessary support and opportunities for collaborative engagement.
- Base the selection and support of camel management options on Aboriginal needs associated with the integrated management of natural and cultural resources as well as on economic criteria.

2. Introduction

As part of the survey of stakeholder perspectives on camel management, a survey was conducted on Aboriginal community perspectives on feral camels, their impacts and management. The project was conceived as a partnership involving Waltja Tjutangku Palyapayi Aboriginal Corporation (Waltja) and Desert Knowledge CRC (DKCRC). Petronella Vaarzon-Morel, a consulting anthropologist with extensive fieldwork experience in Aboriginal communities, was engaged to deliver the surveys. The objectives were:

- to identify the range of perspectives among selected Aboriginal communities¹
- to enable an effective participatory camel management strategy to be developed
- to promote education on camel issues.

2.1 The structure of the report

In writing this report I have attempted to reconcile the needs of different audiences. Thus, I have presented information in different formats throughout the report including tables, maps, and descriptive analysis combined with background information.

Section 1 presents a summary of the report with the conclusion and recommendations. Section 2 provides the introduction. In Section 3 I describe the aims and methods used in the research as well as its limitations. I also briefly mention the challenges I faced in organising and conducting the research.

Section 4, the findings, presents the two case studies. Section 5 discusses the remainder of the findings from all the Aboriginal communities surveyed, focusing on key differences in perspectives among and within them. Implications of the findings are also discussed. Following the conclusion of the report (Section 6), recommendations are presented (Section 7).

Appendix 1 presents the results of the research conducted with 25 communities where the survey was less comprehensive than in the case studies. Nevertheless, much of this material is detailed and rich, providing considerable insight to the comparative analysis in Section 5. Hence, readers may prefer to read this Appendix before reading Section 5.

The series of questions used as a basis for the semi-structured interviews are attached as Appendix 2.

¹ The term 'community' is used here to mean a residential locale. Elsewhere in the report the term also refers to a group of people with cultural ties who relate/work together. The two uses of the term are not necessarily isomorphic. Aboriginal people generally have multiple, cross-cutting social and cultural relationships that extend beyond any particular residential locale to a larger social polity. It is also sometimes the case that all the people who live in a particular locale do not think of themselves as one community. In relation to the latter, Aboriginal people often use the term 'settlement' to refer to large places established by the government where people of different language and cultural groups were settled, for example, Papunya, Yuendumu, Ali Curung, Lajamanu. They generally distinguish these places from Aboriginal villages on pastoral leases and places that were established as homelands or outstations.

3. Method

In order to obtain a meaningful sample of Aboriginal community perspectives a face-to-face survey was undertaken with Aboriginal stakeholders in communities located across the feral camel range. The research was carried out using qualitative methods involving two case studies and a wide-ranging survey. The methods drew upon community-based participatory research principles, with local people assisting in the research process and helping members of the community to assess the impacts and management issues associated with camels in their regions. *The Camel Book*, produced by Tangentyere Landcare (2006) and reprinted by DKCRC in the 'Cross-jurisdictional management of feral camels to protect NRM and cultural values' project with support from the Australian Government, was used to give community members information about camel numbers, impacts, and management options. Waltja provided administrative assistance for the Aboriginal community surveys, organising visits to communities and arranging local research facilitators (who Waltja referred to as Nintiringtjaku workers).

The case studies

The objective of the case studies was to survey a wide group of people of varying ages in order to evaluate differences in perspectives within communities as well as between communities. The main data collection method for the case studies was face-to-face semi-structured interviews with approximately 20 adults who comprised a cross-section of the community, including older, middle-aged, and young men and women. The questionnaire used as the basis for the interviews addressed people's:

- perceptions of feral camels and their presence
- perspectives on the impacts of feral camels (including environmental, socio-cultural, and economic dimensions)
- involvement in, and attitudes towards, different camel management options.

The wide ranging survey

The objective of the wide-ranging survey was primarily to canvas stakeholders' key views so that differences between communities could be identified. Given the time constraints on the research, it was envisaged that the data collection and sampling methods would be less comprehensive than those adopted in the case study. In the wide-ranging survey, it was intended to hold informal two-way discussions involving two groups of 10–15 people as well as community leaders. The discussions were to be focused on a more limited set of questions than those used in the case studies. In the event, it was not always possible to arrange discussions in this way, so semi-structured interviews using questionnaires were conducted with smaller groups and individuals in combination with two-way discussions. This resulted in richer and more extensive data than originally envisaged.

3.1 Selection of survey areas

In total, discussions were held in 27 communities, five of which were located in South Australia, eight in Western Australia and 14 in the Northern Territory (see Figure 1). In addition, discussions were held in Alice Springs and by phone with Aboriginal and non-Aboriginal people associated with a number of Aboriginal communities that were not visited. It is estimated that approximately 490 Aboriginal people participated in discussions concerning the project, of which approximately 255 people were involved in formal interviews.

Ecological, social, cultural, and material factors were considered in the process of selecting the communities to be surveyed. As it was not possible to survey all the Aboriginal communities within the feral camel range, it was decided to limit the survey to the states and territories where feral camel numbers were most dense. This meant that Aboriginal communities in SA, WA, and NT were included but not communities in Queensland and NSW. Other criteria used when selecting communities included the need for a broad representation of different cultural and language groups across the feral camel range, including areas known to have high densities of camels causing significant impacts on the environment and areas with a lower camel density. Thus, communities were selected whose members were affiliated with the following language and culture areas: Arandic communities (Eastern Arrernte, Anmatyerr, Alyawarr); Western Desert (Pintupi, Luritja, Pitjantjatjara, Yankunytjatjara, Ngaanyatjarra, Ngaatjatjarra); Warlpiri; Kukatja; Ngarti; Walmajarri; Tjaru; and Tjurabalan. Communities in areas where there were reported to be few or no camels – for example, Tennant Creek, Ti Tree, and Utopia – were not included in the survey. In addition, Central Land Council (CLC) requested that the survey not be extended to Docker River where they were implementing camel management plans. It was thought that yet another person asking questions about feral camel issues at that time would further complicate the process. As a result the survey's findings do not reflect views held in a community where extensive consultation and education on feral camel management issues has occurred.

Taking into account these considerations, I drew up a list of potential communities to be surveyed in consultation with project director, Glenn Edwards, and senior project officer, Benxiang Zeng. The Aboriginal communities selected were surrounded by Aboriginal freehold land, surrounded by pastoral leases, or surrounded by Aboriginal freehold land on which there were cattle operations. For the most part, larger Aboriginal communities were selected; however, some homelands or outstations were also included in the survey.

The next step involved Waltja obtaining permits from relevant land management organisations such as CLC, Ngaanyatjarra Council, and Anangu Pitjantjatjara Land Management (APY). These organisations approached Aboriginal people in the selected communities to gauge their willingness and consent to participate in the feral camel research. It was not until research was well under way in the CLC and Ngaanyatjarra regions that permission to work in SA on the APY lands was obtained. Inevitably, the selection process meant that some communities whose members had extensive experience with camels – for example, Fregon – were not included in the survey.

3.2 Characteristics of the survey population

The project team's experience in the region has shown that pastoralists tend to be primarily concerned with issues that affect livestock production and their cattle operations. Most (but not all) Aboriginal stakeholders in the survey region do not share the same concerns. In general, the Aboriginal stakeholders' primary focus in relation to the environment is the management of natural and cultural resources, which, for Aboriginal people, are intimately related.

Most Aboriginal stakeholders in the region being surveyed have little or no experience with the approaches used in quantitative research, and, as noted by Devitt and McMasters, standard survey work with Aboriginal people in central Australia can be fraught with problems:

Methods that are culturally questionable to Aboriginal people ... will produce correspondingly unreliable outcomes (1998, p.18).

While many Aboriginal people in the survey region are multilingual, English is often a second or third (or indeed, fourth) language. Many people, in particular those older than 40, are not functionally literate or numerate, and many others may have only received a rudimentary form of western education. In order to obtain meaningful information it was important both for the research approach to be qualitative and for the interviews to be open ended. The different cultural assumptions that westerners and Aboriginal

people hold about the world, and about ways of categorising things within it, meant that a close-ended survey of the type used for pastoralists was not an appropriate method of inquiry. However, for the purposes of comparison and analysis, the research needed to be focused on similar themes to those explored in the pastoralist survey. Thus a questionnaire was used to provide structure to the interview process and to ensure, as far as possible, consistency in the coverage of questions with different interviewees. Importantly, while the existence of the questionnaire helped focus questions, it did not inhibit a wider discussion of camel issues. The use of a standardised open-ended interview approach enabled the interviewees to ask questions and discuss issues of concern, while at the same time I was able to explore more fully their cultural understandings, attitudes, and perceptions. I found that, while interviewees can, and often do, generalise about matters, they provide more useful information when discussing specific contexts and concrete examples.

Other researchers in the region have questioned whether the mode of questioning used in surveys is culturally appropriate for Aboriginal people. For example, Devitt and McMasters (1998, p.14) state:

Asking questions is problematic: the majority of the local Aboriginal community consider sustained systematic questioning of the kind commonly used in surveys as a hostile intrusion. It is discourteous and unsettling to most Aboriginal people. In some circumstances it is interpreted as a form of criticism. It is the style of communication most usually associated with White authority in its many forms (see also Nathan & Japanangka 1983, p.8).

However, I found that for the most part, people were happy to discuss feral camel issues and have their views known. The participation of local Waltja workers in the research, combined with the fact that feral camels are a matter of interest to many people, meant that the research was not generally perceived as intrusive. It also helped that I was known and trusted by many people in the communities, having worked in many Aboriginal communities in a variety of areas including education, Aboriginal land claim and native title research, history, and environmental issues.

3.3 The survey questions

The development of the questionnaire involved a three stage process. The initial questionnaire form was designed by scientist and project officer Benxiang Zeng to address similar themes as those in the survey that was delivered to pastoralists (camel presence, camel impacts, and camel management) (see Zeng & Edwards 2008: Appendix 3.1), but with modifications arising from the significant differences between the two stakeholder groups.

The second stage involved me making the questionnaire more user friendly for Aboriginal people. A number of referents used in the original questionnaire had to be qualified or changed. For example, the original question ‘Do you have camels on your land?’ was thought to be too general and problematic. Aboriginal respondents might interpret the question in different ways. The referent ‘land’ might be a person’s own clan estate, country associated with his/her language and cultural group, the person’s residential community, or the surrounding land. Similarly, the term ‘community’ can mean many things; for example, the locale where one resides or a wider social entity. The term ‘feral’ is not widely used by Aboriginal people, but alternatives such as ‘wild’ can also have other connotations apart from what is meant by feral. The term ‘country’ has different levels of meaning for Aboriginal people. For example, it is sometimes referred to as a person’s patrilineal clan estate, sometimes as the area a person habitually uses, at other times as country associated with a wider language and cultural grouping and, of course, as Australia. Additional questions were added to clarify these matters. As well it was intended that further explanation would be provided verbally at the time of the interviews.

The third stage involved me trialling the modified questionnaire in Titjikala and Apatula/Finke. One set of questions that proved highly problematic concerned ‘valuation of negative impacts’. Most Aboriginal interviewees found it difficult to estimate the economic impacts that camels have had on their community and country in the last two years. As a result, questions concerning the evaluation

of negative impacts were not strongly pursued with interviewees. I also changed the order of some questions and added some additional questions concerning people's country and community affiliations and their past experience and association with camels. This information helped me to contextualise the interviewees' other answers and gain a greater understanding of their perspectives and underlying assumptions. A copy of the questionnaire is attached as Appendix 1.

3.4 Survey delivery and sharing of information

Waltja provided administrative assistance for the Aboriginal community surveys, organising my visits to communities and arranging local research facilitators (Nintiringtjaku workers). In organising the visits, Waltja explained the purpose of the research and consulted with the CEO in each community about appropriate times (see later discussion on limitations and challenges). The timing of the visits depended upon a number of factors such as the availability of key informants and local Waltja Nintiringtjaku workers to participate in the research, the availability of accommodation for the researcher, and my fieldwork timetable.

The role of the local research facilitators was to identify key informants and focus groups within the community, to introduce the principal researcher to potential participants in the survey process, and to facilitate the conditions for the interviews and two-way discussions about camel issues and people's perspectives on camels.

Prior to each interview, I explained to every interviewee involved the purpose of the research and how the information would be used. In addition, an information sheet was provided to interested people. I explained that as indicated in the original ethics proposal for the project, the names of interviewees would not be used in the report unless specifically requested. Informed consent was obtained from key interviewees. Where they were available, Waltja workers helped interpret the survey questions. Invariably, in the course of discussing issues raised by the survey questionnaire, people indicated that they wanted further information. This provided a good opportunity to discuss matters raised in *The Camel Book*, including the growth in camel numbers, impacts, and management options.

Before I undertook the interviews, Benxiang Zeng, Project Officer with DKCRC, conducted interviews in WA at Warakurna, Warburton, Papulankutja/Blackstone, and Kanpa. As well, Miriana Jambrecina, Manager at UKTNP, conducted an interview with a focus group at Mutitjulu, and anthropologist Diana James conducted an interview at Fregon with the Robin family from Walalkara. The Zeng and Jambrecina interviews took place before I had revised the questionnaire and as a result some questions were not directly addressed, for example: 'Do you think they need to control camel numbers?' I also conducted a phone interview with Jeannie Robyn, Project Manager for Kuka Kanyini Walalkara, who was in Adelaide at the time. In addition, I spoke by phone to Don Rowlands, Ranger at Simpson Desert Conservation Park, concerning his perceptions of camel numbers and issues in the south-eastern Simpson Desert area.

3.5 Selection of interviewees

The survey of each Aboriginal community involved a number of interviewees. This is an important difference from the pastoralist survey, where one person spoke for one pastoral unit. Given the constraints on the research, the realities of Aboriginal community life, and the varying interest levels of the participants, it was logistically impossible to ensure that the same age range and number of interviewees participated in each community survey. Nor, as stated in the methodology of the original proposal for the Aboriginal community survey, could I ensure that a representative of each different 'family' group participated in the survey. It would have been a major anthropological exercise to

delineate, and ensure representation of, different extended family groups. This was well beyond the scope of this research, and, given that Aboriginal people have extended webs of kinship rather than the nuclear families of Anglo-Australians, would not have been possible in many cases.

Another factor that had to be considered was that within Aboriginal communities people have different statuses, roles, and responsibilities in relation to land or country. According to Aboriginal cultural protocols and customary law, it is senior people with recognised traditional rights, responsibilities, and interests in a particular country or estate who have the right to speak for it (see Myers 1988, Sutton 2003). These people include both ‘owners’ and ‘managers’ (see Pawu-Kurlpurlurnu 2008, pp. 10–17). In the Aboriginal land tenure system there are likely to be multiple estates and owners and managers of estates in any one region surrounding a community. At the same time, people who have lived in an area for a long time but are not traditional owners also have interests which must be taken into account. It was important to know a person’s status vis-a-vis country and whether an individual was familiar with an area and had lived in the community for a period of time or was a recent arrival. The local Nintiringjaku workers and community council members were helpful in this regard, as were interviewees themselves. Generally people who were only visiting a community, or felt that they had no cultural authority to speak on an issue, informed me that this was the case. In the main, with the assistance of Waltja workers I spoke first to senior members of the community, and was guided by their suggestions as to potential interviewees. The existence of non-customary governance structures such as local community councils meant that I also needed to obtain the views of councillors. Overall, I tried to ensure representation from the following groups of people: people with traditional rights and interests, Aboriginal councillors, younger (15–39), middle-aged (40–59), and older (60 plus) men and women. These groups were not mutually exclusive.

3.6 Data collection and analysis

The interviews and their interpretation were necessarily an act of cross-cultural communication. As many anthropologists and linguists have noted, such communication is not merely a matter of the translation of words but also of concepts. In central Australia, where Aboriginal languages are widely spoken and customary relations to land still strong, the conceptual systems of Aboriginal people differ from those of non-Aboriginal people in sometimes radical ways.² As a result, translation, which ‘requires close correspondences across conceptual systems’ (Lakoff 1987, p. 312), is not always possible. This does not mean that communication is not possible but rather that it involves understanding different ways of experiencing and constructing the world (see Lakoff 1987).³ There was thus sometimes much discussion about what a question meant. Waltja workers assisted me in this task, and it also helped that many Aboriginal people spoke good English and that I understood some of the Aboriginal languages the interviewees used. I noted people’s responses by hand and attempted to record the exact words of the interviewee; however, this was not always possible when a lengthy discussion ensued. On one occasion I used a tape recorder and subsequently transcribed the tape; however, the process was too time-consuming to use more widely.

The next step involved entering the raw data into a Microsoft Excel datasheet. Responses were organised according to community and were edited as necessary into categories. The questions on the questionnaire form were used to provide the different themes used as the categories. Following accepted procedures for the analysis of qualitative data, data within and between different categories was then compared to ensure appropriate categorisation (Baker & Motton 2005, p. 310). There was some overlap between different categories. This overlap did not reflect a lack of reliability in the coding (see Baker & Motton 2005, p. 311) but rather issues associated with cross-cultural translation and approaches to categorisation. Standard approaches to the latter tend to be based on a classical model

² See Rose (1995, pp. 5 & 165–171) for a discussion of this issue and the problems Rose faced discussing land use and resource management issues as a non-Aboriginal researcher with a scientific background.

³ See Debra Rose (1999 and 2005a) for accounts of Aboriginal understandings of environmental relations.

in which each category has ‘clear boundaries, which are defined by common properties’ (Lakoff 1987, p. 16). However, as the cognitive models approach indicates (Lakoff 1987, pp. 56–7), there are some categories which have ‘fuzzy boundaries’. In my discussions with Aboriginal people, I have drawn on my knowledge of Aboriginal culture when interpreting the data.

Given the time constraints on the project, the various cross-cultural issues discussed earlier and limited sample sizes, it was neither feasible nor desirable to attempt statistical analysis of the answers for each community. Rather, analysis involved a process of synthesising and describing data (Baker & Motton 2005, p. 310), with similarities and differences in community perceptions identified and summarised. Providing examples of people’s responses is considered to be a useful way of illustrating how people think about issues and of indicating how representative a particular view is, and also provides some comment on potential cross-cultural differences. In addition, some background information is given for each community to help contextualise the information.

As mentioned earlier, I have presented information in different ways (see Sections 5 and Appendix 1) for different audiences. The detailed information presented in Appendix 1 of this report aims to provide a useful resource for future camel management discussions with Aboriginal people. In contrast, Section 5 – the discussion section of the report – presents tables that compare the responses for each community in summary form. This allows the reader to form a broad picture of the similarities and differences in perspectives. However, it is important to point out that the tables differ in both their intent and the way responses were selected. Table 2 on observations of camel presence is relatively unproblematic. In general there was concordance among interviewees in each community about the themes discussed in relation to camel presence and densities. Tables 4, 5, 6, 7, concerning perspectives on camel impacts, and Table 11, concerning the need for assistance and support to manage feral camels, are more problematic. They show where a view was mentioned within a community; however, it does not follow that the view was commonly held. In contrast, Table 8 attempts to present a view with which most interviewees felt comfortable. However, it does not mean that everyone within a community proposed the same view. Further discussion of these issues follows each table.

3.7 Survey coverage

How well the survey sample represents the Aboriginal population in the feral camel range is a combination of:

- the number of communities and their location
- how many people were interviewed and who they were.

As Figure 1 and Table 1 indicate, although there was a stronger focus on communities in areas known to have large camel populations, the survey has achieved a reasonably wide coverage of the Aboriginal communities within the feral camel range. Approximately 5.6% of Aboriginal communities within the camel range were surveyed, giving an estimated survey sample of 22.6% of the population in that area. It is important to note that there was a bias toward places with larger populations. Indications are that camel numbers and impacts may actually be greater at places with smaller populations, at least in non-pastoral regions. Hence negative impacts of camels are probably conservatively reported.

Due to the reasons discussed below, more comprehensive interviews were conducted in some communities than others. While the numbers of people interviewed in each community were not large, the fact that men and women of different ages and statuses were interviewed means that a reasonable sample of the range of views of people across a community was obtained. This is underlined by the high degree of repetition of perspectives and issues from different people and places. At the same time, however, it is important to note that wider consultations and longer-term research within communities would most likely reveal some other perspectives and raise yet more issues.

Table 1: Community survey coverage

Within the camel range, there are 484 communities, including outstations, with a total population of 31 383:	
Number of communities surveyed	27
Estimated population of communities surveyed	7096
Mean population of communities surveyed	263
Number of communities not surveyed	457
Total population of communities not surveyed	24 287
Mean population of communities not surveyed	53
Proportion of communities surveyed	5.6%
Proportion of population surveyed	22.6%

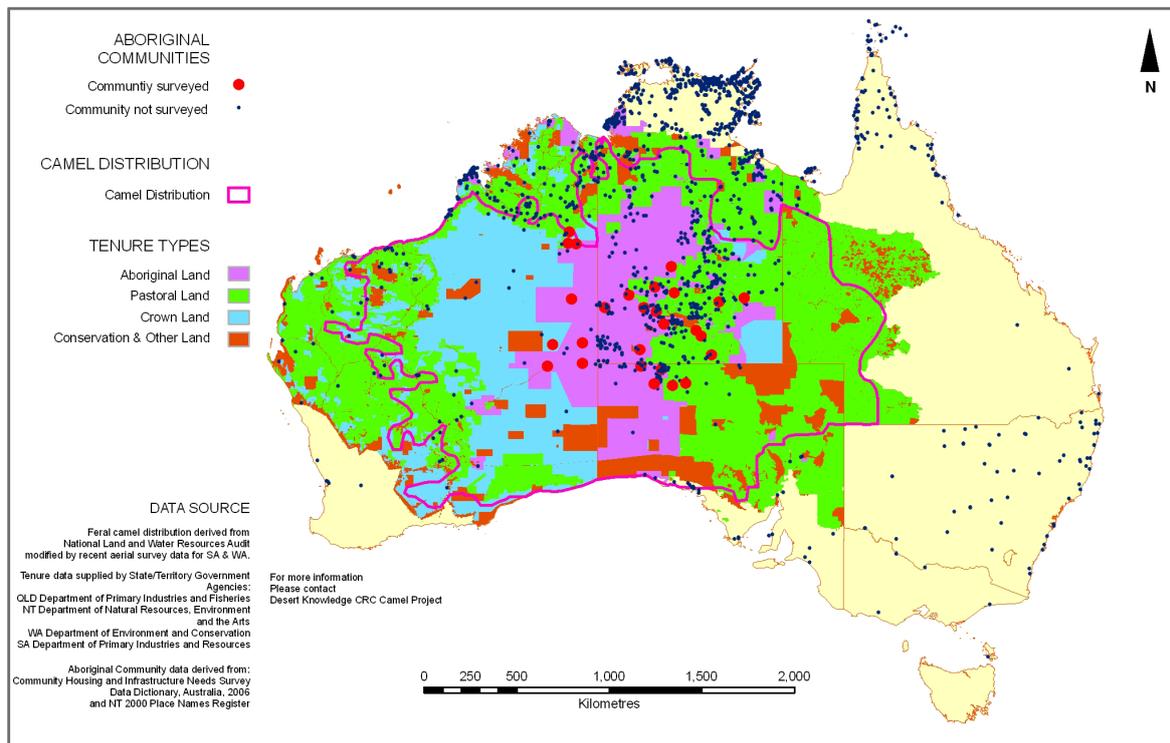


Figure 1: Map of Aboriginal communities surveyed

3.8 Challenges and limitations

As with all rapid survey work, the research on which this report is based was limited by time constraints on the researcher and unexpected events in communities that influenced the selection of informants. As mentioned earlier, Waltja, in consultation with particular Aboriginal communities and me, undertook the planning of visits to communities to carry out research. The need to plan visits to communities often several weeks before they took place inevitably meant unexpected events later occurred which sometimes affected the research. Factors such as the turnover of non-Aboriginal administrative staff, illness, funerals, conflicting meetings, and other competing demands often meant that potential key informants were not available to participate in the survey at the scheduled time. These factors resulted in the sampling of some communities being more comprehensive than others.

The research happened when a major shift in Commonwealth–Aboriginal interaction was under way in the Northern Territory, resulting in many visiting bureaucrats being in the NT communities. On more than one occasion I arrived in a particular community to find that the Howard Government

Intervention was being, or had just been, rolled out. While over time people's memories of the first days of the Intervention may fade, its implementation had implications for this research. The Intervention introduced changes that sometimes resulted in members of the community having increased levels of stress and uncertainty, and feelings of disempowerment, which were not particularly conducive to a positive research environment. Because Waltja also had a history of positive collaboration with many people in the communities and the research involved local Waltja workers, and because I was trusted by a number of informants, people openly discussed their concerns with us. People wanted to know whether the research was part of the Intervention and how the data would be used. As well as providing background information on the genesis and aims of the camel project, we assured people that the camel project was not part of the Intervention and did not seek to impose a preordained course of action on a community but rather objectively sought people's views. In the event, many people were pleased to share their knowledge of camels, their concerns about feral camel impacts on the environment, and their ideas and aspirations concerning the matter. It is a measure of the interest in the project and the interviewees' desire for their views to be heard that despite the many pressures they were facing in their daily lives, they willingly engaged in discussions and answered questions.

Another challenge for the research process was that Waltja Nintiringjaku workers were not available to assist with the interviews and discussions in all of the communities. While the research would undoubtedly have benefited from the presence of a facilitator/interpreter on all occasions, the lack of such a person did not present insurmountable problems for the research. My familiarity with Aboriginal languages, social organisation and cultural beliefs in the survey region facilitated the discussions and interpretation of the data.

In presenting observations of camel presence I sought to indicate people's perceptions of camel densities. However, perceived observations may differ from the reality of the situation. The frequency of sightings is indicative of people's travel patterns and activities and cannot be taken as an accurate picture of camel density.

Finally, the findings of this research can be considered indicative of different Aboriginal perceptions and attitudes concerning feral camels throughout much of the feral camel range. However, while they are meant to inform future planning concerning feral camel management, they do not provide a blueprint for a particular course of action in a particular community. Further consultation is required in order to determine appropriate, achievable and acceptable camel management strategies for the different Aboriginal communities and land tenures. The consultations must involve people with customary interest in land, other community members, representative bodies charged with managing Aboriginal land, and local governance organisations.

4. Findings

4.1 Introduction

The following section presents material from the case study areas Apatula/Finke and Kintore. This material is more detailed than that obtained from other communities (see Appendix 1) and canvases more fully the responses of interviewees from different age groups.

4.2 The case studies

4.2.1 Apatula/Finke

Background

Apatula, also known as Finke, is located approximately 400 kilometres south-east of Alice Springs. The area was originally a railway town populated by settlers and other Europeans until the siding moved in the 1980s and Aboriginal people, who had lived in the sandhills to the east, moved into town and housing built by the Apatula Housing Association. One hundred square kilometres surrounding Finke became Aboriginal land in 1990 (NT Government 2007). The estimated population is 200. In addition to English and Arandic languages, Yankunytjatjara and Pitjantjatjara are also spoken by people at Finke.

Sample

Fifteen semi-structured interviews were held with men and women ranging in age from 15 to 90. One interviewee was a councillor and another was the community council president. In addition, discussions were held with other local Aboriginal people during a camel sausage barbecue at the community, and with the non-Aboriginal CEO and school teachers.

People's past association with camels

Historically, many people from the Finke region had strong associations with camels. Of the 15 people formally interviewed, 10 had prior experience with camels. They were aged as follows: eight older people, one younger, and one middle-aged person. Four older people recalled that their parents also had strong associations with camels, as did one middle-aged person.

For example, one 50 year old interviewee said:

I used to ride camels. When I was 10 or so, we lived in front of the sandhill near here. On this side we had a big yard, had horses and camels. This was before houses were here. No money. My grandfather had an idea. He bought horses from Macumba.⁴ He sold the camels to Margaret Bain.⁵ We got houses then. I used to ride camels here. They are fast runners.

He also described how Aboriginal people used camels to travel from place to place until the early 1970s, when Aboriginal people in the region began to get motor vehicles:

That time we no motor car, we had no motor car. My family was travelling along, and we'd walk along, might be get too hot and we'd jump on camels. Go along, settle down somewhere in a good shade and have lunch. [They'd] unhook the camels again, then start moving along. Travel along to Santa Teresa, stop there for two days. That was getting ration time. Old people were getting ration, and after ration we'd go back the same place again. Go back have another holiday in Amoonguna⁶ and start moving from there to Titjikala,⁷ travel along to Titjikala – couple of family there with a lot of camels. Met up with another mob family. I been travel from there with a motor car then. Because my mother was

⁴ A station on the edge of the Simpson Desert in South Australia.

⁵ Margaret Bain worked for the Uniting Church and was instrumental in helping Aboriginal people get houses and land at Finke.

⁶ Established as a government settlement near Alice Springs in 1960.

⁷ The area referred to as Titjikala here was formerly part of Maryvale Station.

staying at Amata, I went to Imanpa – no, before Imanpa – I went to Ebenezer⁸... Another old people had camels – another old grandfather from Amata side, we been travel from there with camels to Angus Downs, travel along. First time I see a lot of camels, family had. Another mob family travelling from Amata.

An older man recalled his experiences briefly as follows:

As a young person I travelled with camels up the Finke River. From Henbury we started. My mum used to work there. She worked for Molly Braeden... We stopped using camels late 1960s. Old people died, young ones never took it up. The camels just went loose and took off. I broke in camels. I like animals, wildlife. I don't like the idea of eating camels for meat because I grew up with them. They are part of the family. I grew up and worked with them. They carted everything: carted wagons, got mail and rations every Friday, flour at old shed at Finke. Old bloke would get them off the train. The green ration shed is still here... My nana first was working with Afghans, carting loads to Hermannsburg, Tempe Downs, starting off from Marree, Oodnadatta, and Finke. Then my mother joined in – hard work. Follow the feed, water; long way between bores. I used to muster up the camels. We had five camels and they pulled a cart... I grew up with them.

A young woman reminisced about the pet camels her family had at Finke:

We used to own two camels, we grew them up with milk... The male got too aggressive when it got older. We had to put a fence around [it]... They used to know each person. They would smell you and know you – they know the scent. When other people go there, they'd get aggressive with them. When they got bigger we chucked them on a trailer and took them out to the homeland.

Observation of camel presence

All of the interviewees reported seeing feral camels in the wider area but not at Finke community. Camels were generally thought to be increasing in the Simpson Desert region (see Figure 7.5 in Edwards et al. 2008), but some interviewees commented numbers were less on neighbouring stations than had previously been the case, due to culling. The culling of camels over the past eight years in Witjira National Park to the south is likely to have reduced numbers in the region. Generally, the closest feral camels came to the community was approximately five kilometres away. For example: 'Not often that I see tracks close to the community. Have seen tracks in the sandhills 5 k near Finke.' A middle-aged man commented: 'Not around here close, because the neighbouring stations have been shooting them out. Odd one along Finke River – they follow the creeks and get through where there are no fences.'

Most camels were seen by people around homelands such as Ilinya and Charlotte Waters, when visiting sacred sites near the desert and when hunting, particularly along the Finke River, in the sandhill country, along the road to Kulgera and east of Finke on stations on the edge of the Simpson Desert such as New Crown, Andado and Mt Dare. The frequency of sightings is indicative of people's travel patterns and activities rather than camel density. For example, a 50 year old man said that he frequently saw camels:

When I drive out going hunting – I sometimes go Kulgera road – I see them there 10 k away from Finke. And when I lived at my outstation, Ilinya (Half-Way camp), 20 k from here (but bore broke down) – lots of camels there and across the creek; passing through like visitors. Saw some last month when I had a flat tyre hunting next to Centre Creek and when I went visiting sacred site in desert last week. Saw one lot of five camels then another lot of six. Bull camel with three mothers and a couple of young ones ... When you driving along, you see camel and say, 'Hey, where did he come from?' He come from the bush ... a few camels around here, where the Finke wraps around, when you go there you'll see camel tracks. An old soakage bin here for quite a while; they know main places, main soakages. Sometimes when they see a trough, they come up to the trough, or see turkey nest dam or where they

⁸ Imanpa is a relatively recent excision on Mt Ebenezer Station.

make a dam for the station. When water dry they move along, they move to other places. After a big shower, when the rain comes, they move along, they follow the rain and go miles away. When they live in the desert they live on parakeelya and trees until another rain comes up. Some camels don't worry about water. They live on what they eat, they live on that. They wait for another rain.

Perspectives on negative camel impacts

When asked to consider generally whether camels caused any problems, only five interviewees indicated that they did. Three of them were older people. Some interviewees commented that, compared to cattle, camels had relatively little impact on country. Most interviewees thought that camels were not causing problems at Finke community, which was said to be partially fenced. For example, a senior male responded:

Not at Finke and not at our outstation. I just leave them be, minding their own business. There is an electric fence on one side of Finke to block them. We did that to keep the camels on New Crown. They put them in horse paddock. They used to come here for water and go away again. We weren't paid to put the fence up – we did it ourselves, when CDEP was on; but not now because of Intervention.⁹

However, a middle-aged female perceived that they were a problem at Charlotte Waters homeland in that camels damaged fences and were a safety risk to children: 'Yes, it is causing problems at outstation Charlotte. They're destroying all the fences. Kids can't go around and play. All right when the creeks are full.' Five interviewees indicated that they were frightened of bull camels in season (i.e. when mating). However, one man expressed concern for camels being frightened and possible consequences to them:

When they get frightened they stampede to another boundary. They get herded, crippled up, that's when people shoot them. We get sorry, he's going to be like that [crippled] all his life and sometimes people shoot 'em.

When asked to consider in the abstract whether camels were causing problems for country, only two older interviewees and one middle-aged person perceived that they did. For example, one older woman commented: 'Yes, they damage the country – you see all the trees stripped bare and sacred sites and waterholes.' However, when people considered specific contexts some offered further comment on camel impacts.

For example, a female interviewee said that camels were 'cheeky; damage fences. They eat bush tucker – mulga trees and grass. Damage sacred sites and waterholes'. A 50-year-old man commented: 'Other side of Fregon we saw one bull camel fall in a waterhole ... It was a sacred site. The old *tjilpis* [old men] had to clean it out. They do damage to Dreaming trees. They don't know how to act; they got no brains.' Another person added: 'Break trees, *watarrka* (*Acacia ligulata*). They eat any sort of thing when there is no *watarrka*.' One middle-aged woman said that at her homeland, 'we have broken fences everywhere because of camels. They eat all the trees around us; hardly any trees left. Don't notice them eating bush tucker. We got biggest mob mulga. But the mulga is destroyed by cattle anyway'. In addition to impacts on sacred sites, other examples of problems caused by camels included: damage to rockholes/water sources and fences, generally making a mess and eating trees and vegetation including bush tucker. Of 19 examples of camel impacts provided by interviewees, older people provided 11, middle-aged people provided five, and younger people provided three. It was the older people (three) who expressed concern about damage to sacred sites. In part, this reflects older people's greater cultural authority and right to speak for country, their greater knowledge of country, and the fact that younger and middle-aged people are more likely to be occupied by jobs and tasks that keep them tied to the community. Some younger interviewees said that they 'did not really know' and that camels 'live their own lives and don't bother us'.

⁹ At the time of the research CDEP was no longer operating in this community due to changes brought about by the Intervention.

In regard to the question about camel impacts on other animals, no interviewees perceived camels to have an impact on other animals. For example, a middle-aged man said: ‘No, we don’t really see them as a pest here. We don’t have big numbers here like they do in the west [for example, Kintore].’

While some interviewees were concerned about camel impacts as described above, in general, people at Apatula/Finke did not consider camels to pose a significant land management issue in their area. In part, this is related to the fact that camel densities are said to be low in the region when compared to other areas such as the Simpson Desert. It is also related to the fact that people have strong historical associations and moral concerns in relation to camels in this area and tend to regard them as a legitimate part of the landscape – certainly as much as cattle, which they perceive to impact country.

Perspectives on positive camel impacts

The majority of interviewees perceived camels as a resource from which they could potentially derive benefits; for example, the creation of jobs and income from activities such as tourism, stock work, land management activities such as fencing of protected areas, and camel products. For example: ‘Good to have job for Aboriginal people to muster them up.’ Two older men had once been involved in the sale of camels, but not recently. For example, one man said: ‘I sold a wild camel to the man from the Camel Farm in Alice Springs a couple of years back. Young camel, feral. Chucked a rope over him.’ The other had worked mustering camels on a European-owned station: ‘Just on stations like Tieyon, a few years ago I put them on trucks – when there was a market for them.’

Only four interviewees suggested camels should be used for meat and three of these were young or middle-aged, reflecting the fact that, in general, older people at Finke do not like to eat camel meat. For example, an older woman said:

Never eaten camel meat. God made camels, so you can’t eat them. Some people eat it a long time ago, not me. My father and mother ate wild camel at Erldunda, Ernabella and Mimili. They used to make bush medicine from fat from the hump. A long time ago – Margaret Bain time [early 1970s] – my father sold some and they went on a train to Sydney somewhere. But not wild ones ... He caught them on a horse and hobbled them.

Another older man stated:

A lot of people shoot them for meat, they reckon good meat, but not me ... Camel is like family to us ... Haven’t eaten camel or donkey. Make me sorry, like religion – it hurts. Myself, I don’t like eating travel. They are really good when you are travelling. They see things miles away and they tell you. They’ll talk. They’ll see things at night time and see things like kurdaitcha [malevolent being] following you. They are really smart, really brainy, really sensible ... They know their master ... the bloke who looks after the camels. If you get rough with camels, they’ll recognise you and when you try to catch them they’ll bite you. They’ve got a good memory – that’s why we tell people not to talk rough to camels ... That’s why I like camels here.

Perspectives on camel management

Limited activities were undertaken at Finke related to camel management. Two interviewees had helped erect protective fencing. Two-thirds of the interviewees did not perceive a need for feral camel control and most were opposed to culling as a form of camel management. However, four interviewees, a young male, and an older female and two males, indicated that they understand the need to cull camels in areas where there are too many. A 90-year-old male explained his position as follows: ‘Yes, too many camels now. They have to shoot them. When I was a kid we didn’t like camels being killed – but I recognise the need.’ Another man, who is in his mid-50s said that he thought it was cruel to kill camels and was generally opposed to it, but that if ‘too much breeding up, they can get rid of a few. When they travel in helicopter they might shoot ’em, get rid of ’em.

The most common reason for opposition to culling was that people perceived it to be cruel and wasteful: ‘killing for nothing’. Two middle-aged men and one older man believed that culling would result in the cessation of rain. The older interviewee, who nevertheless understood the need for culling, linked this belief to Christianity. He explained his reasoning as follows:

If you shoot 'em, it will get dry, dry. That's religion. If you shoot donkey or camel – that's religion for Christ ... Because some camels and donkeys in the Bible, it says they follow the stars ... I seen one white bloke out on the station, we went along to a stock camp and we seen a little young camel standing on the side of the road, and he was going to shoot him. I said: 'Don't shoot him'. He said: 'No, he's eating grass.' I said: 'He's doing nothing.' He shot him. He missed him but he shot his leg, crippled him. 'Something might happen to you, you never know. If you shoot camel or donkey something might happen,' I said. 'What you believe in that for,' he told me. After a while we was taking a lot of horses, and he broke his right leg, bone was sticking out. When I seen that, I said: 'Oh gee, that's when shooting that camel.' He broke his leg. I told him but he couldn't understand; he couldn't listen to me. I told him if you do something bad, you will get punished, revenge, something will get you. Kill donkey, you get that same punishment. That's why that bloke ended up in Adelaide hospital.

When I asked how shooting camels made the country go dry, the interviewee explained that according to the Christian ‘legend’ camels are associated with rain and bountiful lands. Therefore if you shoot camels the country will become dry: ‘If a station bloke shoots camels that's why he's got no grass for the cattle’. One young woman suggested that if culling were to happen, then the meat should be given to people for pet meat.

The preferred management strategy was live removal for sale and subsequent meat processing. For example, a young woman commented: ‘Good to sell for meat and to eat like at Docker River. I had camel meat and burgers when I went for a school trip to Alice Springs. It was good.’ A middle-aged male commented: ‘My idea would be to put them in abattoirs for meat. Least they get something for them. Station people just shoot them.’ In all, 13 interviewees were in favour of selling camels to make money; however, people had little knowledge of the market for camels. There were said to be no camel yards or facilities to load camels at Finke.

Most people were keen to have government or other agencies assist with camel management, suggesting this would create jobs in areas such as mustering and live removal for sale, the protection of culturally significant sites (e.g. sacred sites and trees, waterholes, ceremonial areas, bush tucker areas), and tourism. One man saw the latter as an opportunity to transfer skills to the younger generation:

Pretty good for old people to show young ones how to ride camels, a lot of these young ones don't know ... They'd like to take over the reins and learn how to ride camels; they talk about it like that ... At the Camel Farm on the Stuart Highway ... he got a lot of camels. Camels really good, because a lot of tourists like taking photos; they've never seen camels sometimes – only might have seen them in movies or a zoo or something. They like them in the desert. They are not really wild [i.e. the camels], they just look at people, they never seen people walking around before, you know. When you catch camel they get quiet straight away ... learn how to lead, learn how to hoosh, all that sort of thing.

Apart from some people in their 60s and older who said they were too old to consider camel work, there was little difference in people's answers in relation to age. For example, an 18-year-old-male suggested: ‘Make jobs for young fellas to muster them. We'd like that work – spend time on country.’ A young woman wanted ‘jobs for Aboriginal people; fencing off waterholes and places to protect’. Another suggested:

Why don't they store all the meat up and sell them overseas to African people living in poverty. It would be good to have camel job. Young fellas wouldn't mind driving round and chasing camels. Even girls would be in that and it would get them off sniffing [petrol].

A middle-aged woman commented: ‘Create jobs, let people make money for themselves. People who don’t know how to read and write can go around mustering.’ And, a middle-aged man stated:

Create jobs. Some fellas could have a team with Toyotas, bike, ropes and things. Truck with crane. I worked on stations most of my life doing that sort of stuff. I could train and show them how to do it. I don’t like to shoot, especially for young ones. I might shoot wounded ones – for their own good. We need to start training people to do it, get it off the ground.

Most interviewees indicated that they had received little information about camel management. Three people commented that they heard information about camels on television, and others said that what they knew about camels was purely from their own observations and experience.

4.2.2 Kintore

Background

Kintore, also referred to as Walungurru (variously spelt Walangura and Walangkura), is located approximately 550 kilometres west-north-west of Alice Springs near the NT/WA border on Aboriginal freehold land. Kintore and the surrounding country are regarded as being traditionally Pintupi. It is approximately 177 kilometres from Kiwirrkura WA, and many members of the two communities are closely related. The population is estimated to be 475 (Grants Commission current figure, June 2006). Pintupi is the main Aboriginal language spoken in the community, with Luritja also commonly spoken. Established as an outstation of Papunya in 1981, Kintore has since become a major Pintupi community.

Sample

Eighteen semi-structured interviews were held with men and women with the following ages: 8 young people between the ages of 15–39, 8 middle-aged people (40–59) and two people 60 and older. Ages ranged from 19 to early 60s. At least 12 of the interviewees identified as traditional owners of surrounding country, two of whom were also community councillors. Other interviewees had lived at Kintore for many years and/or had married into the community, as had the council president, for example. One senior traditional owner declined to be formally interviewed because he said that he had made his views on camels known to CLC on previous occasions and nothing had happened (see discussion on attitudes to camel management below). Discussions were also held with Pintupi individuals and groups (including two councillors) on the following occasions: during a camel sausage barbecue; at the Kintore Papunya Tula arts centre; with a non-Aboriginal youth worker/substance misuse officer, police, and the temporary CEO. In addition, a field trip was made with senior male and female interviewees to inspect camel impacts on a rockhole outside Kintore and to visit the outstation, Yuwalki, where a now-deceased senior traditional owner of the land had constructed camel yards (see camel management section below).

People’s past association with camels

Compared to Apatula/Finke, fewer interviewees at Kintore had strong historical associations with camels. Three younger interviewees had kept camels as pets. One younger and two middle-aged people had used camels as a mode of transport when younger, one middle-aged person had broken in and ridden camels at Nyirripi, and three interviewees of different age groups had parents or grandparents who had used camels. Examples of people’s reflections on their experiences with camels are set out below.

One man remembered his first encounter with camels (circa 1959)¹⁰:

¹⁰ I was able to establish the date of this encounter through the following details provided by the interviewee: ‘Mara-murtu [meaning ‘short-hand’] – a whitefella [indicates that he lost his index finger] – he used to look after us, Maralinga bomb time, Mr McDougall. He used to look after us with flour around Puta Puta, Tjurnti and Warakurna and Tjukurla, in the bush. He had Land Rover to drive us. Aboriginal people called Mr McDougall Mara-murtu’.

First camel I saw at the bush was at Tjukurla. I was scared. I thought, 'What's this big animal? It might chase us and kill us.' I was six or seven ... We went on camel from Tjurnti, east of Docker River. Old people went for dingo skins¹¹ [and] they found us. We were living at Puta Puta and Tjurnti, Lasseter's Cave. They took us on camel to Ayers Rock; Nipper Winmati [now deceased] did. He had three or four camels – just for carrying water and another one for food.

Some older women recalled that their first encounter with camels was also the first time they saw a white man and tasted European food. They told me that they were living at Ilpilli at the time with 'no clothes', when a white man came with a camel carrying rations and took them to Haasts Bluff Lutheran Mission. As the 1969 film by Roger Sandall entitled *Camels and the Pitjantjatjara* illustrates, Aboriginal people in the region used camels widely at ration depots and government communities such as Papunya and Areyonga. Indeed, one of the main characters of the film, Captain, is a relative of Nipper Winmati, who was mentioned in the previous quote as having brought people in from the bush on camels. That camels were widely used until the mid-1970s, when some people acquired motor vehicles, means that it is not only older people who used camels. A middle-aged woman recalled her experiences:

I rode camels when I was little – camels and horses at Papunya. We used to travel to Areyonga all the time and Glen Helen Station. Old Tutuma [now deceased] owned the camels and Jimmy Jungarrayi [now deceased]. Tutuma had two or three camels. We used to travel to Areyonga for business. And old Jack Kunti Kunti [deceased] came to Kintore from Mt Liebig on a tractor. He caught an adult camel and kept it here and used to ride it around.

A younger female interviewee said that in the 1980s her grandfather had built a camel yard at Yuwalki, an outstation of Kintore, where he kept camels (see camel management section below), and an older person recalled: 'My father used to break camels in at Papunya. He was L. Japaljarri [deceased]. We had three camels and travelled with them to Yuendumu.'

Observation of camel presence

All interviewees reported feral camels in the region surrounding Kintore, including near outstations/homelands, and said that the numbers were increasing. While 14 interviewees reported seeing camels frequently and five occasionally, it is clear from comments that sightings of camels are not merely indicative of people's mobility but also camel numbers; it is widely acknowledged that there is a high density of camels in the Kintore region.

Camels were often seen at water points such as creeks, rockholes, bores, low-lying swampy areas and in the sandhills. Places camels are said to frequent include:

- near the NT/WA border on the road to Kiwirrkura
- the outstations Desert Bore, Muyin, Tinki, Ngutjul and Ilpilli
- along the roads to Tjukurla and Mt Liebig communities.

For example, a middle-aged woman had observed camels in the following areas:

At Desert Bore, Muyin and women's rockhole near Kintore and on Western Australia border. Camels everywhere on the road. We see them everywhere in this area. Last time I went to Tjukurla too many standing on the road, blocking my way – this was two weeks ago. Every night you've got to drive slow. Camels always lying on the road.

Generally, camels were seen in groups of less than 10, sometimes 20–50, and one person reported seeing 50–100 at a time.

¹¹ In earlier days many Pitjantjatjara and Yankunytjatjara people killed dingoes in exchange for rations and goods provided by white 'doggers' and missionaries. Under the *Dingo Destruction Ordinance* police paid a bounty for each scalp.

Perspectives on negative camel impacts

When asked to consider in the abstract whether camels caused any problems, 10 interviewees indicated that they did, with two qualifying their answers ‘sometimes’.

However, when asked to consider concrete examples, many more interviewees offered comments on perceived impacts on community life and culturally significant resources. The types of impacts said to be caused by camels include the following:

- damage to infrastructure such as bores at homelands/outstations, taps, and pipes in the community
- damage to fences/yards
- fear of bull camels
- road accidents
- damage to country
- damage to rockholes and natural water sources, sacred sites (apart from natural water sources), trees, and bush tucker resources.

The range of camel impacts is discussed further below and examples of people’s responses are provided.

Damage to community infrastructure

Most interviewees were not aware of camel damage to houses and infrastructure at Kintore. One person said that camels did not cause problems in the community because ‘we have too many dogs here chasing them, so no damage to houses’. Some commented that they do come in looking for water when it is especially dry weather but that they are ‘just looking around. Not damaging things here. They go to the bore near here’. However, one middle-aged person who lived in west camp observed that ‘some do [cause damage] – breaking taps in yards’. The Aboriginal police officer confirmed that camels come close to Kintore and that ‘one came into the police station [yard] and died’. Another police officer told me that camels keep trying to break the fence surrounding the waste treatment plant on the outskirts of the community and that he was worried that ‘they’ll try the [swimming] pool next’. Several people had observed camel damage to infrastructure at outstations in the Kintore region and in other communities such as Tjukurla and Docker River. For example, one person said: ‘Not here, but at Tjukurla. They damage fences, toilets and water supply facilities.’ A middle-aged female commented: ‘Every outstation has dry bores – no bores – because camels might break it. But I’m thinking camels want to drink water too – but all outstations are dry’. In the mid-1990s Rose noted that people at Kintore wanted to harvest feral camels and that this was partly to ‘reduce damage to outstations, such as breaking fences and taps’ (1995, p. 121).

Fear of camels, perceived risks to personal safety and road accidents

Several interviewees, mostly middle-aged, but also some older female artists, commented that they were frightened of camels out bush, particularly when there were many camels and/or bull camels. For example, one woman said: ‘People get frightened of camels. We make fires and sleep between them out bush.’ Another woman said: ‘We don’t like to camp out because of them. We see them when we go hunting; we run and light fires’. However one middle-aged woman indicated that although bull camels could be dangerous she knew how to protect herself: ‘We like to see camels. If bull camels in rut we light fire to keep them away’.

Five middle-aged and one older person expressed strong concern about the risks camels posed to road safety. As I can attest, camels are difficult to see in the early morning and late afternoon light, and their habit of sleeping on roads makes road travel risky. ‘They sleep on the road – we drive slowly – they could cause accidents,’ said one interviewee. Local police confirmed people’s observations, noting that

there have been two reported car accidents in the area involving camels. A non-Aboriginal policeman commented: ‘We have them on the road here. People’s lights don’t work that well. Everyone has a story about a real near miss. They roll around and create a depression.’

Observations of impacts on country

When asked to consider in the abstract whether camels were causing problems for country, two younger and four middle-aged people replied in the affirmative, with another younger person replying ‘maybe’ and a second stating that it was when camels were in high densities that they ‘messed up’ country. As the following examples illustrate, perceived problems include degradation of waterholes and damage to bush tucker and sacred sites: ‘They are eating bush tucker and making country dry. Making a mess of *ngurra* [country]’; ‘Yes, stomping on sacred places and making a mess, and rolling over and making dirt and mess. And dangerous for kids – when they get angry, they run after you.’ One younger and one middle-aged interviewee thought that camels only travelled through country and therefore did not significantly impact it.

When interviewees were asked to consider camel impacts in relation to specific contexts, more observations were offered. Twelve interviewees voiced concern over camels dying near rockholes and polluting water in rockholes by urinating, drinking, digging and dying. Seven interviewees said that camels were eating and ‘messaging up’ bush tucker. Camels were said to ‘make a mess’ of things. One female interviewee mentioned that in summer camels had come into the men’s ceremonial area but that it was not a matter she could talk further about; another indicated that camels could damage sacred sites.

Examples of people’s comments follow:

- ‘We don’t like it if they pass away at rockholes.’
- ‘At Ilpilli Spring there are dead ones, weak ones, messing up the country – no good smell.’
- ‘Some camels slip into the waterhole and die. We’ve got a couple that died up at Kungkakutjarra [Women Dreaming] rockhole, and at other rockholes. We didn’t have a tractor to pull them out.’
- ‘They make rubbish water’.
- ‘They sleep near rockholes and make a mess, and they eat bush tucker and make it dry.’
- ‘When you drink from rockhole, you get germs. You should see women’s rockhole near here. Rockholes are for people not camels.’
- ‘All the old people used to drink water from waterholes, but we don’t drink because of camels messing up rockholes.’
- ‘Messing up rockholes, swamps. Messing up bush tucker.’
- ‘They damage by stamping bush tucker and tearing and eating trees.’
- ‘Making a mess at rockholes and drinking them dry.’
- ‘Eating all the trees and bush tucker like banana trees and quandongs.’
- ‘Aboriginal people today are thinking about keeping the country clean from camels. They are polluting waterholes. We are frightened to drink it [water]. We used to go for a drink when it was clean water, but not now, too many camels’.

For Pintupi, as with other Aboriginal groups, many rockholes and water sources are considered to be sacred sites, and a number of interviewees were deeply concerned about camel impacts on the rockholes in the Kintore region. It was for this reason that I was taken to a sacred rockhole affiliated with a Two Women’s Tjukurrpa located approximately 30 kilometres from Kintore. Despite being dry, the rockhole was an impressive feature of the landscape. The area surrounding the rockhole, which was deep and narrow, was thick with camel scats and tracks, and it was apparent that camels had tried to dig out part of the rockhole to obtain water. Interviewees pointed out that there were many more sacred rockholes and water places affected by camels in the region.

Observations of impacts on animals

Three interviewees, all of whom were middle-aged, thought that camels caused problems for other animals by frightening them away from, and competing for, water. Examples of comments are as follows: ‘Yes, drinking water that kangaroos and other bush animals eat. They frighten other animals’; ‘Yes, like *marlu* [kangaroo], turkey – drinking their water and eating *marnikiji* [conkerberry, *Carissa lanceolata*] and bush tucker. They get in the way for hunting.’ It was clear that some other interviewees understood the question to be about whether camels intentionally interfered with other animals and were keen to deny that they caused them problems. For example, one interviewee expressed the following sentiment: ‘They go along and mind their own business, running and trotting along.’ Another said: ‘They got nothing to do with other animals – they got their own skin, their own way. Camels walk around in open area. Kangaroo living in grass and shade’. One person said that camels were ‘only frightening people. Kangaroos and emu, they not a person, they animals. Camels are like people, camels can see you, and they’ll come closer and closer. Can smell jerry can of water and come to you’.

Perspectives on positive camel impacts

Despite the fact that many interviewees were frightened of bull camels and thought that camels negatively impacted the landscape, nine also expressed positive feelings for the animals. Many viewed them as a resource to be used to provide meat, a source of fun, opportunities for tourism, the creation of jobs related to camel management, and income. Some expressed compassion for the animals and were worried that they did not have sufficient water. The following are examples of responses:

- ‘We like them. It’s good meat. We always buy from Youth Centre.’
- ‘They’re a little bit good – I like camels for pets for my kids.’
- ‘I love camels because camels take you a long way to other places.’
- ‘They are good. Sometimes we made a fire to frighten camels. Sometimes they get cheeky and follow you and we get scared.’

Compared to Finke, people at Kintore are much more likely to eat and enjoy camel meat and many are willing to incorporate it in their regular diet. Indeed, it is rapidly acquiring a reputation as a health food. As the following interviewee indicates, it is frequently used in the meals prepared at the local Women’s Centre for old people: ‘I’m diabetic. Camel meat is really good meat. Good for women to cook. We were cooking stew yesterday, stew with camel and vegetables, at Women’s Centre for old people.’

Attitudes to camel management

Thirteen out of 15 interviewees felt feral camel numbers needed to be controlled. ‘Yes, too many – should take a lot away and clean up the country,’ said a middle-aged person. Four interviewees did not want complete removal but wanted some kept to provide meat and resources for the future. For example, a middle-aged woman said: ‘Truck some away – there are too many, maybe sell them for money. Keep some camels here to eat.’

For most people camel management was not a simple issue. Some people indicated that they felt differently about the issue at different times and that while they recognised feral camels caused negative impacts they also felt compassion for them. For example, one middle-aged man told me ‘I feel sorry sometimes when I see its face. I remember when I was riding, sitting on that camel – I remember that. But when I was young [there were] not many camels. [They were mainly] only with station manager and at Ernabella and Areyonga.’ Another person said: ‘Sometimes [I feel] sorry [for camels]. Sometimes I worry about the mess they’re causing on rockholes.’

While most people said that there were too many camels, only four people were comfortable with the idea of shooting to waste as a way of controlling feral camels and their impacts. Underlying reasons for opposition to culling included a strong cultural ethic forbidding waste of animals, concerns about seeing dead carcasses littering the country, and associations of camels with Christian mythology. Examples of responses are set out below:

- ‘Only for meat, not just to die. Shoot them outside community – not close up to community.’
- ‘I don’t like to see them shot. They want to sit down alive too. Some people are all right to kill them for meat – good for sick people. But don’t kill for nothing. You can’t kill them for no reason.’
- ‘Shoot ’em for meat, that’s all. Save it in refrigerator – take meat for a month.’
- ‘Not all right. People have to eat camel – not just for waste. OK to shoot, cut meat and share.’
- We don’t like people shooting camels and leaving them here. They don’t burn them and they [the carcasses] just stay there. Makes us ‘sorry’ to see people shoot camels for waste – just to let them die.’
- ‘*Wiya* [no], when they shoot a camel they should bury it, proper way. Clean up. Otherwise make people sorry. Only kill for meat.’
- ‘Let them live, they are free. They can shoot camels to eat. But we don’t eat much. Camels were with three shepherds – belonging to God. They are Christian for Jesus.’
- ‘It’s OK to shoot for meat but not to waste.’
- ‘I don’t like that. I feel sorry, *wiyarrpa* [sorry/compassion]. Old people cried at Kiwirrkura for the camels. Only to shoot them for meat, I think. That’s all right. Young people are going out with Tom [youth worker] to shoot camels.’

Preferred management strategies were hunting for food and live removal involving local people catching, mustering and selling feral camels in order to provide jobs and income.

While there are no camel yards or facilities to load camels at Kintore, there are camel yards at Yuwalki outstation. One older woman who is a councillor said that although Kintore had no yards as present:

We are getting yards. Peter Peasley, he works for Intervention program. He’s looking into how to start an outstation camel project – breeding camels, selling and mustering them – selling to abattoirs for meat. We don’t want to kill animals ourselves – young people can.

I was unable to find out further information about this matter from either the temporary CEO or other people.

While none of the interviewees had been involved in selling camels, all thought it was an acceptable way to deal with camels, and most were enthusiastic because of the expectation of work and income. One older man said that he was interested but that he could not speak on the matter in relation to Kintore because his country was in Western Australia. Examples of responses are as follows:

- ‘Good to sell camels – make money for community.’
- ‘Good idea, send camels overseas.’
- ‘Yes, we’ve been talking about it – that way.’
- ‘I’m trying for that one. It’s a good idea. We could make money at Yuwalki. They been try really hard a long time ago.’
- ‘Yes, good. Sometimes Jupurrula sold camels to make money.’
- ‘We’ve been talking about this before – mustering camels and putting them on a truck.’

Most interviewees did not know how much they could earn from the sale of a camel. One younger woman said: ‘My father used to tell me \$5000 or \$6000 for 10 camels. No one owns them. They are living in the bush and breeding. The workers who run camels should get money, and community.’ An older woman told me: ‘We don’t know. One kilo is \$20–\$50 if they are in abattoir. Maybe \$70 and

wages. People in this place own camels. We all own the country. Camels belong to this land. They don't come from other places. At Docker River they have their own camels. Everybody got their own camels. We got to get something for community.'

Seventeen out of 18 interviewees thought that it was acceptable to shoot feral camels for meat to be used for local human and pet consumption. However, informal discussions with other locals revealed that many older people, particularly women, did not like camels being shot even for meat. They have fond memories of camels bringing them in to communities, where they met other family members and obtained rations, and hence feel a sense of obligation to them (see section about historical associations). For example, Napaljarri, a woman in her 70s, said: 'We don't like people to shoot camels. We feel sorry for them. Don't cruel them, they are poor things. I don't eat camel, poor thing.'

There is a long history of people killing camels for human consumption in the Kintore region. An interviewee told me that 'at Yuwalki they caught camels and skinned and ate them. All the young fellas working with old fella, Jupurrula. He told us how to butcher them. Shoulder is best part. We didn't sell the meat. Just shared it'. As indicated, in the late 1980s the senior traditional owner for Yuwalki, an outstation area approximately 36 kilometres south-east of Kintore, erected camel holding yards and a trough with the help of kin and outstation coordinator, Peter Bartlett.¹² The people were supported initially by CLC and later by the Bureau of Rural Resources under the Aboriginal Rural Resources Initiative (ARRI). Although the evaluation of the program was positive, there has been no government program since its demise in 1996 that offered this kind of enterprise support. (P. Bartlett 2008, Earth-Bound Consultants, pers. comm. 7 September)

The original idea was to catch and muster camels into the yards for local butchering, consumption, riding, and sale. A survey was conducted on the location of seepage water in the general region, where it was known camels congregated when ephemeral water had dried up. Bayonet traps with wings to catch camels were set up at these places. Although lack of continuing outside support and markets meant that the operation did not become economically viable, it provided meat and much social enjoyment (P. Bartlett 2008, Earth-Bound Consultants, pers. comm. 19 September). One interviewee recalled that at one stage they put 'a satellite collar on the neck of a camel. We did that in the bush this side of Nyuman to track him and find where the camels went. This was 1989, somewhere around there. We got one camel and chased the others away'. The death of the senior traditional owner led to the temporary abandonment of the outstation. However, a number of close kin are keen to re-activate camel activities and the outstation, but need support to do so. In 1995, Rose noted that people were interested in harvesting feral camels in order to provide constructive activity for young men, to reduce camel damage to outstations, and to provide a supply of fresh meat (1995, p. 121).

In the recent past, several Pintupi youths have hunted camels for food. One young interviewee described the process as follows: 'Six of us men go hunting with youth worker, Tom. We shot camels and ate the meat.' Another person commented: 'Not me, but some young fellas shoot camels for meat. They always give out camel stew from green shed when they have a disco. They always have camel stew, people like it.' A woman added: 'Policeman used to go on the weekend and shoot them – sometimes meat for people and [sometimes] for dogs. Jonathon [ex-Government Business Manager (GBM) for the community] used to give us camel, but me, I didn't eat it ... My kids love it.' In April 2008 camel hunting was reported as a 'new Aboriginal pastime' (Squires 2008) in the *Telegraph*, a United Kingdom newspaper. The article said that Aboriginal teenagers hunted them once a week and that the town's police officers had shot the camels. Fifteen camels were apparently butchered over a six-month period 'by a shifting group of around 20 hunters, the youngest just 13' (Squires 2008). According to the youth worker, Tom Holyoake, the capturing and butchering of camels was initiated in 2007 by the then GBM, a European, who had his own set of butchering knives. Tom told me that the GBM 'talked with the community about what he wanted to do. At first there was opposition, then when they saw it was a free

¹² The initial submission for funding was organised with the community by CLC. The third attempt to obtain funding was successful.

source of meat they came around to it. There are still older people opposed to it because of religious beliefs'. The GBM left the community with his knives at the end of 2007. Subsequently, Tom obtained a small grant from Grass Roots Empowerment, a Sydney-based non-government organisation (NGO), to buy a set of butchering knives and replacement tyres for the youth worker Toyota, so that youths could capture camels for food once again. At the time of this discussion Tom was hoping to find an instructor to come out to the community to train youths in healthy and safe butchering practices. He saw four key benefits arising from the camel activities as follows: improved nutrition, the prevention of substance misuse (through the engagement of youths in purposeful and enjoyable activities), caring for the environment, and economic gains (free meat).

Most interviewees indicated that they lacked the resources to manage camels and that they would like assistance with camel management linked to job creation and income production for local Aboriginal people. Suggested management activities were: mustering and live removal (preferred by most interviewees); tourism (suggested by one senior female); culling and burial of carcasses by outside parties (suggested by one older male); shooting for local meat consumption (widely accepted); and protection of culturally significant sites (e.g. sacred sites and trees, waterholes, ceremonial areas and bush tucker areas). At the same time, some interviewees said that they had considered the possibility of a commercial pet meat producer removing camels but that the return per kilo being offered was too low.

A number of interviewees indicated that they would like to work with Central Land Council and had already had discussions with them on the matter. For example, a senior member of the community told me: 'We decided last year to fence rockholes and put spider¹³ and fence. We bin talking about it – some of the government know all the workers have got the idea; and bush tank for water for Aboriginal people.' Another senior man and community councillor said that he'd told CLC that he wanted jobs and income for locals from mustering and selling camels, but that CLC had told him there was no market. His solution was for Land Council to shoot feral camels and bury them in the sand. He said: 'You can drive around with helicopter and see them everywhere – especially in the desert; same on the road. Can't just talk about it, people should do something. I know camels are damaging country – but can't just give information every couple of years. We got to do something.'

Other responses are set out below:

- 'Jobs for young fellas, shooting and cutting them up for meat.'
- 'Would be a good idea to have jobs, putting camels in yards and mustering.'
- 'Young fellas working with camels, mustering them, cutting them up. And women cooking meat.'
- 'Look around for camels. Muster up to Yuwalki – killing and butchering. Take some to town to sell. My auntie's place is Tjuwanpa – I see that they are doing it there.'
- 'Mustering them and selling them to people elsewhere. Training young fellas to cut them up.'
- 'Government should help to open outstations and put water there. Ladies should cook camel meat for workers, old people and kids. We want to truck camels away. They should fix Yuwalki yards. Young fellas are doing nothing – they are asking council but council got no job for them. It would be good for young fellas to work with camels. Centrelink are always saying people should work but no jobs. Ranger work. Men's side, they should look after sacred sites, put fences to stop camels messing areas up.'
- 'We need equipment and jobs for young people, make them busy. We want young people to do jobs, train them up. Should work with camels at Yuwalki. Need help with Toyota.'

¹³ As described in Appendix 1, the 'spider' is an invention of Ngaanyatjarra Land Management and is used to straddle rockholes to prevent camels from falling in the water and dying (Tangentyere Landcare 2006: 13).

A number of interviewees indicated that they received information about camel management from CLC, the youth program at Kintore, television, and from other Aboriginal people involved with camel management – for example, at Undurana near Hermannsburg.

5. Discussion of differences in perspectives among and within Aboriginal communities

5.1 Observations on camel presence

As Table 2 and Table 3 show, interviewees from all 27 communities surveyed reported that they had feral camels in the region surrounding their communities, with 21 perceiving that camel numbers were increasing. Interviewees from 20 communities said that they had often seen camels during the previous two years, while people in six communities reported only occasional sightings. (Interviewees at Mutitjulu were not asked about their frequency of sightings and therefore Mutitjulu is not included in the latter figures.) Interviewees from 13 communities reported that feral camels came close to the community. Camels were sighted near cattle and horse troughs, tanks, taps and water points, local airstrips, waste disposal plants and buildings. There was general consensus within communities on these matters. In the section below that follows the tables I analyse key reasons for the differences between communities.

Table 2: Observations of camel presence and perceived population trends by community

Jurisdiction	Do you have feral camels on your land? Yes/No*	Do feral camels come close to your community?	Has the number been increasing? Yes/No*	How often have you seen camels on your land in the past two years?		
				Often	Occasionally	Never
SA						
Amata	Y	Y	Y	Y		
Indulkana/Iwantja	Y		Y	Y		
Mimili	Y	Y	Y	Y		
Pukatja/Ernabella	Y		Y	Y		
Walalkara	Y	-	Y	Y		
WA						
Balgo	Y		Y		Y	
Billiluna/Mindibungu	Y		Y		Y	
Kanpa	Y	Y		Y		
Kiwirrkura	Y	Y	Y	Y		
Mulan	Y				Y	
Papulankutja	Y	Y	Y	Y		
Warakurna	Y	Y	Y	Y		
Warburton	Y	Y	Y	Y		
NT						
Areyonga	Y	Y	Y	Y		
Apatula/Finke	Y		Y	Y		
Haasts Bluff	Y			Y		
Atitjere/Harts Range	Y				Y	
Kintore	Y	Y	Y	Y		
Laramba	Y		Y		Y	
Mt Liebig/Watiyawanu	Y	Y	Y	Y		
Mutitjulu	Y	-	-	-	-	-
Nyirripi	Y	Y	Y	Y		
Bonya/Orrtipa-Thurra	Y			Y		
Titjikala	Y		Y	Y		
Mpwelarre/Walkabout Bore	Y	Y	Y	Y		
Willowra	Y	Y	Y		Y	
Yuendumu	Y		Y	Y		

*Only 'Yes' responses are shown.

Table 3: Summary of observations on camel presence and perceived population trends in surveyed communities

Questions	Explanation	No. of communities surveyed	Total
Do you have feral camels on your land?	Y/N*	27	27
Do feral camels come close to your community?	Y/N*	26	13
Has the number increased?	Y/N*	25	21
How often have you seen feral camels on your land in the past 2 years?	Often	26	20
	Occasionally	26	6
	Never	26	0

* Only 'Yes' responses are shown.

In general, the reasons why camels enter some communities and not others relates to factors such as the location of a community within the feral camel range, whether culling has been carried out on surrounding country, the topography of the land on which the community is situated, and whether a community is fenced or not. These factors are also relevant to people's perceptions of camel densities and increases in population.

Of the communities surveyed, 22 are surrounded by Aboriginal land. One of these, Mutitjulu, is situated within the Uluru–Kata Tjuta National Park. The other five communities (Titjikala, Mpwelarre/Walkabout Bore, Laramba, Orrtipa-Thurra/Bonya and Atitjere/Harts Range) are Aboriginal living areas (excisions) surrounded by non-Aboriginal pastoral leases. It is said that camels are not entering these communities. In the case of Mpwelarre/Walkabout Bore, it is not because camels have been culled on the surrounding area but because the living area is fenced.

Additionally, two of the survey communities on the APY Lands in SA are said not to be affected by camels because they are situated in rocky country, which camels do not like. (However, at Areyonga in the NT, which is also located among hills, camels were said to be so desperate for water that a few were entering the community via the creek.) The culling of camels on neighbouring pastoral leases has apparently reduced numbers around the NT Aboriginal communities of Finke, Titjikala, Laramba and Orrtipa-Thurra/Bonya, and Atitjere/Harts Range. (Atitjere is also surrounded by hilly country.) According to interviewees, a recent cull of camels at Haasts Bluff, which is Aboriginal freehold land, has reduced camel impacts on the community.

Of the communities that reported occasional sightings of camels, three are located on the margins of feral camel country (Balgo, Billiluna and Mulan), two others are excisions with pastoral leases (Laramba and Harts Range), and, as noted by interviewees, the country surrounding Willowra has only been penetrated by camels in the last several years. However, numbers are said to be increasing in the northern Willowra-Lander River region.

As mentioned earlier, people's sightings of feral camels reflect their patterns of travel as well as the presence of camels. Nevertheless, similar observations among people from a particular place provide a valuable picture of where feral camels are likely to be found, depending on the season and the availability of water. Aboriginal people's close observations and knowledge of country is a valuable resource that should be supported and used in the development and implementation of feral camel management strategies.

It is significant that all the people interviewed for this survey reported having seen camels in the region surrounding their communities (see Table 3). This finding contrasts with earlier research in the NT by Nugent (1988) and Rose (1995). Nugent conducted a survey of Aboriginal attitudes to feral animals and land degradation in 15 Aboriginal communities in the Western MacDonnell Ranges and the south-east Tanami Desert, NT. He reported that camels occurred in the Mt Liebig, Haasts Bluff, Kings Canyon, Nyirripi, and Chilla Well areas. However, apart from Nyirripi, which was regarded as 'camel country' (Nugent 1988, p. 17), Mt Liebig, and Haasts Bluff, where numbers were thought to be increasing, the general impression given is that the camel numbers were very low and that people's sightings

of camels were infrequent.¹⁴ There is no mention of camels being present in the other areas Nugent surveyed, which are the following: Hermannsburg, Willowra, Bean Tree Bore/Yuwali Bore, Mt Barkly, Papunya, Mt Allan, Yarripilangu [Mt Wedge], Desert Bore/Paladi [sic.][Pulardi]. I conducted interviews with people from six of the places Nugent surveyed. They are Mt Liebig, Haasts Bluff, Areyonga, Yuendumu, Willowra, and Nyirripi. The interviewees at these places reported that camels were present in their areas.

Eight years after Nugent’s report, Rose (1995) conducted an 18-month survey of attitudes and perceptions of land management issues among Aboriginal people of central Australia, NT. His report on the survey notes that feral camels occurred in the following areas: Areyonga, Atula, Haasts Bluff, Kulpitarra (near Hermannsburg), Apatula/Finke, Kintore, Papunya, Tanami Downs, Nyirripi, and Kings Canyon. However, there is little information on people’s perceptions of camel densities around the various communities nor is there much specific discussion of feral camels. Rose tended to discuss feral animals in general terms and concluded that people did not perceive ferals – including horses, donkeys, cats, camels – to be a significant land management problem. It is difficult to know if camel densities were low or high and, if the latter, if people were simply unconcerned about them. Given the recent scientific data on the rate of increase of the camel population, it is likely that when Rose conducted his survey 13 years ago camels were not yet in high densities.

5.2 Perspectives on camel impacts

5.2.1 Negative impacts

In this discussion I use the term ‘broader landscape values’ to encompass the following dimensions of Aboriginal people’s environment: the natural and cultural resources used by people in a particular community (including sacred sites, bush tucker and native animals), the built environment (i.e. infrastructure, buildings and airstrips) of larger communities and homelands, roads, and country surrounding a community.

Table 4: Negative impacts on broader landscape values mentioned by people in survey communities

Jurisdiction	Impacts on natural and cultural resources			Community infrastructure impacts	Home-lands	Fences	Safety concerns (fear of camels and road safety)	Impacts on animals
	Naturally occurring water sources	Bush tucker	Other culturally significant resources					
SA								
Amata	Y	Y	Y	Y	Y	Y	Y	Y
Indulkana/Iwantja	Y	Y						
Mimili	Y	Y	Y		Y	Y	Y	Y
Pukatja/Ernabella	Y	Y	Y		Y	Y	Y	Y
Walalkara	Y	Y	Y					Y
WA								
Balgo	Y	Y	Y			Y		
Billiluna/Mindibungu								
Kanpa	Y	Y	Y	Y			Y	Y
Kiwirrkura	Y	Y	Y	Y	Y		Y	Y
Mulan								
Papulankutja	Y	Y		Y	Y			Y
Warakurna	Y			Y	Y	Y	Y	Y
Warburton	Y	Y		Y				
NT								
Areyonga	Y	Y	Y				Y	Y
Apatula/Finke	Y	Y	Y				Y	
Haasts Bluff	Y	Y	Y		Y	Y	Y	Y
Atitjere/Harts Range							Y	

¹⁴ Nugent provides little information on people’s observations about camel densities.

Jurisdiction	Impacts on natural and cultural resources			Community infrastructure impacts	Home-lands	Fences	Safety concerns (fear of camels and road safety)	Impacts on animals
	Naturally occurring water sources	Bush tucker	Other culturally significant resources					
Kintore	Y	Y	Y	Y			Y	Y
Laramba	Y		Y		Y	Y		
Mt Liebig	Y	Y	Y	Y	Y	Y	Y	Y
Mutitjulu	Y		Y					
Nyirripi	Y	Y	Y			Y	Y	
Bonya/Orrtipa-Thurra	Y	Y	Y			Y	Y	Y
Titjikala	Y	Y	Y			Y	Y	Y
Mpwelarre/Walkabout Bore						Y		
Willowra	Y	Y	Y			Y	Y	Y
Yuendumu	Y	Y	Y			Y	Y	Y

Note: The views expressed were not unanimous within each place. The table records any mention of negative impacts by an individual interviewee in a particular community as a 'Yes'.

With respect to impacts on broader landscape values, 23 of 27 communities mentioned the impact of feral camels on natural and cultural resources as the most significant issue they were concerned about (see Table 5). The safety risks that feral camels present were also a major concern and ranked second to impacts on natural and cultural resources. In 17 communities a large number of interviewees mentioned that the risk feral camels pose to road safety, and/or their fear or wariness of bull camels in season (i.e. mating bulls), and/or the large numbers of camels, affected their use and enjoyment of country, including patterns of exploitation. In 16 communities roughly a third of interviewees perceived that feral camels had an impact on native animals. Fourteen communities mentioned that camels damage fences in country surrounding their communities (including on non-Indigenous pastoral leases). Interviewees in nine of the communities mentioned the impacts of feral camels on homelands/outstations (i.e. the built environment), while some of the interviewees in eight communities reported that camels were having a negative impact on community infrastructure (including buildings, associated hardware and airstrips). The tabulated results (see Table 4 and Table 5) are discussed in more detail below.

Table 5: Number of communities by state/territory where interviewees mentioned negative impacts on broader landscape values

Jurisdiction		Natural and cultural resource impacts	Safety concerns (fear of camels and road safety)	Impacts on animals	Fences	Homelands/Outstations	Community infrastructure impacts
All	Total	23	17	16	14	9	8
NT	Subtotal	12	11	8	9	3	2
SA	Subtotal	5	3	4	3	3	1
WA	Subtotal	6	3	4	2	3	5

Note: The views expressed were not unanimous within each place. The table records any mention of negative impacts by an individual interviewee in a particular community.

Impacts of feral camels on natural and cultural resources

As discussed earlier, westerners tend to regard natural and cultural resources as separate categories, unlike Aboriginal people who see the two are intimately related. A natural resource may also be a cultural resource and vice-versa. For this reason I have not distinguished between the two. While in Table 4 (above) I have separated comments on water sources from bush tucker, it is important to keep in mind that water sources such as rockholes, soakages, claypans, and swamps may also be sacred sites, and that, along with bush tucker, Aboriginal people regard them as being of cultural significance. In Table 4, the category 'other cultural resources' encompasses cultural phenomena which are additional

to the water sources and bush tucker already listed. The category includes both physical entities (for example, culturally significant sacred sites, places, trees, and resources such as bush medicine and native tobacco) as well as culturally valued experiences associated with customary use of country. There is necessarily some overlap between the categories. For example, if someone perceived camels to be polluting waterholes, he/she might also not want to camp near or use the waterhole. To take another example, some interviewees perceived that camels had an impact on kangaroos by scaring them away from water and feed; at the same time, they could disturb a kangaroo while it was being hunted or distract the hunter thus affecting availability of bush tucker.

(a) Naturally occurring water sources

A perception shared by many interviewees in 23 of the 27 communities surveyed was that camels were having a negative impact on naturally occurring water sources such as rockholes, soakages, and other wetlands. Camels were said to be ‘messing up’ waterholes by polluting and depleting the water, eroding and degrading the area surrounding the water source (including vegetation and land), and dying both in and near water sources. Feral camel impacts on wetlands were of concern to a significant number of people. People’s concerns about camel impacts were multi-faceted and encompassed religious as well as aesthetic, practical and physical dimensions. For example, as the Kintore case study illustrates, people are concerned about camels ‘stomping on sacred places’ and damaging rockholes associated with Jukurrpa or Dreamings. They are also concerned about camels drinking dry waterholes that people and animals depend upon.

A number of interviewees also commented that they do not like to see and smell the dead animals around the rockholes. In relation to this issue one interviewee at Pukatja/Ernabella said that at ‘the rockholes at Aparra, the other side of Amata, heaps of camels rushed to the rockholes pushed each other over and died. Rockhole is bad now.’ Some interviewees said that camels sleep near rockholes, which affected their use of the area. Many other interviewees commented that where once they would have freely camped near and used the water sources, they are now much less likely to do so because of feral camels (see section on valuation of negative impacts for further discussion of this issue). For example, an interviewee from Walalkara said:

We want the rockholes to be clean for [native] animals and people to drink ... There is rubbish dirt everywhere, sand, kumpu [urine] and kuna [excrement]. One day that rockhole will be gone, just camel tracks everywhere.

Concern about camel impacts on wetlands or naturally occurring water sources was greater in areas where camel densities were high. For example, it was not an issue in communities on the edge of the feral camel range, and tended to be much less of an issue at places such as Finke, Atitjere/Harts Range, Pukatja/Ernabella, Titjikala, Laramba, and Orrtipa-Thurra than at Kintore, Nyirripi, Amata, Mimili, Warburton, Kiwirrkura, Areyonga/Utju, Mt Liebig, and, to a certain degree, Yuendumu, Haasts Bluff, and Willowra (see Table 4).

In respect to the NT, my findings differ from the earlier research of Nugent (1988) and Rose (1995). Apart from saying that at Nyirripi, where camel numbers were high, camels ‘don’t dig up soakages’, Nugent (1988, p. 47) notes little discussion of feral camel damage to naturally occurring water sources. He concludes that feral animals caused little damage to country (1988, pp. 13, 15). In contrast, Rose (1995, p. 33) notes that feral animals caused damage to rockholes and soaks at Kintore, and that at Kintore and the Pitjantjatjara lands, a ‘rockhole cleaning and protection program’ (1995, p. 33) had been implemented. He also noted that at Apatula/Finke camels were perceived to be ‘bad for country’ (1995, p. 110), but apart from these examples there is little mention of camels having a negative impact on water sources. Interestingly, Bird et al. noted that in 2000–2001 Martu people in the north-west of the Western Desert claimed that ‘a decrease in kangaroo populations in the desert is a result of increased competition for surface water’ (2005, p. 458).

Camel impacts on rockholes, soakages, springs and other naturally occurring water sources are a major issue for Aboriginal people. The provision of tap water has not obviated the significance of naturally occurring water sources in people's lives. As many anthropologists have noted (see Debra Rose 2005b), a great many are sacred sites, and for good reason. Strehlow noted that among Arrernte 'many of the finest waterholes ... provided inviolable sanctuaries for kangaroos' (quoted in Bennett 1986, p. 131). Peterson pointed out the importance of water 'in determining plant cover and hence available food', (1976, p. 67) which in turn influenced patterns of population, use of country and social relations among people and groups. Rose has noted 'water is part of the sacred geography of people's homelands; it is part of creation, connection, and an ethic of responsible care' (2005b, p. 48). Today water sources continue to be a major focus in Aboriginal people's relationships to country. Impacts from the presence of camels of the type described by interviewees constitute a major threat to their cultural values.

(b) Bush tucker

Interviewees in 20 communities (see Table 4) mentioned that camels are affecting bush tucker resources negatively by stomping on them, eating them, and otherwise destroying them. Types of plant food commonly said to be impacted by camels include quandongs (*Santalum acuminatum*), bush banana (*Leichhartia*), bush currants (*Solanum centrale*), and bush potato (*Ipomoea costata*). For example, one female interviewee from Walalkara said:

Camels eat bush tucker like quandong and they stomp on mingkulpa (Nicotiana spp.) and bush medicine like irmangka irmangka (native fuschia Eremophila alternifolia¹⁵). We want to have more food on country.

To give another example, a female interviewee at Pukatja/Ernabella observed that camels are:

... taking over the country, eating all the food and water at waterholes. Ruining country. Stepping on soakages and stomping on grass. Damaging all the trees and doing toilet everywhere. They eat all the mulga trees. The trees grow a sugar lerp and they like this. They break branches while eating it.

Some interviewees also mentioned that camels are reducing the availability of bush food by frightening kangaroos and other game away or by 'getting in the way' of the hunter and his prey. For example, an interviewee observed that 'when they [camels] eat grass and kangaroo got nothing to eat, then the kangaroos will go somewhere else' (see also later discussion on impacts of feral camels on other animals). Importantly, concern was expressed not just in relation to current availability of bush tucker but also the consequences for future generations if bush tucker is significantly reduced. This concern related to not only diminishing supplies of bush tucker but lack of opportunity to teach future generations about bush tucker (see section on valuation of negative impacts).

Not all interviewees in communities where bush tucker impacts were noted were concerned about the matter. Some people were of the view that camels were just passing through and that the damage was relatively insignificant. Most people who were concerned about the impact of camels on bush tucker indicated that problems were associated with large numbers of camels rather than individuals. For example, at Amata one person commented that if feral camel numbers kept increasing the area would 'turn into a desert'. In general, stronger concern was shown about the impact of camels in regions where camel densities were highest. For example, little concern was expressed about camel impacts on bush tucker at Apatula/Finke, Balgo, Mulan, Billiluna, Laramba, Atitjere/Harts Range, and Willowra. Interviewees in communities in SA such as Walalkara, Pukatja/Ernabella, Amata, Mimili, and in communities near the Gibson and Great Victoria Deserts, such as Kintore and Nyirripi, expressed greater concern. These are all areas where there are said to be large numbers of camels. There was a broad range of views concerning camels' impact on bush tucker at Warakurna, Kiwirrkura, Yuendumu, and Areyonga/Utju. Interviewees in communities surrounded by cattle stations, such as Apatula/Finke, Mpwelarr/Walkabout Bore, Laramba, Yuendumu, and Harts Range, were more likely to compare

¹⁵ Commonly the leaves are crushed and mixed with fat then used as a rubbing medicine like Vicks. There are also other methods of preparation.

camels favourably to cattle in terms of impact on vegetation than interviewees at other places. A number of interviewees who were concerned about camels' impact on vegetation indicated that the effects were greater during dry times, such as the country was experiencing at that time.

The findings show that interviewees hold a broad range of views concerning the impact of camels on bush tucker. A comparison of these findings to those of Nugent (1988) and Rose (1995) with regard to central Australian communities in the NT more than a decade earlier indicates that, in some areas at least, there has been a marked increase in both perceptions of feral camels' impacts on bush tucker and concern about the matter. For example, Nugent comments in respect of Nyirripi that camels 'do not feed on anything humans might eat' (1988, p. 17). Rose states that Aboriginal people recognise the damage to country caused by large numbers of feral animals; however, he notes that, in general, 'the effects of feral animals on the country are not seen as a cause for concern' (1995, p. 128).

(c) Other culturally significant resources

Interviewees in 19 communities expressed concern about the impact of camels on culturally significant resources other than naturally occurring water sources and bush tucker (see Table 4). Examples provided of such resources included: Jukurrpa trees, trees that provide shade for animals, bean trees (*Erythrina vespertilio*), bush medicine plants, and native tobacco (*Nicotiana* spp.). In addition, a number of interviewees mentioned that camels affected their ability to use and enjoy the country, particularly when they were in large numbers or where bull camels were present. This issue is discussed in more detail below. As with bush tucker, concern about the impact of camels was generally stronger in regions where camel densities were high and where cattle had not already considerably impacted the country.

Safety concerns

Interviewees from 17 communities expressed concern over the danger camels posed both on and off road (see Table 4). Road accidents and fatalities are now an increasing occurrence in these regions and not only local Aboriginal people, but also non-Aboriginal staff in communities, including police, are worried about this issue. Interviewees reported that camels are difficult to see on the roads, particularly at night, and in the early morning and late afternoon when camels are most active. While not all the interviewees raised the issue of road safety, people were most strongly concerned about the matter at Kintore, Kanpa, Kiwirrkura, Pukatja/Ernabella, Mimili, and Yuendumu. Interviewees at the other survey communities expressed comparatively little concern about the matter.

Fear or wariness of camels is beginning to impact on people's use of country and patterns of exploitation. Interviewees in nine communities expressed a fear of bull camels, particularly during the mating season when they fight with other camels and jealously guard their herd. Some also said they were cautious of large numbers of camels and that, when hunting, they often avoid areas where camels are known to be present. There are numerous stories about lucky escapes from a bull camel. For example, one interviewee said: 'When we break down, bull camels [can] chase people. One bloke walked from near Kintore when his car broke down. He was chased by a camel and had to climb a tree.' While this incident may appear slightly humorous, it is in fact a serious issue, particularly given the fact that some desert areas have few trees and that Aboriginal people's cars are often old and break down. Some interviewees said that they no longer camp out in certain areas because of camels. Many said that when they camp out they light fires to keep camels away and subdue them.¹⁶ One interviewee said that he cannot live at his outstation because camels have damaged the tank, and if he brings water it will only attract camels (see Nyirripi section). Many people in high-density camel areas perceive that if something is not done to check the camel population the problems will escalate. Communities where there was a strong concern about the issue included: Kintore, Titjikala, Nyirripi, Warakurna,

¹⁶ This concern has been confirmed by a number of other anthropologists who work with Aboriginal people in central Australia. For example, I recently discussed the issue with anthropologist Diana James, who was planning a field trip with Pitjantjatjara women to the south of Uluru on Aboriginal land. She said that concern about camels was a factor in women's decisions about where and how to camp.

Kiwirrkura, Amata, Pukatja/Ernabella (in regard to the homelands/outstations), and Yuendumu. In addition, one interviewee at Willowra expressed concern about the matter, as did another at Laramba in relation to Mt Wedge.

While, as yet, concern about the safety risks that feral camels pose is not universally shared, comparisons with Nugent (1988) and Rose (1995) with regard to the NT communities (see Table 5) reveal that it is a growing issue. Neither Nugent nor Rose discuss the issue, which indicates that it is probably only in the past decade that camels have been perceived as a real road-safety risk and/or a barrier to people's use of country.

In my opinion the negative impacts on Aboriginal people's use of country should not be underestimated. An exponential increase in the feral camel population has the potential to profoundly alter not only people's access to country but also the transmission of cultural knowledge and practices concerning country to future generations. The desert region could well be transformed from a benign, familiar, and familial landscape populated with mostly small non-aggressive animals, kinfolk, and ancestral spirits to an emptier, more alien landscape replete with danger.

Damage to outstations/homelands

Homelands that interviewees perceived to be negatively affected by camels include Angatja in SA and, in the NT, Warren Creek near Mt Liebig, Charlotte Waters near Finke, and outstations of Haasts Bluff and Kintore (see Table 4). Types of damage mentioned included damage to taps, tanks, bores, windmills, buildings, fences, and vegetation, including trees and bush tucker. In the main, interviewees who had close associations with homelands mentioned the damage to homelands, and they were concerned about it. Wider consultation is likely to reveal damage from camels on other homeland or outstation areas. While he does not mention camels, 13 years ago Rose (1995, pp. 47–8) found that people in central Australia expressed concern about damage being done to outstations by feral animals such as horses and cattle.

Damage to fences

Interviewees in 14 communities perceived that feral camels damaged fences (see Table 4). However, this did not necessarily mean that it was a matter of great concern to people. A number of the Aboriginal communities surveyed (for example, Apatula/Finke, Atitjere/Harts Range, Titjikala, and Yuendumu) are adjacent to, or surrounded by, pastoral leases, and interviewees are not responsible for the upkeep of fences on them. Not surprisingly, people are more likely to be concerned where the damage impacts them directly; for example, on outstations, around houses, and on Aboriginal land with pastoral operations. Haasts Bluff, Atula (Atnetye Aboriginal Land Trust), and Willowra are examples of the latter.

Interestingly, with respect to the NT, Rose recorded that camels damaged fences at Atula. However, apart from the Aboriginal station manager, he said that other Aboriginal people were not concerned about the matter and felt that feral camels 'were not a problem' (1995, p. 118). This observation contrasts with comments some younger Aboriginal people from Orrtipa-Thurra/Bonya and Atitjere/Harts Range made in relation to Atula, which indicates that some people's perceptions are changing (see also Table 5). For example, one young man commented: 'Too many camels, can't do anything. They are ruining fences – sometimes bothering cattle.'

The impacts of feral camels on other animals

There was a broad range of perspectives concerning the impact of feral camels on other animals, with no consensus either within or among communities. Overall, roughly a third of interviewees perceived that feral camels negatively affected other species, either directly or indirectly. Interviewees in 16 communities perceived that feral camels negatively affect native animals (see Table 4) by competing with them for water and food, damaging their water sources, frightening them away from water sources,

and generally disturbing them, and eating their shade. For example, one man said: ‘When you are chasing *marlu* [kangaroo], camels are running too; they frighten them away.’ To take another example, another man perceived that feral camels affect native animals by depriving them of water:

They frighten them away. The animals have gone somewhere. Kangaroos only drink rockhole at night time but camels are drinking the rockholes dry and damaging them. They are our hunting animals and they’ve gone because of no water. And emus too – they are frightening them away, drinking their water. Emus go in the afternoon to rockholes to drink water – but not anymore because there is no water.

Yet another person commented that camels affected vegetation on which other species depend: ‘We have to go a long way to find *kuka* [meat] because camels hunting them away. Making the country dry. No grass – our tucker can’t grow.’ An interviewee from Walalkara commented: ‘We have a big problem with camels. We are worried about [the impact on] mallee-fowls.’ She also observed that camels deprived other animals of water and said: ‘We want the rockholes to be clean for [native] animals and people to drink.’ In general, interviewees who perceived camels to be having an affect on other animals came from regions where camel numbers were said to be high.

However, nearly half the interviewees in the same communities thought that feral camels had little or no impact on other animals. It was clear that some interviewees interpreted the question of whether feral camels caused problems for other animals as a moral question concerning intentional behaviour and motivation. More than one person pointed out that camels do not intentionally interfere with other animals. For example, one man said that while feral camels are like people in some ways and can be drawn to them out of curiosity, they are not interested in, and nor do they make trouble for, other animals in the same way.

Another man expressed his thoughts on the matter as follows: ‘They are like neighbours, friends. They travel together, *yapa* [Aboriginal] way, cross country every day.’ Rose found that most people he spoke to in the NT (cf. Table 5) thought that feral animals did not ‘interfere’ with native species but that they could scare them away and disturb their environment (1995, pp. 100, 102–3, 112).

A few interviewees expressed concern about the possibility of disease being transferred from live and dead camels to other native animals, and a larger number were concerned about the potential for a dramatic increase in dingo numbers if camels were culled in large numbers (see later discussion on camel management).

5.2.2 Valuation of negative impacts

As noted earlier in the report, one set of questions that proved highly problematic concerned the ‘valuation of negative impacts’. Most interviewees found it difficult to estimate the economic impact that camels had on their community over the last two years. It is not that people are not concerned about impacts, but rather that they are not used to applying a dollar value to culturally significant resources and experiences, nor indeed to objects in the built environment. Moreover, as mentioned earlier, many people are innumerate. Traditionally, Aboriginal culture was non-capitalistic and today Aboriginal communities remain underdeveloped in western economic terms. While Aboriginal people participate in the cash economy, their engagement with markets remains largely marginal. Much of the Aboriginal population in the region is impoverished and dependent on government welfare and financial assistance for the provision and maintenance of houses and other infrastructure. People often do not know the cost of repairs and maintenance, which is generally administered on a community rather than an individual household basis. It was difficult for me to find out from administrators the cost of repairs to houses and infrastructure as a result of camel damage. This can partly be attributed to the high turnover of staff and lack of corporate knowledge about this issue, and the fact that the relevant agencies apparently do not keep such figures. For these reasons the economic valuation of the negative impact of camels was not strongly pursued with interviewees.

Another important issue is that because many Aboriginal people lack resources they often feel powerless to control and rectify problems, with the result that things such as damage caused by camels are accepted as being the way things are. However the changes wrought by large numbers of feral camels on the Aboriginal cultural environment have the potential to create significant and cumulative losses. These losses could include changes in subsistence patterns (see also Bird et al. 2005, p. 458) and customary use of country, damage to rockholes and other culturally significant sites, a decline in bush food, medicine, tobacco, and other culturally valued resources, and loss of opportunity to teach younger generations about such things. Turner et al. maintain that if loss is:

Not obvious to others, is not readily measured, is not represented in a matter recognized as legitimate, or is a result of a series of compounding impacts that are not easily connected to an original action, the consequences can be invisible even though they prove devastating (Turner et al. 2008, p. 1).

Further, they point out that such invisible losses are ‘seldom considered, awarded compensation, or mitigated by decision makers and resource managers’ but that the ‘risk to people’s overall health and capacity for resilience’ (Turner et al. 2008, p. 2) may be profound.

5.2.3 Positive impacts

This section outlines interviewees’ perceptions of the positive aspects of feral camels. Table 6 indicates communities where an interviewee mentioned a positive impact experienced in the previous two years or earlier. Table 7 indicates the type of positive impact mentioned by what number of communities in each State/Territory.

Table 6: Positive impacts of feral camels mentioned by some interviewees in survey communities

Jurisdiction	Selling camels		Butchering and eating camels	Mustering jobs/pet meat operations		Tourism		Other (e.g. owning camels as pets, wool products)
	Last 2 years	3 years ago or before		Last 2 years	3 years ago or before	Last 2 years	3 years ago or before	
SA								
Amata		Y	Y		Y		Y	Y
Indulkana/Iwantja								
Mimili		Y	Y		Y			Y
Pukatja/Ernabella								Y
Walalkara	-	-	-	-	-	-	-	-
WA								
Balgo			Y					Y
Billiluna/Mindibungu								Y
Kanpa								
Kiwirrkura								
Mulan								
Papulankutja								
Warakurna				Y				
Warburton								
NT								
Areyonga								
Apatuka/Finke		Y			Y			Y
Haasts Bluff								
Atitjere/Harts Range							Y	Y
Kintore			Y		Y			Y
Laramba								
Mt Liebig								
Mutitjulu								
Nyirripi			Y					Y
Bonya/Orrtipa-Thurra			Y		Y			
Titjikala			Y	Y	Y			Y
Mpwelarre/Walkabout Bore		Y	Y		Y	Y		Y

Jurisdiction	Selling camels		Butchering and eating camels	Mustering jobs/pet meat operations		Tourism		Other (e.g. owning camels as pets, wool products)
	Last 2 years	3 years ago or before		Last 2 years	3 years ago or before	Last 2 years	3 years ago or before	
Willowra								Y
Yuendumu		Y						Y

Note: The views shown were not unanimous within each place. The table records any mention of positive impacts by an individual interviewee in a particular community as a 'Yes'.

Positive impacts associated with feral camels include income from camel-related jobs such as capturing and mustering; pet meat operations; opportunities for involvement in the sale of camels and tourism enterprises such as camel farms, rides and safaris; meat for human and pet consumption; and products such as camel wool. The latter is used sporadically at Ernabella Arts for making art and craft items such as beanies for sale on the tourist market. Importantly, it is not just income that is valued in relation to camel work but also the opportunity for camels to provide meaningful and productive activity. While the number of interviewees who benefited recently from feral camels is not large, the widespread and varying engagement of Aboriginal people with camels is impressive. In the following I discuss the benefits perceived to accrue from camels.¹⁷

Capturing and butchering camels for local consumption

Youth involvement in the capturing and butchering of camels at Kintore provides meaningful activity, which apparently helps prevent substance misuse (see Squires 2008). It also results in an ongoing, if small scale, supply of cheap and healthy meat for the community, which is cooked by women in the Women's Centre for seniors and school children's lunches. A similar program has occurred at Docker River, where camels were killed and eaten on a more regular basis (see Tangentyere Landcare 2006, pp. 19–20). Some Amata people affiliated with Angatja Homeland and Yaka Yaka, an outstation of Balgo, have also killed camels for local consumption by both humans and pets.

Kangaroo generally remains the meat of choice for many Aboriginal people in central Australia; however, camel meat is becoming more accepted. It is gaining a reputation as a health food, because it is low in fat and cholesterol (see Tangentyere Landcare 2006, p. 15) and is perceived, at least by some people, as 'clean'. For example, one interviewee, a young male, perceived that 'camels are cleaner meat than bullocks because [they are] eating trees'. The following sentiment was also not uncommon: 'It's really nice to eat, healthy meat. If you are thin [i.e. unhealthily] and you eat it, you'll get fat. When sick, it will make you healthy; good for diabetics and sick people.'

Camel meat is widely eaten at Kintore and Docker River (see Tangentyere Landcare 2006), although some older people do not like to eat it because they feel a responsibility to 'look after' camels, as it was Europeans with camels who first brought them rations and took them in from the desert. Some people also do not like to eat camels because of their Christian mythical association with the Three Wise Men (see Section 4.2.3 for further discussion). Throughout the world, people's food preferences are governed by moral considerations, custom, and identity, and Aboriginal people are no different. When I offered camel sausages to interviewees during BBQs for this study some were hesitant in accepting, not because they found the idea of eating camels particularly distasteful but, as they pointed out, because they 'had not learned to eat it'. Once people saw that camel sausages looked like beef sausages, many were willing to try them. On the other hand, as the following comment indicates, some people reject the idea of camel meat on the basis that it is alien and not part of their identity: 'We only want to see our *kuka* [meat], *marlu* [kangaroo], emu, and turkey. That's our food – not camels.'

¹⁷ I do not distinguish here between feral camels and domesticated camels because of the general perception of Aboriginal people that feral camels are easily domesticated or broken in and 'made quiet'. Benefits are associated with both types of camels.

People in communities in the Ngaanyatjarra Lands, WA, are becoming increasingly accepting of camel meat (D Brooks 2008, Principal Anthropologist Ngaanyatjarra Council, pers. comm. 28 August), as are people at Amata and Mimili in SA, and Titjikala, Walkabout Bore, Nyirripi, and Areyonga in the NT. However, most people at Balgo, Billiluna, Mulan, Willowra, Pukatja/Ernabella, Yuendumu, Haasts Bluff, and Orrtipa-Thurra/Bonya are unaccustomed to eating it. At Laramba, there was considerable resistance to the idea. (No information was obtained on the matter at Mutitjulu.) Significantly, even those Aboriginal people who do not like to eat camel meat themselves tend to accept killing feral camels for meat for pet and human consumption as a legitimate and moral practice (see discussion on camel management below). Eating camels is not a completely new phenomenon among Aboriginal people in central Australia: a small number of people related stories about relatives who had killed and eaten camels in earlier times. For the most part the camel eaters were Pitjantjatjara, although stories of Warlpiri who had come across a wounded camel and killed it for meat were also told.

Commercial pet meat operations

As yet Aboriginal employment in the pet meat industry is small scale and mostly in Ngaanyatjarra communities in WA. It is well regarded by the local community and the Ngaanyatjarra Council Land Management Unit precisely because it is of a manageable scale, is non-intrusive, builds on the strengths of Aboriginal people, and is flexible. To date, local people in the communities of Warakurna, Jameson, and Tjukurla, on the Ngaanyatjarra Lands, have been employed in pet meat operations. Of these, Warakurna was surveyed for this project (see Table 6, Table 7 and Appendix 1).

Mustering, live removal, and sale of camels

A minority of people from Finke, Mimili, Amata, Walkabout Bore, Kintore, and Yuendumu have participated in camel mustering and selling activities, with the scale of operations ranging from the sales of a few camels to much larger and organised activities (see Table 6). For example, one man from Finke had captured and sold a camel to the Camel Farm in Alice Springs and a man from Yuendumu had sold two camels to someone from Newcastle Waters. In the recent past European stations owners at Teyon Pastoral Lease (PL), Horseshoe Bend, and Palmer Valley PL employed some interviewees at Finke and Walkabout Bore to muster camels, which were then sold. Larger scale activities involving mustering, live removal and sale of camels have been undertaken by people associated with Amata, Mimili and Kintore.¹⁸ For example, one man from Amata had helped his father muster camels at Harry Creek homeland for sale to the abattoirs. Another family associated with Angatja Homeland had also sold live camels. Yet another interviewee at Mimili had been involved in an Aboriginal-run activity in the early 1990s mustering and selling more than 50 camels near Fregon. The Bureau of Rural Resources gave them 'technical and marketing advice on the management and commercial use of the camels' under the Aboriginal Rural Resources Initiative (ARRI) (McNee nd, p. 12). Perceived benefits of the activity included income production, reduction of camel population, and social benefits. It was clear that the interviewee had enjoyed the activity and was proud of what he considered to be a meaningful, relatively independent activity that used his skills and knowledge of country (see discussion on camel management, Mimili, for more detail).

Aboriginal involvement in the camel tourist industry

Some Aboriginal people have been involved in the camel tourist industry (see Tables 6 & 7). Two interviewees from Harts Range had worked for long periods of time taking tourists for camel rides at the camel farm south of Alice Springs. The son of one of the senior traditional owners of the country works at the Aboriginal-owned tourist venture, the Camel Farm in Alice Springs, where he takes tourists on

¹⁸ The mustering and sale occurred during the late 1980s and early 1990s. It appears that the camels were mostly sold within Australia but some were also sold to the United States of America. Although not part of this survey, there are purpose-built cattle yards on Anselm Impu's country at Undurana near Hermannsburg, which are sometimes referred to as a 'camel farm'. More than 40 camels have been mustered, transported live, and sold. The Indigenous Land Corporation, Tjuwanpa Outstation Resource Centre at Hermannsburg, CLC, and mining company, Santos Limited, have been involved with this project.

morning and sunset camel rides down the Todd River and on other camel activities. He has won races in the Camel Cup held annually in Alice Springs on more than one occasion. In about 1988 or 1989, a family associated with Amata ran a tourist venture on their country at Angatja homeland in SA. They mustered and broke in small numbers of camels to take tourists for rides to learn about Aboriginal culture and country. They were affiliated with the company 'Desert Tracks' and, according to the interviewee, also took tourists on camel rides to Uluru. They did not win the contract to continue these rides. Another company, which is also Aboriginal-owned, now undertakes camel tourism in this area.

Historical associations with camels

In addition to the positive impacts already listed, it is important to note that many interviewees have strong historical associations with camels. Communities in which many older residents had strong historical associations with camels include: Apatula/Finke, Amata, Pukatja/Ernabella, Mimili, Mutitjulu, Titjikala, Mpwelarre/Walkabout Bore, Nyirripi, Areyonga/Utju, Haasts Bluff/Ikuntji, and Atitjere/Harts Range.

A few individuals in some other places, including Kintore, Balgo, Indulkana, and Yuendumu, also have strong historical associations. In other places people's associations are not as strong or widely shared, although some interviewees elsewhere did recall that their deceased relatives had used camels and/or that they had ridden camels when young.

The significance of historical associations is that people with such experiential links tend to value camels more highly than others and are more likely to be skilled handlers of camels. However, while it is sometimes the case that such people are more resistant to the idea of controlling the camel population and using them for meat and other products, this is not always the case. Indeed, the research shows that while members of the older generation who used camels respected and valued them, this did not mean that they abstained from eating them or using their fat and other products when necessary (see Section 4.2.3). In addition, many older people are very aware of the dramatic increase in the camel population during their lives and recognise the need to manage it.

Other positive aspects ascribed to feral camels

Although not perhaps an impact, other positive aspects ascribed to the presence of feral camels include the enjoyment derived from the use of feral camels as family pets, and the excitement and pleasure many people feel in seeing feral camels (although at the same time they may be wary of them). Families in 10 of the 27 communities surveyed either keep camels as family pets or have kept them in the recent past (see Table 6). The communities concerned are as follows: Apatula/Finke, Kintore, Balgo, Billiluna, Mimili, Titjikala, Mpwelarre/Walkabout Bore, Nyirripi, Willowra, and Atitjere/Harts Range. In addition, at the Mpwelarre/Walkabout Bore outstation 50 camels were kept in fenced camel paddocks.

Table 7: Positive impacts of camels: type of positive impact by number of settlements in each state/territory

Type of positive impact interviewees mentioned	Number of settlements where interviewees mentioned this impact			
	WA (n=8)	SA (n=4)	NT (n=14)	Total (n=26)
Sale of camels in last 2 years				
Sale of camels 3 years ago or before		2	3	5
Eating camels	1	2	5	8
Mustering and/or pet meat operation jobs in last 2 years	1		1	2
Mustering and/or pet meat operation jobs 3 years or more years ago		2	5	7
Tourism in last 2 years			1	1
Tourism 3 or more years ago		1	1	2
Other (e.g. owning camels as pets, wool products)	2	3	8	13

5.3 Perspectives on camel management

Many interviewees across the survey communities perceived a need for feral camel management (see Table 8). Although many people possess skills that could be used in camel management programs, they lack the resources and infrastructure to manage camels and their impacts. As a result the harvesting that does occur is sporadic and low scale. Apart from one interviewee who had been involved in culling, feral camel management was largely restricted to hunting for meat for local consumption and the fencing of culturally significant resources and property. While some individuals had been involved in mustering and selling camels in the recent past, this was undertaken for European pastoralists. Australia wide, current approaches to the management of feral camels include both commercial and non-commercial approaches. Commercial approaches include:

- pet meat production, live harvest for human consumption and live harvest for export.

Non-commercial approaches include:

- aerial shooting, ground-based shooting and fencing.

At the time of the survey, these camel management approaches were not generally available to Aboriginal communities. In the following, I discuss approaches to camel management that have been used and explore Aboriginal perspectives on camel management. I focus on differences between communities. Table 8 and Figure 2 show attitudes to camel management in the survey communities across the feral camel range. Table 9 shows the number of communities in each state/territory that hold attitudes toward different types of feral camel management.

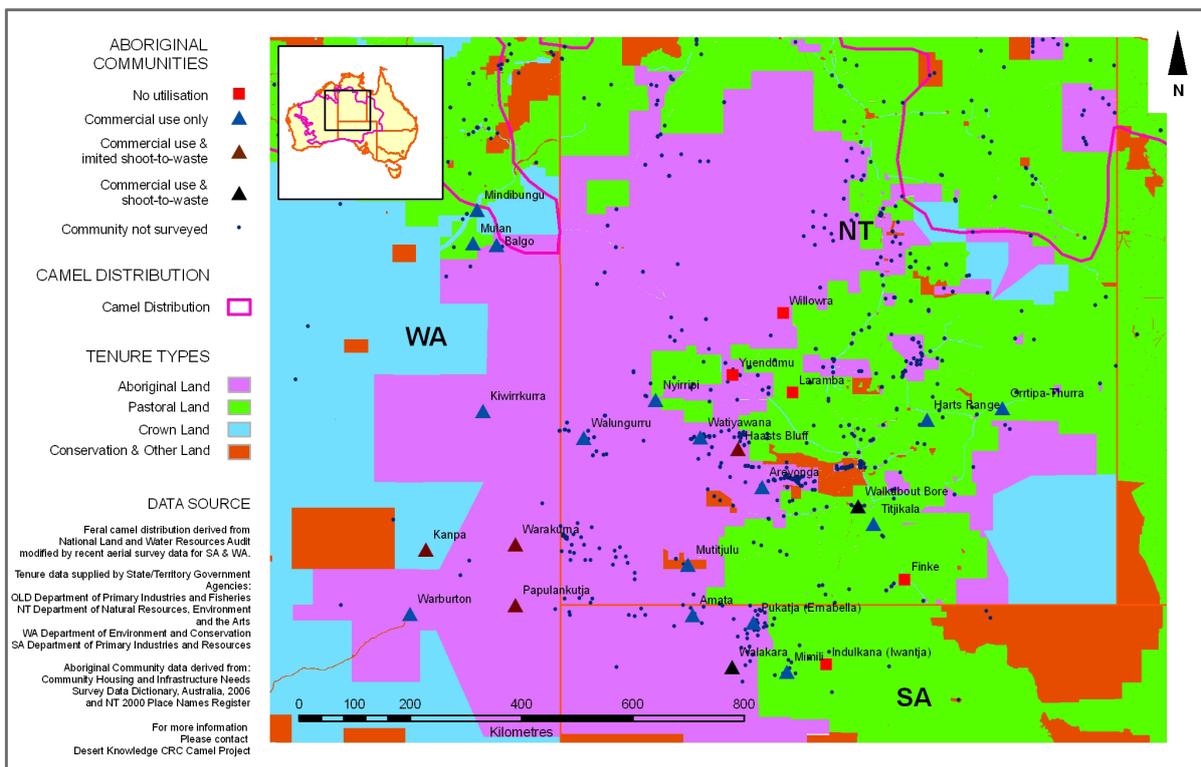


Figure 2: Aboriginal communities' perceptions of camel management

5.3.1 Attitudes to camel management

Perceived need for control and/or management

Many interviewees thought that the feral camel population needs to be controlled (see Table 8). This was particularly the case in areas where camel densities are high. Examples of the latter places include Kiwirrkura, Papulankutja/Blackstone, Kanpa in WA, Amata and Walalkara in SA, Titjikala, Mpwelarre/Walkabout Bore, Areyonga/Utju, Mt Liebig/Watiyawanu, and Mutitjulu in NT. There was much less of a perceived need for camel management at Balgo, Billiluna, and Mulan, which are on the edge of the camel range (see Figure 2). However, people at Balgo recognised that camel densities were higher further to the south-west in the Great Sandy Desert and to the south in the Gibson Desert (see Figure 7.5 in Edwards et al. 2008), and that camel management was required in those areas. The need to control the impacts of camels is being increasingly accepted at Warburton, where camel numbers are increasing.

There were some places where the removal of camels had occurred in the surrounding region via pet meat operations, for example, at Warakurna, and by culling, for example, at Haasts Bluff, Finke, Laramba, and Orrtipa-Thurra. At Haasts Bluff most people felt that if camel numbers increased they should be controlled. One person stated, for example: ‘Just get rid of them and get the environment back again.’ However, at Finke two-thirds of the interviewees did not perceive a need to control camels even if numbers were to increase in the region; others acknowledged the need to control camels ‘if they breed up’. For example, one man in his late 80s said: ‘Yes, too many camels now ... When I was a kid we didn’t like camels being killed – but I recognise the need.’ Although there are few camels at Orrtipa-Thurra and Atitjere/Harts Range, many of the interviewees were associated with old Atula (now held by the Atnetye Aboriginal Land Trust), which is on the edge of the Simpson Desert, and recognised that camels ‘are increasing, coming in from the desert’ and need to be managed. A spokesperson for Apiwentye Pastoral Company, which runs cattle on Atula and had some camels removed already, also said that ‘something had to be done’ about the increasing numbers.

At Yuendumu, Willowra, Laramba, and Nyirripi, which are in the southern Tanami Desert (see Figure 7.5 in Edwards et al. 2008), people’s perception of the need for camel management was less clear cut. Although, in general, many interviewees perceived a need to manage camel impacts, most were only prepared to consider limited management options (see below).

In contrast, interviewees at Amata, Mimili, and Walalkara in the APY Lands in SA indicated much stronger support for camel management (see Tables 8 & 9). For example, at Mimili one person said: ‘Get rid of them. Should finish them. We only want to see our *kuka* [meat], *marlu* [kangaroo], emu and turkey. That’s our food – not camels.’ Another person at Walalkara voiced a similar sentiment: ‘We need government to help us get rid of camels.’ At Indulkana and Pukataja/Ernabella, people do not have a camel management problem, although a senior man from Indulkana was concerned about the impact of camels in the APY Lands and wanted the problem solved, as did many interviewees at Pukatja/Ernabella. For example: ‘They should sell camels and send them back to their own country; they got no *Tjukurrpa*. *Tjukurrpa wiya* [no Dreaming]. They belong to other countries.’

While a minority of interviewees advocated the total removal of camels from their country, many others across the surveyed communities specified that some camels should be kept for local consumption and as a resource to be used in the future. For example, a Balgo man remarked: ‘You never know, one day we might need camels. The Arabs might want them. One day people might come from overseas and want to talk business.’ To take another example, a woman at Kintore said: ‘Truck some away – there are too many, maybe sell them for money. Keep some camels here to eat.’

Perspectives on culling

Apart from one person who had been involved in culling at Haasts Bluff (where there was a cattle operation) and another person from Mpwelarre/Walkabout Bore who had undertaken culling on pastoral stations, no other interviewees had undertaken culling of feral camels. However, the APY Land Management Unit was said to have organised some culling as explained: 'Land Management mob at Umuwa have been mustering and shooting. Killing and leaving them there.'

In only two of the communities surveyed, Mpwelarre/Walkabout Bore and Walalkara were the interviewees comfortable with the idea of culling (see Figure 2 and Table 8). Interestingly, people at Walkabout Bore kept camels themselves and had a long history of working on cattle stations on the edge of the Simpson Desert (see Figure 7.5 in Edwards et al. 2008), where there are high numbers of camels. One informant said that although he felt compassion for camels and didn't like them to be killed, he recognised that it was necessary sometimes: 'Culling – they'll have to do it, especially in the Simpson Desert. If they have to, it's all right. Shooting camels by helicopter and leaving them to die is cruel, but you got to do it because in sandhill country you can't chase them with a Toyota.' The removal of camels was a high priority for the people at Walalkara. While they hoped to derive income by selling camel meat for pet meat, they were also prepared to cull camels themselves in order to protect the wetlands, vegetation, reptiles and animals in the area, of which a number of species are endangered.

Only in four other communities was aerial culling considered to be acceptable, and then only if it was the only option and was undertaken away from roads and communities. These communities were in WA, where people had been involved in, or had observed, a pet meat operation. It is likely that the presence of such an operation and the benefits it is perceived to bring in terms of employment, pet meat, and a reduction in camel numbers have influenced people in terms of accepting a more diverse range of camel management strategies than they otherwise may have. However, the sample size of the WA communities was very small and further consultations in these places may reveal a range of different attitudes.

The fourth community, Haasts Bluff, is somewhat of an anomaly as a culling operation had been carried out on the surrounding Aboriginal land prior to the survey. Although two interviewees felt comfortable with culling as a management option – one of whom assisted with the culling operation – other interviewees expressed discomfort. The preferred management strategies of the latter were using camels for pet and live meat consumption and live harvesting. Following consultation with CLC, a culling operation was carried out so that the traditional owners could grant a grazing licence free of feral camels. Significantly, there was a change in land use from land formerly not used for cattle grazing to land that was fenced and brought under production with a grazing licence. The change resulted in economic and employment benefits for local people.

Although I have not shown Areyonga in Table 8 as accepting limited culling, it is noteworthy that at least a quarter of the interviewees were prepared to support limited ground culling if it is the only option and provided that it is done away from the roads. However, many of the people who live at Areyonga are not the traditional owners of the surrounding land. Management activities cannot be undertaken without proper consultation with the traditional owners. What is significant is that Aboriginal attitudes are not homogenous and that amongst the diversity of views expressed in the survey, there are people who accept culling as a viable option.

Some interviewees (for example, in Mutitjulu, Harts Range, and Billiluna) said that they would accept culling if the carcasses were buried or burnt. They were worried about disease, smell, the sight of dead bodies, and an increase in the dingo population if large numbers of camels were culled and left to rot. Many people who were opposed to culling shared this concern. For example, an interviewee at Areyonga/Utju commented:

Get rid of the camels. If they could catch them and sell them, it would be a good idea but otherwise shoot them. I'm not worried. Maybe they should dig a big hole and just bury them. If you left them, they'd smell and dingoes would breed up.

As discussed in more detail later, other reasons for opposition to culling include sentimental attachment, a sense of obligation to protect camels from harm, a strong cultural ethic against killing animals for waste and a fear of environmental repercussions if camels are killed for waste.

Live removal: the preferred management strategy

For the majority of interviewees the preferred camel management strategy was live removal for sale within Australia and for export (see Tables 8 & 9). However, the general perception was that local people should be involved in live-removal projects and that the workers and local community should derive income from associated activities (see following section). For example, at communities like Willowra, where there was considerable resistance to the idea of reducing camel numbers through pet meat operations or culling, many people were happy to have camels removed live. One senior male said: 'If something happened with the market, people would be happy to sell them, muster them up.' To take another example, at Finke one person said: 'My idea would be to put them in abattoirs for meat. Least they get something for them. Station people just shoot them.'

It was generally accepted that camels sold live could end up being processed for meat and other products, being used for bloodstock for overseas countries or being used for tourism. Most people preferred that camels be used in this way rather than being shot and left to waste on their country. Through television many Aboriginal people have become mindful of global realities such as food and fuel shortages. Several people asked why the need for meat in some other parts of the world couldn't be reconciled with the superabundance of it, in the form of camels, in the desert. Statements such as 'we want to have them trucked away and sent for people overseas who have no food, like Africans', and suggestions that overseas aid money should be used to provide jobs for people in Australia to produce meat to be donated overseas, were not uncommon.

Killing camels for use as pet meat and for human consumption

Many people indicated that killing camels for pet meat and human consumption was a desirable way to manage camel numbers. For example, at Walalkara people are said to be 'keen to start our own business shooting camels and butchering them for dog meat'. In general, opposition to pet meat operations was found in communities that had little experience of eating camel meat and where camel numbers were still relatively low; for example, Laramba, Yuendumu, Willowra and Finke. Some people in these communities were not opposed to the processing of camels for meat at abattoirs elsewhere but did not want camels killed on their land.

It was not always clear from interviewees in other places if people wanted commercial pet meat operations on their country or if they were merely in favour of low-scale local butchering and consumption of meat. Some people at Kintore indicated that they had considered the possibility of a commercial pet meat operator removing camels but that the return per kilo was too low. People in many other communities felt that they did not have enough information on the matter to indicate a preference one way or another. In only one of the communities surveyed, Warakurna in WA, had commercial pet meat operations been undertaken. The Ngaanyatjarra Land Management Unit facilitated the operations, and had also organised pet meat operations at Jameson and Tjukurla (these other communities were not surveyed). The structure of the operation was as follows. Two non-Indigenous shooters employed two Aboriginal people as guides to show them where to locate camels and which places to avoid for cultural reasons. The Aboriginal workers also operated the camel hoist. They were paid on a daily basis and the community also received camel meat. At the time of writing, the pet meat operator had been working in the region for approximately 30 weeks and had shot an estimated 3000 camels (Gordon Sanders 2008, Project Officer, Ngaanyatjarra Land Management Unit, pers. comm. 8 May).

Apart from pet meat operations, some communities have captured and butchered camels for local human and pet consumption. Over the past two decades individuals had undertaken such activities on a small scale at Yaka Yaka, south of Balgo in WA, at Atula, Yuwalki (near Kintore), Titjikala and Nyirripi in the NT, and at Angatja, Amata and Mimili in the APY lands. As mentioned previously, as part of a youth project at Kintore, over the past two years, young men have periodically hunted and butchered camels for local community consumption. Key benefits arising from the camel activities were reported as follows: improved nutrition, the prevention of substance misuse through the engagement of youths in purposeful and enjoyable activities, caring for the environment, and free meat. Although not part of this survey, Docker River in the NT has had a similar youth program involving the killing of camels for local consumption (see Tangentyere Landcare). In addition to the above, an interviewee at Bonya said that he'd shot some camels at Atula and used their meat for dingo bait.

Most interviewees who had experience capturing camels perceived them to be highly intelligent animals with good memories. This has implications for control programs. Some of the interviewees observed that if a camel was handled improperly by a human it would remember the handler and pursue them. Examples of people's observations on the matter are as follows:

- 'Camels are brainy animals. They won't forget you. If someone chased one, they'd remember and chase them.'
- 'Camels have a memory like a human being. If you get cheeky, he'll remember you and go for you.'
- 'You got to watch a young camel that you break in; if it goes in the wild it will like to see Anangu and try to play with Anangu. In the wild he'll kill you. Don't let a camel go in the wild that you've broken in – send him to market.'
- 'They are really smart, really brainy, really sensible ... They know their master ... the bloke who looks after the camels. If you get rough with camels, they'll recognise you and when you try to catch them they'll bite you. They've got a good memory – that's why we tell people not to talk rough to camels.'

Managing camel impacts on country by fencing and through ranger activities

Some interviewees mentioned that they had participated in activities such as the fencing of significant resources and property. For example, at Finke some interviewees had helped erect protective fencing, as had some interviewees at Warren Creek outstation near Mt Liebig. The Ngaanyatjarra Land Management project officer also indicated that land care activities such as maintenance and protection of waterholes are undertaken on the Ngaanyatjarra Lands. According to some interviewees at Mimili, the APY Land Management Unit undertakes similar activities with local rangers as part of the Caring for Country project. Traditional owners of land on the edge of the north Simpson Desert (see Figure 7.5 in Edwards et al. 2008) at Loves Creek and Atnetye Aboriginal Land Trust had also fenced and cleaned rockholes and soakages with assistance from CLC. Looking after rockholes and soakages and protecting them from damage by feral camels and cattle was seen as an important priority (see also Mahney 2002).

A common perception was that there was a need to protect important places, trees and bush tucker from camel damage. Some interviewees at Kintore, Amata, and Walalkara mentioned that camels had fallen into waterholes and died, but the interviewees had no means of pulling them out and had to wait until the camels decayed to clean out the waterhole. Activities that were suggested to help prevent the negative impacts of camels included: fencing areas of cultural significance and assets such as airstrips, cleaning out and maintaining rockholes so that other animals could use the water, and the provision of water points away from significant places in order to protect these places, provide water for the camels and enable them to be caught. For example, a man at Amata said: 'Camels are making country dry – should make more bores and use them to trap camels.' A man from Balgo commented: 'Government should put in trough and dams for camels. I don't like to see them suffering. The tanks would also be

used by people camping out, and shooting emus, turkeys, and kangaroos.’ Similar sentiments were expressed at some other communities. At Mimili the men and women were interested in the ideas to protect waterholes depicted in *The Camel Book* (Tangentyere Landcare 2006, p. 13). Some men were concerned that the fencing of rockholes would prevent native animals from drinking. For this reason they were intrigued by the Patjarr Spider, which, as mentioned earlier, is used to straddle rockholes to prevent camels from falling in the water and dying but still allows animals to drink from the rockholes. At Mutitjulu, suggestions included to ‘make a dam to tempt camels away from waterholes and stop them dying in the summer; build a fence with a dam, camels come to drink and can’t get back out, good way to muster; put a fence between SA and NT and then control camels in NT’. At Mt Liebig it was said that the airstrip needed to be fenced as camels were frequently wandering onto it.

Tourism

A few interviewees across the survey communities mentioned tourism as a possible means of managing camels, although it was generally acknowledged that such management would be limited in scale (see Table 8). For example, at Balgo some people suggested that young people should be trained to use camels for tourism rather than let the animals wander around and die in rockholes. An interviewee at Amata said that her family had used camels for tourism at Angatja Homeland in the APY lands in the late 1980s, partly as a way to manage the camels in the area.

Table 8: Attitudes to feral camel management in the survey communities

Jurisdiction	Do you think that feral camels need to be controlled? Yes/No*	If Yes, what kinds of management activities would you like?				
		Exclusion/ fencing/ providing water points/ other ranger type activities	Communities comfortable with shooting for waste/culling	Commercial options: pet meat and human consumption are acceptable	Aerial culling acceptable if the only option and away from roads and communities	Live removal acceptable
SA						
Amata	Y	Y		Y		Y
Indulkana/Iwantja	Y			No info. on this issue		Y
Mimili	Y	Y		Y		Y
Pukatja/Ernabella	Y	Y		Y		Y
Walalkara	Y	Y	Y	Y		Y
WA						
Balgo	Y	Y		Y		Y
Billiluna/Mindibungu	Y			Y		Y
Kanpa	Y			Y	Y	Y
Kiwirrkura	Y	Y		Y		Y
Mulan				Y		Y
Papulankutja	Y	Y		Y	Y	Y
Warakurna	Y			Y	Y	Y
Warburton	Y			Y		Y
NT						
Areyonga	Y	Y				Y
Atitjere/Harts Range	Y			Y		Y
Apatula/Finke		Y		Y		Y
Haasts Bluff	Y			Y	Y	Y
Kintore	Y	Y		Y		Y
Laramba	Y	Y				Y
Mt Liebig	Y	Y		Y		Y
Mutitjulu	Y	Y		Y		Y
Nyirripi	Y	Y		Y		Y

Jurisdiction	Do you think that feral camels need to be controlled? Yes/No*	If Yes, what kinds of management activities would you like?				
		Exclusion/ fencing/ providing water points/ other ranger type activities	Communities comfortable with shooting for waste/culling	Commercial options: pet meat and human consumption are acceptable	Aerial culling acceptable if the only option and away from roads and communities	Live removal acceptable
Bonya/Orrtipa-Thurra	Y	Y		Y		Y
Titjikala	Y	Y		Y		Y
Mpwelarre/Walkabout Bore	Y		Y	Y		Y
Willowra	Y	Y				Y
Yuendumu	Y	Y				Y

Note: The views shown were not unanimous within each place. Only 'Yes' responses are shown.

Table 9: Attitudes to feral camel management by number of communities in each state/territory

Jurisdiction	Do you think that feral camels need to be controlled?	Communities comfortable with culling	Commercial options: pet meat and human consumption are acceptable	Aerial culling acceptable if the only option and away from roads and communities	Live removal acceptable	Exclusion/ fencing/ providing water points/ other ranger type activities
	Yes/No*	Yes/No*	Yes/No*	Yes/No*	Yes/No*	Yes/No*
Total	25	2	22	4	27	18
WA	7		8	3	8	3
SA	5	1	4		5	4
NT	13	1	10	1	14	11

Note: Only 'Yes' responses are shown.

Camel information and education

Availability of information

Most Aboriginal people indicated that they lacked access to information about feral camel management (see Table 10). Apart from people at Amata and Mimili receiving information in the early 1990s from the Bureau of Rural Resources, people at Mutitjulu receiving information through joint management activities, and people at Walalkara receiving information through National Heritage Trust programs, no other interviewees mentioned receiving information directly from government sources. For the most part, any information that they were able to obtain was said to be from non-government organisations such as Central Land Council and land care groups in the NT, Anangu Pitjantjatjara Yankunytjatjara Land Management in SA, and Ngaanyatjarra Council in WA.

Table 10: Main sources of information on feral camels and their management by number of communities in each state/territory

Question		NT	SA	WA	Total
Where do you get information about camels and their management?	None				
	Government	1	3		4
	Aboriginal representative groups	10	3	5	18
	TV/other	10	2	1	13

Note: Responses concern sources of information prior to this project

Interestingly, many interviewees said that they saw programs about camels on the television and some had heard camel stories or announcements about proposed camel activities on the radio. In the NT a small number had either been to, or heard about, the Undurana Camel Farm near Hermannsburg. In

SA many interviewees were aware of camel management activities that had happened in the past at Fregon. The survey found that people largely relied on their own observations and word of mouth. Few interviewees mentioned printed matter as a source of information apart from *The Camel Book* by Tangentyere Landcare.

It is interesting to consider these findings in the light of earlier surveys of Aboriginal perceptions of feral animals in the NT. Although neither Nugent (1988) nor Rose (1995) discussed how people obtained information on feral camel management, they concluded that it was insufficient and that more information and assistance should be provided to Aboriginal people. Rose also noted that there were ‘few examples of information exchange programs on land management issues which were designed specifically for Aboriginal people’ (1995, p. 149).¹⁹ In calling for more information, Nugent’s emphasis was on how to market feral camels (1988, p. 22). Rose called for ‘better and more appropriate information’ to support Aboriginal people in their land management decisions (1995, p. 149). In doing so he emphasised the need for ‘an information exchange process’ that acknowledged and would also ‘reinforce the traditional Aboriginal view of a management issue’ (1995, p. 149). As noted by Rose (1995), however, feral animals present new challenges to the ‘traditional Aboriginal view’.

One of the aims of this project was to promote education about camel issues. This was achieved in several ways. Firstly, it occurred through the discussion and exchange of information concerning feral camels and their management among the interviewees, Waltja workers, interested community staff, and myself. For the most part this happened in people’s communities, but a field trip to inspect damage to country at Kintore also provided an opportunity for the exchange of information, as did a Waltja workshop held in Alice Springs in 2007. The camel sausage BBQs introduced many people to a new food experience. *The Camel Book* by Tangentyere Landcare proved a useful tool for sharing information with Aboriginal people. It has good images and is well set out. It provides basic information on the origin, distribution and population of feral camels, their adaptation to, and impacts on, country, and options for management. People were particularly interested to see photographs and read about what was happening in other Aboriginal communities; for example, Docker River. The photograph of a dead camel in a sacred waterhole stimulated much discussion and questioning. The need for additional information is discussed in the following section.

5.3.2 Willingness to participate in feral camel management activities and the need for support

Most communities affected by feral camels indicated an interest in participating in feral camel management activities. However, they lack the resources and require assistance to undertake these activities. Most interviewees indicated that they would like more information on camel management options and issues, including the viability of commercial operations and avenues for job creation. They also wanted assistance in the form of financial support, resources, and training to manage feral camels and their impacts. Key areas that were suggested as possible sources of income and employment are as follows:

- mustering and live removal of camels for sale
- protection and maintenance of natural and cultural resources through ranger activities such as: cleaning out rockholes, erecting fences or ‘spiders’ to protect wetlands, and other activities associated with looking after country
- capture and butchering of camels for pet meat and/or human consumption
- tourism
- transfer of camel handling knowledge and techniques to younger generations.

¹⁹ With the expansion, albeit limited, of the CLC, Ngaanyatjarra Council, and APY land management units, and the work of organisations such as Tangentyere Landcare and DKCRC this situation has improved over the past decade. However, much greater funding and support in this area is required.

In general there was little interest in activities involving culling. However, individuals in two communities expressed interested in culling feral camels themselves. In addition, some people from areas heavily impacted by camels are prepared to consider outsiders assisting with culling if this is the only management option and it is undertaken away from roads and communities. A key theme was that camel management should create opportunities for Aboriginal people to engage in 'productive work'.

What is meant by the concept 'productive work'? It is beyond the scope of this study to examine this issue in detail. However, people's comments indicate that 'productive labour' is not narrowly understood to mean work that produces income. Some interviewees contrasted 'real work' which involved meaningful activity with work which was perceived to be of little practical use, intrinsically uninteresting and made up. For example, a senior man commented:

People should work, putting yards, putting them on a truck using motorbike to muster, selling overseas. Young fellows to fence rockholes. Proper work, not just cleaning up rubbish. Cut all the timber, build stockyards.

Meaningful work tended to be associated with activities that required engagement with country and/or physical exertion and the outcomes of such work were culturally valued (see also Povinelli 1995). For example, mustering, looking after country in a customary way, and ranger activities were thought of as 'real' work. People expected to be paid fairly for work associated with feral camel management. At the same time some people thought that camel management should be undertaken regardless of whether or not it was economically feasible because it would provide social and other benefits. For example, at Mutitjulu it was stressed that 'even if there are no profits in the camel meat market, it can still pay something towards wages for young people to be involved. Don't just think in terms of making a profit'. In the following, I discuss in more detail key areas where people are interested in assistance and support to manage feral camels and their impacts.

Perceived need for more comprehensive information in culturally appropriate forms

Interviewees indicated that they wanted more detailed information about a wide range of feral camel management issues. For example, one man commented that people need more information about options: 'We need someone to teach us what camels can be used for – like spinning wool and using hides in craft centre.' People asked for feedback on this camel project – in particular, for information on economically viable management strategies and what is happening in other areas. They feel that they cannot make properly informed decisions about feral camel management without such information. They hear conflicting stories about the money to be made from selling camels. They want to know what the real situation is and how they can engage with employment opportunities while caring for their country and managing feral camels. In order to increase the understanding and ownership of these issues it is important to make information accessible to Aboriginal people across the feral camel range.

Aboriginal people are keen observers of change that is occurring within their local area. However, like other people, they do not always know what is happening on the broader scale. Thus, although people in areas of high camel density may be aware of the negative effects of feral camels, people in other areas may not be. This is important if existing support for feral camel management is to be strengthened and widened. It is also important if people are to appreciate the need for a collaborative feral camel management strategy across different land tenures and regions.

Given that traditional Aboriginal society had an oral tradition, that many people today are not functionally literate, and many speak English as a second language, information needs to be made available in appropriate, accessible and culturally meaningful forms. Good-quality visual material is needed that presents information on issues such as the implications of increasing camel numbers, the negative effects of feral camels on country, management options, and employment opportunities. Accompanying written information needs to be presented in clear non-technical English. The information should also be translated into some of the major Aboriginal languages; for example,

Arrente, Warlpiri, Pintupi/Luritja, and Pitjantjatjara. Aboriginal people respond well to material presented in audio-visual forms such as video, PowerPoint presentations, and photo books (see, for example, Snowdon 2002, pp. 155–9). It is suggested that such forms be used to share information about feral camel issues. In addition, a game approach could prove useful to educate people about the reality of the camel market. The approach would involve people working through a camel mustering and financial scenario similar to that already used by Mitchell (2002, pp. 136–141) in pastoral planning. The production of such material should involve Aboriginal people from areas already involved in feral camel management and land care activities. As well as enabling Aboriginal people to share their knowledge, the material would provide technical and scientific information in accessible forms. It could be used locally during community-wide consultations, participatory planning workshops, and field trips with traditional owners on country.

Learning about feral camel issues and their impacts on country could also be linked to school children's camps and education. As explained by the senior Yankunytjatjara man, Yami Lester, learning about the land is a culturally legitimate part of every Aboriginal child's education:

On the land are the stories, Aboriginal stories that explain why people, rock holes, the hills, and the trees came to be there. The land is full of stories, and it's all a story for the children to learn. The old people always tell stories about it, and at an early age the children start learning from that land (1984, p. 4).

Camel impacts are yet another chapter in the continuing narrative Aboriginal people have with their land.

Camel education is likely to be more effective if it is two way and participatory in nature. It is important to recognise the depth of environmental knowledge held by older men and women who walked the country and knew what it was like before feral camel incursions took place. As senior members of clans associated with particular country they hold the corporate memory of the land. They can provide a long term perspective on environmental change and should be supported to monitor and record observations on natural water sources, plants and animals and their habitats as well as other cultural values. Ideally such activities would at times involve senior and younger traditional owners in association with people trained in conservation, for example, personnel from the land management units of different land councils. Video could be employed to assist in recording people's observations as well as ancestral stories and other cultural phenomena thought appropriate by senior custodians. Aboriginal cultural protocols concerning the rights of people to speak for and make decisions about country must be observed in the planning and implementation of educational activities concerning country. This means that outsiders should seek guidance from senior people who hold customary rights and interests in country and 'always ask' (Myers 1998).

Finally, in order to reach a wide audience, NITV, CAAMA radio, and local Aboriginal video organisations could be used to broadcast appropriate educational information on feral camel impacts, management options, and local people's observations on the issue.

Culling or shooting to waste

Overall four communities indicated they were interested in receiving assistance with culling operations (see Table 11). However, with the exception of Walalkara and Walkabout Bore, interviewees expressed little interest in carrying out culling activities themselves. One interviewee at Walkabout Bore said that he was keen to help the government manage camels, as he wanted a job and had experience not only in mustering but also in tracking camels and the aerial culling of horses: 'I'd be happy to help culling elsewhere – tagging them and putting radio collars on [their] necks.' According to Jeannie Robin, whose family cares for their traditional country within the Walalkara IPA (see Appendix 1), her father is prepared to cull camels to protect his country but requires assistance to do so. She stated:

We need government to help us get rid of camels. We need help with motorcars and helicopters. Robin [father] is happy to shoot them. We want to have country with more food. We want the rockholes to be clean for animals and people to drink. [In order to do this] first get rid of all camels – truck them away or kill them. We need help from the government to help country be strong.

In addition to culling, a few interviewees suggested castration of male camels and biological control as possible feral camel strategies. For example, at Yuendumu a middle-aged male who had experience working with ecologists said: ‘They should inject them and stop them reproducing. Maybe rangers [could do this].’

Live removal or harvesting camels for sale

Most communities were interested in the live removal and sale of camels and associated employment and income opportunities (see Table 11). It was perceived that live harvest involved activities such as: tracking, mustering and yarding, loading onto trucks, and sale of live camels. For example, a middle-aged man at Mimili who had mustered and sold camels with the assistance of the Bureau of Rural Resources in the early 1990s said: ‘I really want to truck them away and earn money.’ There was a general perception that live harvesting jobs would provide productive activity for young people. For example, one interviewee said: ‘I’d love to see young fellas train up and work with camels. A big mob here. They can learn how to catch camels and sell them.’ It was also clear from some people’s comments that part of the reason they felt comfortable about such work was because it resembled stock work, in which many older-generation males were skilled. For example, an interviewee said:

If they don’t want them, they might help us to muster them, truck them away. Good to have jobs for young people, and people like me who have worked with cattle can help. We’d like outside people to help.

People perceived that camel mustering would be of interest to young men, because it involved engagement with country and physical work, it used older people’s knowledge and skills, and was a source of income. For example, a female interviewee at Pukatja/Ernabella said:

Send them [camels] away and sell them. Get money from them. Jobs for young people. Government should give money to manage land so that young fellas can do work. In some places they are already doing this [we hear]. They are mustering and sending them off to abattoirs

For some people, live harvesting clearly held the promise of the excitement and romance associated with the stock work of earlier days. In order to be able to engage in live harvesting, however, people need appropriate equipment and vehicles, which they currently lack. Most people did not fully understand what was required to operate a profitable financial enterprise and wanted marketing and financial assistance. For example, one man from Amata said: ‘We got to find out the price for feed, mustering, trucks to cover the costs and get a profit. We’d need to work out how much we’d get. Someone will have to help with money side.’

It was clear from people’s comments that they envisaged flexible harvesting operations that they controlled rather than an externally driven commercial enterprise that required them to deliver a certain quota at a particular time. One man at Areyonga suggested that Aboriginal men could be trained up like contractors, who could hire their services out for mustering: ‘Long as they got their own gear, Toyota, yard, fence, everything ... good job, but need to be trained up.’

Only two survey communities, Walkabout Bore and Yuwalki, near Kintore, reported having yards for holding camels or facilities for loading them on trucks. In the case of Yuwalki, the yards are old and would need to be checked for their suitability. There were also said to be camel facilities near Fregon and steel yards on Mt Wedge.

Using camels as pet meat and meat for human consumption both locally and for sale

In many of the communities there was strong general support for shooting camels to use for pet meat and human consumption (see Table 11). However, this does not mean that everyone wanted to participate in such activities themselves. Sometimes middle-aged and older women suggested that it was a good idea for younger men to do this, but several young men also said they were interested in participating in such activities, as did some older men. For example, at Amata one man said:

Good idea to create jobs and bring in money from outside ... They should put meat in a mobile deep freezer and abattoirs. Trap them at the water. Get young fellas to cut them up and use the meat for the community. Use unhealthy ones for dog meat.

Some people were interested in capturing and killing camels so that the meat could be used locally and others were interested primarily in selling pet meat. For example, at Walalkara people said: 'We are keen to start our own business shooting camels and butchering them for dog meat. We'll sell it to Alice Springs.' People in some other communities felt that they did not have enough information on the matter to indicate a preference one way or another.

The problem of dead carcasses littering the countryside was raised by interviewees in relation to both the culling and the butchering of camels for pet meat. Concern was expressed about the possibility of unpleasant smells emanating from rotting carcasses if camels were killed near human habitation and roads. People were worried about the sight of dead camel bodies, associated disease and smell, and an increase in the dingo population. If pet meat operations were to expand on Aboriginal land and these concerns were not properly addressed, it could prove counterproductive for camel management in the long term. It is important for reasons of health and cultural values that slaughtering and disposal of camels does not occur near natural occurring water sources and drainage lines.

Protection and maintenance of natural and cultural resources through ranger type activities

People expressed widespread interest in receiving more assistance than is presently available to care for their traditional country. Many interviewees supported the need for more paid positions to look after country and protect culturally significant resources from the effects of feral camels (see Table 11). Suggested activities focused on the exclusion of camels from, and the protection and maintenance of, culturally significant resources. They included:

- fencing of water sources and areas perceived to need protection, including community airstrips
- use of Patjarr Spiders
- provision of extra bores and water points to attract and facilitate the capture of camels
- cleaning and maintenance of rockholes and other naturally occurring water sources
- monitoring and looking after country, including sacred sites and culturally significant trees.

For example, an interviewee at Amata said: 'We'd like to fence off the lake at Angatja, close it down so camels don't come and die [there]'. Although some people mentioned that they wanted to fence rockholes and other water sources, others felt that fencing was not a good solution as it prevented native animals from drinking water and separated the water source from the surrounding country of which it was a part. They wanted information on other options. Some people – for example, at Laramba and Yuendumu – explicitly stated that they wanted more 'ranger work'. Paid ranger work has only recently been introduced to some of the survey communities, and others are still not familiar with the concept. Although only a minority of people explicitly mentioned the need for more ranger jobs, this should not be taken to mean that people do not want to look after country. Importantly, discussions with interviewees revealed that it was mostly when people were visiting their traditional countries away from major settlements that they became aware of the negative impacts of feral camels on the land and the broader cultural values at stake. For example, at Yuendumu a senior older man reflected that camels:

... [are] causing problem for country. We can't catch him. They are everywhere. Last year I went with ranger mob and had a look around my country [Mt Nicker area in the Tanami]. [We were] lighting fires to make country green ... Plenty camels there, mulga country. And in creek at Mt Nicker, they're drinking water. Talk about plenty camels; him [camels] eating yinirnti [bean tree, Erythrina vespertilio], gum trees, Jukurrpa trees.

A younger woman commented:

Especially when we visit our country, we see it's a problem. There's waterholes and soakages. Their [camel] feet get stuck in the waterholes and it will die there. They damage sacred sites. They like to eat pirlarla [Acacia coriacea (seed)] and yinirnti [bean tree, Erythrina vespertilio] – can damage trees.

For Aboriginal people, visits to country are generally multi-purpose and can include activities such as: hunting and gathering bush tucker, gathering firewood, school language and culture camps, sacred site surveys and ranger activities organised by land councils or carried out independently, firing of country, and camping out with family. The visits often provide opportunities for younger people to learn about Jukurrpa from older more knowledgeable kin. Aboriginal people believe that the health of people and country is sustained by carrying out such activities (see Povinelli 1995 & Pawu-Kurlpurlurnu et al. 2008). It is within this wider cultural context of looking after country that feral camel management should be approached. Feral camels should not be regarded as a separate problem to other issues associated with the proper care of country. However, support from externally resourced organisations such as land councils is required if they are to visit, monitor, and care for the more inaccessible country.

Tourism

While people in eight communities suggested that camels could be used in tourist enterprises and that they would need assistance in carrying out such enterprises (see Table 11), only a few interviewees from a minority of communities expressed strong interest in developing independent camel tourist operations. They were from Atitjere/Harts Range, Amata (in association with Angatja), and Mt Liebig.

Transfer of knowledge and skills

Some interviewees had worked with camels in the past and are interested in working with them again. As noted often throughout this report, many middle-aged and older people have strong historical associations with camels, having used them as a mode of transport until the mid-1970s. While some people bought their camels from other people, in the past a number captured and broke in feral camels themselves for domestic use. Some people who have worked in the tourist industry with camels are experienced at capturing camels, breaking them in, with the aid of smoke ('making quiet'), and inserting pegs in their noses. These people are interested in transferring their knowledge and techniques to younger generations, and are keen to support camel management activities that involve the training and employment of Aboriginal youths. There are such people at Harts Range, Walkabout Bore, Amata and Angatja outstation, Apatula/Finke, Yuendumu, Nyirripi, and Mimili. It will be important to build on this knowledge and interest base when developing and implementing feral camel management plans.

Table 11: Perceived need for assistance and support to manage feral camels, noting types of activities suggested

Jurisdiction	Fencing, use of Patjarr Spiders/yard building, provision of water points and/or ranger type work	Help for mustering and live removal	Culling/shooting to waste	Tourism	Shooting for local human or pet meat consumption
SA					
Amata	Y	Y		Y	
Indulkana/Iwantja	Y	Y			
Mimili	Y	Y			Y
Pukatja/Ernabella	Y	Y		Y	Y
Walalkara	Y	Y	Y		Y
WA					
Balgo	Y	Y		Y	Y
Billiluna/Mindibungu					
Kanpa	Y	Y	Y		Y
Kiwirrkura	Y	Y			Y
Mulan					
Papulankutja	Y	Y			
Warakurna			Y		Y
Warburton		Y			Y
NT					
Areyonga	Y	Y			
Apatula/Finke	Y	Y		Y	Y
Haasts Bluff	Y	Y			Y
Atitjere/Harts Range		Y		Y	
Kintore	Y	Y		Y	Y
Laramba	Y	Y			
Mt Liebig	Y	Y			
Mutitjulu	Y	Y		Y	Y
Nyirripi	Y	Y			
Bonya/Orrtipa-Thurra/Atula/Simpson Desert repeat claim area	Y	Y			Y
Titjikala	Y	Y		Y	Y
Mpwelarre/Walkabout Bore		Y	Y		
Willowra	Y	Y			
Yuendumu	Y	Y			

Note: The views shown were not unanimous within each place. The table records any mention of need for assistance and support to manage feral camels by an individual interviewee in a particular place as a 'Yes'.

5.3.3 Perspectives on potential uses for feral camels

As discussed earlier, Aboriginal involvement in commercial activities is currently limited to the occasional employment of a few people in the pet meat industry, some mustering work for non-Aboriginal people involved in live removal and sale (local abattoirs and some export overseas), and using camels in the tourist industry. However, there was general agreement in all communities on a number of potential uses for feral camels.

A majority of interviewees strongly support the development of a stronger camel industry to contribute to feral camel control if it created opportunities for increased employment and income for Aboriginal people. Many people suggested that camels could potentially be used for meat for human and pet consumption, and as a source of employment and income (for example, activities such as capturing and mustering camels for live removal and sale). Some people also mentioned the following as potential uses: tourism, products such as wool, fat for use with bush medicine (as was used by some Pitjantjatjara and Arrernte people in earlier times), the production of hides for use in the manufacture of boots and clothes, and as a mode of transport. Apart from the use of camel fat that some Pitjantjatjara people specifically mentioned, suggestions were put forward by interviewees from across the survey range, with no discernable differences between communities.

With the exception of Aboriginal people who had worked as stockmen on cattle stations or who had been involved in the mustering and selling of camels or had discussed the matter with the CLC Land Management Unit, most interviewees did not know how much income could be derived from the sale of camels but believed that a camel industry would be economically viable. Some people had heard that a camel could sell for \$1000 per camel; some others put the figure lower, others higher and a significant number said it depended on the market. However, many interviewees said that they had no idea about the price of a camel.

5.4 Implications

In this section I explore why people hold the values and perspectives that they do. I show that while much of Aboriginal thinking about feral camels draws on deeply held cultural values concerning human relations with other animals, Aboriginal views on feral camels are neither unchanging nor homogenous. In doing so, I consider the implications for the development of an effective participatory camel management strategy. I first discuss how earlier surveys of Aboriginal perceptions of feral animals in the central Australian region of the NT represented the Aboriginal view of feral camels.

5.4.1 Aboriginal perceptions of feral camels

The earlier literature

As noted earlier, there is no Aboriginal term for the word ‘feral’ and, in general, Aboriginal people tend not to use the word when speaking English. In his earlier study of Aboriginal perspectives on feral animals, Nugent (1988, p. 2) asked if the fact that there was no term for ‘feral’ in central Australian Aboriginal languages meant that Aboriginal people did not have such a concept. While not directly answering the question he concluded that although people recognised that feral animals had once been strangers to the country, they now thought of them as belonging to the country. Moreover, he found that apart from some limited overgrazing of grass ‘feral animals are not thought to be a problem nor are they thought to cause land degradation’ (Nugent 1988, p.15; see also p. 13). He noted that ‘some older people placed feral animals in a Christian schema saying that “they are God’s creatures”’ (Nugent 1988, p. 13). Seven years after Nugent’s study, Bruce Rose (1995) conducted research among Aboriginal people in central Australian region of the NT on their perceptions of land management issues, including feral animals. He also concluded that while non-Aboriginal people generally regard feral animals as pests, Aboriginal people perceive them to ‘belong on the country’ (Rose 1995, p. xx). He observed that:

Where feral animals are in large numbers and damage the country Aboriginal people recognise the impact but generally do not connect such issues with a need to carry out special forms of management. In general Aboriginal people do not understand the rationale for feral animal control programs. The effects of feral animals on the country are not seen as a cause for concern. It is seen as a natural phenomenon that animals eat the grass and raise a bit of dust. To separate the impact of feral animals from native species on these grounds is not seen as logical. People see the contemporary ecosystem as an integrated whole so they don’t see some species belonging while others do not (Rose 1995, p. xx).

For both Nugent (1988) and Rose (1995) the concept of ‘belonging to country’ was central to Aboriginal perceptions of feral animals. It helped explain why Aboriginal people appeared not to be aware of, or concerned about, feral animal impacts on country. Their analyses presented Aboriginal people as essentially ‘holists’ (see Jamieson 2008: 3) in the context of their relationships to other species. Feral camels did not challenge this schema but were accommodated by it. It is now 20 years since Nugent’s study and 13 years since Rose’s. Over the intervening period the feral camel population has grown – in some places dramatically.

The DKCRC Aboriginal community survey

The findings from this DKCRC project indicate that in areas where there are now high densities of feral camels they are becoming a significant issue for Aboriginal people. Rather than seeing them as being part of the ‘integrated whole’ (Rose 1995), many people now perceive feral camels as causing unwanted impacts on waterholes, people’s use of country, bush tucker, and animals. Concern about these impacts has motivated a shift in some people’s thinking about feral camels. People in areas of low camel density are generally less concerned about feral camel impacts and see less reason to implement feral camel management programs. The issues presented by feral camels are complex and not easily resolved. This is not only because people lack information and resources to manage feral camel impacts but also because feral camels challenge people’s cultural values and ways of acting in relation to other species. In what follows I discuss the nature of these challenges and the implications for developing a collaborative camel management strategy.

Aboriginal understandings of ‘feral’ and ‘wild’

As used in this report, the term ‘feral’ refers to introduced animals that were once domesticated and now run wild. I found that although the interviewees do not have an equivalent term in their own language and most do not use the term ‘feral’ when speaking English, they nevertheless understood the concept. People knew that Afghans and others introduced camels to central Australia in earlier times. Older people told me that once they were no longer required as a means of transport, over time, camels were abandoned to wander in the bush, breed, and live their own lives. They did not draw a sharp distinction between feral camels and domesticated ones. Interviewees contrasted feral camels with domesticated camels by referring to the latter as ‘quiet ones’ but also pointed out that feral camels are easily ‘made quiet’ (i.e. domesticated) with the use of smoke.

Because most interviewees did not use the term ‘feral’, I sometimes used the term ‘wild’ to describe feral camels. In English ‘wild’ has multiple meanings, one of which is ‘feral’. What I found was that although people were familiar with the term ‘wild’, not everyone used it in the same way. Some people used it to contrast animals that could be domesticated but ran wild (e.g. camels and dogs) to native animals (e.g. kangaroos and bilbies).²⁰ For others, the primary connotation was a cluster of concepts concerning ‘loss of control’, ‘anger’, and ‘danger’. For example, in response to a question concerning the presence of wild camels one interviewee observed that camels were not always wild and that it was mainly in winter that ‘the bull camel is on his own and will get wild and come after you, jealous of that lady camel’. Despite these differences there is concordance with the way people perceive bush camels and the concept ‘feral’.

How Aboriginal people think about feral camels

The development of effective participatory camel management strategies requires knowledge of which options are acceptable to people and why. Although many people were concerned about the effects of camels on country, they were not comfortable with all the suggested management strategies. In what follows I discuss some reasons why. I briefly explore some of the key ways that Aboriginal people think about feral camels and the moral dilemmas that confront people when considering how to control unwanted feral camel impacts. In adopting this approach I draw on the work of the environmental philosopher Jamieson, who proposes that environmental problems not only involve ‘scientific, technological, and economic considerations’ but also ‘considerations about ethics, values, and the aesthetic dimensions of the environment’ (2008, p. 23).

²⁰ The linguist Jane Simpson told me that some Warumungu people also use the term ‘wild’ in this way (2007, pers. comm.).

‘Belonging to country’

Nugent noted that many Arrernte people ‘thought of feral animals as being “*mwerranye*” or “*arrenye*” (belonging to the country) as opposed to “*ulyerrinye*” – a stranger to the country’ (1988, p. 13). During this project some Warlpiri also referred to feral camels in this way, using the term *ngurra-wardingki*, meaning ‘denizen of the country’.

Some other interviewees said in English that feral camels ‘belonged to country’. They explained that if feral camels are born and grow up on country then they share a relationship with it and its people. Other people who had worked with and kept camels regarded them as ‘family’. Thus people extended concepts applied to humans and native species to camels. However, it is clear that people also perceive differences between feral camels, native species, and people, some of which are relevant to my discussion.

When an Aboriginal person is said to ‘belong to country’ it is commonly understood to mean that he/she has an enduring relationship with it as a result of a culturally valued connection. For example, the person may have grown up in the country and/or be linked to it through a mechanism such as birth, conception, or descent. Different rights in country arise from different types of connections, depending on the law and custom of the person’s group. For example, for Warlpiri people descent from the father’s father is of prime importance. It is thought that a person shares the spiritual essence of the ancestral being that is associated with their father’s father’s country. The ancestral being may be an animal or plant species or other entity. Anthropologists refer to this type of relationship between people and species as ‘totemism’. As noted by anthropologist Deborah Rose:

The totemic relationship invariably requires that people take responsibilities for their relationship with another species, and learn that their own well-being is inextricably linked with the well-being of their totemic species (1996, p. 28).

Jukurrpa is the era when the Aboriginal world came into being through the activities and journeys of ancestral beings. These beings:

... brought order, meaning and obligation to the world, so that all of its constitutive elements, natural and human, became amenable to common lawful processes and regularities (Meggitt 1972, p. 71).

The journeys of these beings are commonly referred to in English as Dreaming tracks or ‘songlines’ and the places at which they performed activities as ‘sacred sites’.²¹

Although Aboriginal people draw analogies between humans and the non-human world, they differentiate between feral camels and native species. Significantly, no interviewees believed that camels have a totemic link with country or that they have Jukurrpa. Thus, while at one level feral camels may be regarded as ‘belonging to country’, at another level they are also seen as different. The fact that camels do not have a Dreaming means that they are not integral to people’s relations with country and its species. Unlike native animals for which there are Dreamings and for which people perform ceremonies, no one has responsibility for feral camels. For example, an interviewee explained: ‘Today they became a pest because no one taking care of them. Nobody owns camels, because no one’s Dreaming.’ Another person who also commented that camels have no Dreaming added that therefore ‘Aboriginal people not boss for [feral] camel’. In the past when camel numbers were low it is likely that their relationship to country was not perceived as an important issue. However, with increasing numbers of camels and competition for culturally significant resources, people are beginning to refute the view that camels belong to country. As the following examples illustrate, in this context, many interviewees now emphasise the alienness of camels:

²¹ Although Aboriginal people throughout central Australia share the concept of Jukurrpa, models of land tenure and how people are affiliated with land can vary. For example, while Western Desert people emphasise place of birth as being an important criterion for affiliation to country, others like Arrernte and Warlpiri prioritise descent from the father’s father. This variation did not seem to greatly influence people’s perspectives on whether feral camels belonged to country.

- ‘They [camels] are not from our country; they got no Tjukurrpa. Tjukurrpa *wiya* [no Dreamings, Dreaming stories or associations]. They belong to other countries.’
- ‘They don’t belong here ... They’ve got no Dreaming. No Jukurrpa. They are *yapakari* – strangers – not belonging to us.’
- ‘That’s Bin Laden’s camels. Camels don’t belong here. They brought it from overseas ... No Jukurrpa for camels. They’re not from here – from overseas.’
- ‘Camels don’t belong here – they’re not from here; they’re illegal immigrants – time bombs.’
- ‘They don’t belong here. They are just lost and walking around. They’re strangers, messing up country.’

Perspectives on culling and using feral camels for meat

As mentioned earlier, the customary law which Aboriginal people observe in relation to their management of country was laid down in the Jukurrpa. Customary law is enforced by senior men and/or women of a community. It involves not just ‘explicit social rules’ but also a ‘morally right order of behaviour’ (Meggitt 1972, p. 71). This ‘morally right order of behaviour’ guides the way people relate to humans and other local species. Non-human beings are morally relevant to Aboriginal people because of the mutual interdependence established through totemism (Bennett 1986, p. 107). However, moral consideration is not restricted to native species but also to other animals. Aboriginal people respect the right to life of other animals and feel sympathy for animals killed for no reason. For example, in response to the question about culling, an interviewee said: ‘Don’t shoot camels. They are animals, they have a right to life. Don’t waste. It’s OK to kill them for meat.’ Respecting animals does not exclude using them for food (see Bennett 1986, p. 106). However, it is expected that people treat camels properly and do not make them suffer in the process (also see below). As the following quotes show, Aboriginal people have a strong cultural ethic against killing animals for waste that is part of Aboriginal Law, or Jukurrpa:

- ‘Jukurrpa, *yapa* [Aboriginal] way, you can’t shoot animals for nothing. Must be for a purpose, like eating.’
- ‘I respect animals, any animal. If you shooting it for skin or hunting, that’s all right. But killing it and leaving it is not right. A couple times a fella shot kangaroos and left the skinny ones, just taking the tail. I said to him, ‘I caught you shooting for nothing. You can’t do that. You are wasting for the future, for people to eat. That’s against the Law. That’s why we respect animals, that’s Jukurrpa.’
- ‘Some whitefellas shot 20 camels along the road. That’s cruel. We don’t shoot for nothing, camel not hurting you, not swearing at you, not doing anything wrong [to you]. Camel is important being again – you can’t waste him, camel want a life too. OK to have young fellas shoot for meat.’
-

The last quote illustrates a commonly held belief that one of the ways camels are different to people is that they have no moral agency. For example, one interviewee said that camels ‘do damage to Dreaming trees. [Because] They don’t know how to act, they got no brains’. People believe that each individual species has its own characteristic behaviour and that if in the course of being itself an animal unintentionally damages another species it cannot be held responsible and does not deserve to be killed.

Association of camels with Christian symbolism

Although not everybody subscribed to the view, some interviewees explained that they did not accept culling because they associated camels with the Three Wise Men in the Bible story about the birth of Jesus. In this view camels have a special symbolic status as God’s animals, and killing them for waste will attract retribution. Punishments mentioned included ill health, death, and environmental repercussions such as drought. Examples of interviewees’ statements on the matter follow:

- ‘Camels were with [the] three shepherds – belonging to God. They are Christian for Jesus.’
- ‘They belong to God. If they get shot, God will punish us... [A neighbouring pastoralist] was shooting donkeys, and God punished him. He got sick and passed away on the road.’
- ‘We’ll have no rain because they’ve shot camels. Camels are God’s gift. If you shoot them, no rain.’

During the course of this project I spoke to many Europeans who dismissed the Aboriginal Christian view on camels as mere superstition (see also Nugent 1988, p. 20). One CEO who had been a Lutheran preacher said that in his view Aboriginal people have interpreted the Christian doctrine incorrectly, because the Bible states that Man has dominion over all other creatures.²² In my view, Christian camel symbolism has more in common with the Aboriginal ethic not to kill animals for waste than might appear to be the case at first glance. As the following quotes indicate, some interviewees clearly saw a unity between the Aboriginal Christian beliefs about camels and Aboriginal Law concerning killing:

- ‘God brought the camel up. Three Wise Men. *Yapa* way it’s not right to kill animals. People might get in trouble.’
- ‘It’s bad to kill and not eat them. In the Bible it says what you kill you eat. [Aboriginal way] you don’t kill for fun – you can get boned. Kangaroo is our Dreaming and culture. We follow Laws through that. You’ll get a good hiding if you kill for nothing.’
- ‘No, we don’t like to see the camels lying on the ground. We feel sad. Camel belongs to *Wapirra*, God, too. We don’t like to see any animal killed and lying there. That’s Jukurrpa. Can’t kill animals and leave them...’

In Aboriginal Jukurrpa there is a close association between, on the one hand, rain, renewal of species (life), and the health of people and country, and, on the other hand, acting appropriately toward other animals. Many rituals are concerned with these themes and it is believed that failure to perform them can result in drought, death, and sickness. Forty years ago Strehlow commented on this belief in relation to the Arrernte at Hermannsburg and the drought that ran for eight years until 1966. He noted that young Christians and non-believers:

... joined together in the same chords of abuse: ‘The old men always said that the rains would fail to come, that the animals and trees would die, and that men and women would fall ill, if the sacred songs were no longer sung and if the sacred acts were no longer performed. And what they said has come true’ (1970, p. 111; quoted in Bennett 1986, p. 107).

Aboriginal Christian beliefs about camels have a similar theme. When I asked one senior male interviewee why shooting camels made the country go dry, he explained:

*Because that’s in the legend, those that believe in Christ, they have rain. And camels live in good country, green [country]. ‘Hey, this is a green place,’ people say [when they see camels]. And where some camels got shot it is dry.’*²³

Empathy for camels born of historical and other associations

Some interviewees were opposed to culling and eating camels because they had close historical associations with them and felt that they should not mistreat them. For example, an interviewee explained:

I don’t like the idea of eating camels for meat because I grew up with them. They are part of the family. I grew up and worked with them. They carted everything; carted wagons, got mail and rations.

²² The historian, White, has pointed out that the latter is a dominant view within Christianity; however, there is also another tradition associated with St Francis of Assisi that emphasises that ‘the role of humans is to live in partnership with nature’ (Jamieson 2008, p. 21).

²³ Intriguingly, one interviewee told me that missionaries once shot camels at Hermannsburg and no rain fell for a long time. It is probably not a coincidence that camels come looking for water in communities and stations when it is dry and that some may be shot at this time. This would be particularly the case in a long dry spell. As Jocelyn Davies suggested (2008, pers. comm. 19 September), to some extent the association of camels with lack of rain may be a self-fulfilling prediction.

Many such interviewees said that they ‘felt sorry’ for feral camels. In expressing this emotion they were conveying feelings of relatedness and a reciprocal duty of care (see Myers 1986, pp. 105–6; Rose 1999, p. 181). Expressions of sorrow were also sometimes meant as judgments (Myers 1986) about the cruelty of culling.²⁴

Many interviewees who do not have a history of working with camels also expressed compassion for them. For example, one interviewee commented: ‘Sometimes I worry if they’ve got no water’. Yet another interviewee expressed concern for the fate of camels because ‘[t]hey were living here a long time. Even though they don’t belong here – they came with other people...Afghans’. In conveying how they felt about camels some interviewees discussed their similarity to humans including that they possess long memories and emotions. For example, one interviewee observed that when baby camels are separated from their carers they ‘cry like little kids’. Orphaned baby camels are sometimes adopted and raised as pets.

Implications for an effective participatory feral camel management strategy

It should be clear from this discussion that feral camels raise complex issues for Aboriginal people. As feral camels grow in number and become an increasing threat to the environment, they occupy new physical as well as conceptual spaces. In making decisions about them, Aboriginal people draw on a set of ethics concerning people and their environment that have served them well over time but are now challenged by feral camels. In thinking about feral camels’ impact on country and how best to manage them, many Aboriginal people feel conflicted. One interviewee expressed the dilemma as follows: ‘We are worrying about Jesus and how we are going to do it [i.e. manage feral camels]. All of us worrying about camels, donkeys. We can’t shoot animals, because everyone reckon we won’t get rain, makes country dry.’ Another person told me: ‘Every time I drive I feel sorry for camels, and I worry for my country.’

For the interviewees, making decisions about feral camel management involved making moral judgments. As Jamieson points out, ‘What is central to moral judgments are reasons for action that reflect a host of concerns involving the interests that are at stake, the harms that would be caused, the precedents that would be set, and so on’ (2008, p. 42). The dramatic increase in the feral camel population in many parts of central Australia over the last few decades, coupled with awareness of their negative impacts on cultural resources and country, has led some interviewees to adopt a more contingent view on feral camels than previously would have been the case. As the earlier findings indicate, people in communities such as Walalkara in SA where camels have had a heavy impact perceive that unless feral camels are managed, their country will become dry and devoid of animals and plants and other culturally valued resources. In considering what is at stake, they have weighed up their concern for feral camels as sentient beings against their concern for country, and they have made choices. Although their preference is to kill camels for pet meat to sell, they are willing to consider culling if it is the only option. In their view, culling has a vital purpose – the maintenance and renewal of country.²⁵ On the one hand this position represents a significant shift in perspective from one where culling is perceived as ‘killing for nothing’. On the other hand it is consistent with the Aboriginal ethic which stresses the need to care for country and related beings (see Rose 2005a).²⁶

The point is not that everyone should adopt the Walalkara position but that a range of approaches to camel management are needed in response to different circumstances. There is not just one Aboriginal perspective on feral camels but multiple, sometimes seemingly contradictory, views that can co-exist in the same community. As this report has shown, there is much concern among people about the impact

²⁴ See Myers (1986) for an analysis of Pintupi emotions as cultural phenomena.

²⁵ This view is not widely held across the camel range.

²⁶ As Jocelyn Davies has pointed out (2008, pers. comm. 18 August) it is significant that the main livelihood of people at Walalkara is the management of country for biodiversity and as cultural outcomes. They are particularly well informed from both their own observations and work with scientists about the impacts of camels.

of feral camels, particularly where numbers are high. At this point in time the commonly preferred management strategy is live harvesting. Aboriginal people perceive live harvesting to have multiple benefits including reduction of the camel population, employment and income opportunities, and, not least, maintenance of broad cultural values including the importance of looking after country and of people's relationship with it. However, people's acceptance of, and willingness to participate in, a wider range of feral camel management strategies could change dramatically if appropriate information, resources and culturally valued livelihood opportunities were provided. An example of this is the decision by Aboriginal landholders at Haasts Bluff/Ikuntji to engage in pastoral activities on their land. This decision necessitated the implementation of management activities such as the culling of feral camels to ensure the success of the pastoral enterprise.²⁷ However, it is clear that whatever feral camel management strategies are adopted in the future, interviewees expect them to be humane. For example, in relation to the killing of camels for meat, one person said: 'We don't want them [camels] struggling for life. No muck-around job'.

One of the aims of this project was to enable the development of an effective participatory camel management strategy. Towards this end I have presented and analysed a range of perspectives that Aboriginal people and communities hold on feral camels and their management. I have noted that Aboriginal views on the topic are not monolithic. I have also explored some cultural themes that underpin or are relevant to different and emerging views. The point that I make is that if effective long-term camel management strategies are to be developed, Aboriginal perspectives, values, and attitudes must be respected. This does not mean reifying a particular viewpoint but understanding the reasons for the views, and assisting people to make meaningful decisions about management strategies (see Turner et al. 2008). This is not simply a matter of providing information but working with people in a participatory way so that they take ownership of issues and solutions.

Feral camels should not be treated as a single issue and separated from other concerns that Aboriginal people have about their country, family, and livelihoods. The research shows that it was mostly when people were visiting their traditional countries away from major settlements that they became aware of the negative impacts of feral camels on the land and the broader cultural values that are at stake. It is within this wider cultural context of looking after country that feral camel management should be approached. However, people require resources, the support of organisations such as land councils, and financial recognition of the value of their work if they are to visit, monitor and care for the more inaccessible parts of their country. An approach that focuses on productive relations from an Aboriginal cultural, as well as western economic, perspective would truly incorporate the 'multi-economism' (Povinelli 1995, p. 506) that has evaded much of settler – Aboriginal relations to this day. It would incorporate 'local cultural beliefs about the limits and meanings of *human* and *environment*' and not just focus on 'scientifically apprehended "facts" of ecological and economic systems' (Povinelli 1995, p. 507).

²⁷ Although not a surveyed community, a similar situation has occurred at Loves Creek. In order to unlock the economic value of an area to be granted as a grazing licence, the traditional owners agreed to the culling of feral camels on the area.

6. Conclusion

- Aboriginal people are key stakeholders in the management of feral camels and their impacts.
- Many Aboriginal people, particularly those who live in high density camel areas, see a need to harvest feral camels and control their impacts.
- Few Aboriginal people are currently involved in camel management. However, a small number have broad experience working with camels and have relevant skills and knowledge, which they are keen to use in feral camel management programs on Aboriginal land. It is important to both recognise and build on this knowledge and interest base when developing and implementing feral camel management plans.
- Aboriginal people lack the necessary support and resources required to play a greater role in feral camel management.
- Generally, Aboriginal people lack detailed and accessible information about feral camel management issues. They therefore cannot make fully informed decisions about management options and ways to develop and implement management programs and activities. They are keen to obtain more information on these matters as well as associated training.
- Most of the Aboriginal people interviewed were not comfortable with killing animals to waste (culling). However, the Aboriginal ‘community’ is not homogenous. There are diverse perspectives emerging in response to the transformations being brought about by feral camels on Aboriginal land.
- The research shows that people with greater camel management experience tend to have different attitudes to others. At the present time, the range of camel management approaches (see Section 5.3) is not generally available to Aboriginal communities.
- Aboriginal people are interested and willing to engage in collaborative management programs. However, interest varies within communities and among communities throughout the feral camel range. It is also predicated on the meaningful engagement of Aboriginal people in the programs and the creation of opportunities, support, and investment in areas such as jobs, income, resources, and training.
- It is essential that government agencies engage with Aboriginal people, communities, and organisations representing Aboriginal land interests, in developing and implementing a cross-jurisdictional management framework for managing feral camels and their impacts.

7. Recommendations

- Provide Aboriginal people with accessible and relevant information on camel management issues.
- Provide community survey participants with feedback on the findings of this camel project in the form of meetings and workshops.
- Facilitate the sharing of knowledge and information among the different stakeholder groups within a two-way learning framework.
- Undertake coordinated follow-up consultations to determine appropriate and acceptable feral management strategies for the different Aboriginal communities. Consultations involving people with customary interest in land and involving other community members to be undertaken and coordinated by representative bodies charged with managing Aboriginal land.
- Provide Aboriginal people and communities interested in feral camel management projects with support and assistance in the form of information, resources, training, and capacity building. This should include support for Aboriginal groups who want to operate independent ‘flexible capture’ programs.
- Harness the willingness and capacity of Aboriginal people to engage in feral camel management as well as their intimate knowledge about camel impacts and presence when developing and implementing a cross-jurisdictional management approach by undertaking appropriate consultations and providing necessary support and opportunities for collaborative engagement.
- Base the selection and support of camel management options on Aboriginal needs associated with the integrated management of natural and cultural resources as well as on economic criteria.

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Appendix 1: Wide range survey information

1.1 The Western Australian communities

1.1.1 Warakurna

Background

Warakurna is located approximately 830 kilometres west of Alice Springs on the Ngaanyatjarra Lands in the Central Desert region of WA. The community holds a 99 year lease from the Western Australian Aboriginal Lands Trust (Hames Sharley 2003, p. 6). In 2007, the population was recorded as 164 (Brooks & Kral 2007). The people of Warakurna share a similar culture to those of the other communities in the Ngaanyatjarra lands (Warburton, Papulankutja, and Kanpa), which were surveyed for this report. Main Aboriginal languages spoken in the area are Ngaatjatjarra and Ngaanyatjarra (Thieberger 1996).

DKCRC project officer Benxiang Zeng undertook two semi-structured interviews with Aboriginal men. As for Warburton, Blackstone, and Kanpa, the interviewees were selected on the basis of their seniority and availability. In addition to the interviews conducted by Zeng with local Aboriginal people, I informally interviewed Gordon Sanders, project officer for the Ngaanyatjarra Land Management Unit.

People's past association with camels

Questions concerning this matter were not pursued during the interviews.

Awareness of feral camel presence

Interviewees confirmed that there were camels in the Warakurna area and that the numbers had been increasing. They reported seeing camels 'every day' during the previous summer, with the number of camels usually seen ranging from 100 to 500.

In response to the question 'What do you think about camels?' both interviewees said that there were 'too many', one of them adding that they 'cause many damages', and the other stating that they were good to eat.

Awareness of the impacts of camels

According to the men interviewed, camels cause problems by damaging houses and infrastructure in the community and outstations. They provided the following examples:

- 'Camels push[ed] down the fence and broke the air-conditioning taps.'
- 'On the road to Papulankutja, windmill been pushed down, water tank damaged; in the community four houses and the art centre were damaged.'
- 'Camels died inside the house in an outstation.'

Camels were also perceived as a potential risk for children's safety.

Both interviewees said that camels caused problems on country in that they 'messed up' and caused much damage to rockholes. One interviewee thought that camels caused a problem for other animals by damaging water sources on which other animals depended.

Camel management

One interviewee had participated in camel management activities in the previous two years. He had acted as a guide for a pet meat shooter for two weeks, for which the shooter paid him \$400. Both interviewees thought that it was a good idea to sell camels, one suggesting that they could build yards to hold camels. At present there are neither yards nor facilities to load camels at Warakurna. Neither of the interviewees knew the going market price for a camel.

One man accepted the need for aerial killing, because camels were damaging waterholes. He observed that someone had already killed some in the bush. However, the other interviewee did not agree with camels being shot unless it was for meat. No comments were recorded about how people obtained information on camel management. However, the Ngaanyatjarra Land Management Unit project officer is actively involved in discussions with the community about feral camel issues and management strategies. To date, the unit has facilitated pet meat operations at Warakurna, Jameson and Tjukurla. The shooters have employed two Aboriginal people as guides to show them where to go and which places to avoid. The Aboriginal workers also assist with operating the camel hoist. The workers are paid on a daily basis and the community also receives camel meat. At the time of writing the pet meat operator had been working in the region for approximately 30 weeks and had shot an estimated 3000 camels (Gordon Sanders 2008, Project Officer, Ngaanyatjarra Land Management Unit, pers. comm. 8 May). It is likely that the presence of such an operation, and the benefits it is perceived to bring in terms of employment, pet meat, and a reduction in camel numbers, has encouraged people to accept a more diverse range of camel management strategies than they otherwise may have. Interviewees indicated that they would like help to manage camels. The camel management activities they suggested were shooting camels for meat and culling camels.

1.1.2 Warburton

Background

Warburton, also known as Mirlirtjarra Community, is located approximately 1050 kilometres south-west of Alice Springs on the Ngaanyatjarra Lands in the Gibson Desert. It is part of the Central Desert region of WA (see Papulankutja and Warakurna above). The population in 2007 was 640 (Brooks & Kral 2007). The main Aboriginal languages spoken at Warburton are Ngaatjatjarra and Ngaanyatjarra (Thieberger 1996).

Two semi-structured interviews were held for this project, one with three elderly males and a female, and the other with one older male. DKCRC project officer Benxiang Zeng was the interviewer. In addition, I obtained information on people's past associations with and perspectives on camels from published sources and David Brooks, Principal Anthropologist Ngaanyatjarra Council.

People's past association with camels

No information was obtained from interviewees on this matter. However, published and oral sources indicate that, while missionaries and Aboriginal guides from the Mt Margaret Mission near Laverton used camels to scout out the site of Warburton (Morgan 1991, pp. 143–144, 159, 88), they were not used by Ngaanyatjarra people at Warburton. Yet people clearly remember visits by Pitjantjatjara from Pukatja/Ernabella, when they came with their camels and, on one occasion, heralded ceremony business (D Brooks 2008, Principal Anthropologist Ngaanyatjarra Council, pers. comm. 26 August). They also recalled that in the 1960s, some desert people living in the Goldfields sometimes travelled to and from Warburton using camel carts (D Brooks 2008, Principal Anthropologist Ngaanyatjarra Council, pers. comm. 1 September). Camels were also sometimes eaten. Anthropologist D Brooks was told in 2001 by an elderly Ngaanyatjarra man (the latter is now deceased) that prior to acquiring guns people used the following technique to kill a camel:

They speared it in the leg first. When it sat down they would come and hit it with a stick on the neck and the head – many times until it died. Then they would skin it, cut it and cook it (D Brooks 2008, Principal Anthropologist Ngaanyatjarra Council, pers. comm. 24 August).

Awareness of feral camel presence

The interviewees confirmed the presence of camels in the Warburton region and said the numbers were increasing. People regularly sighted large numbers of camels, with estimates of the numbers in a group ranging from 50 to 100, particularly during the summer period.

Awareness of the impacts of camels

A shared perception was that there were ‘too many, everywhere’, causing considerable problems for the environment and community. Camels were said to cause the following problems: ‘mess up waterholes, damage houses, bush tucker and break taps’. The reported damage to houses did not occur at Warburton, but in the communities of Tjukurla and Warnan. According to D Brooks: ‘great herds have several times approached Warburton, without actually entering’, and camels have broken bores and windmills (D Brooks 2008, Principal Anthropologist Ngaanyatjarra Council, pers. comm. 24 August).

Interviewees also described camels getting stuck and dying in waterholes. In response to questions concerning damage to country caused by camels, people reiterated earlier comments concerning damage to vegetation and waterholes.

Camel management

None of the interviewees had participated in feral camel management activities in the previous two years, nor were there yards or facilities to load camels at Warburton. Although one person had heard that the going price for a camel was \$1000, others were not sure. Potential uses for camels were said to be meat for consumption (although camel meat is not commonly eaten at Warburton) and fat from the hump (presumably for mixing with bush medicine, although this was not stated). Interviewees thought it was a good idea to sell camels to make money and reduce numbers. They were opposed to shooting camels for waste, but accepted shooting camels for pet meat – as had recently occurred at Warakurna. Mustering and transport of camels for local markets and overseas sale was the preferred management strategy. According to information from D Brooks, opposition to controlling camels is diminishing. This is most likely due to increased camel density and negative impacts on the region, and the influence of the Ngaanyatjarra Council Land Management Unit. Interviewees indicated that they would like help to manage camels. The following management activities were suggested: shooting camels for meat, mustering for live removal, and export of camels.

No information was recorded about how people obtained information about camel management issues. However, as for Warakurna (see earlier), the Ngaanyatjarra Land Management Unit project officer for the region provides people with relevant information on an ongoing basis.

1.1.3 Papulankutja/Blackstone

Background

Papulankutja, also known as Blackstone, is located approximately 1050 kilometres south-west of Alice Springs and approximately 750 kilometres east of Kalgoorlie. It is on the Ngaanyatjarra Lands in the Central Desert region of WA. Main Aboriginal languages spoken in the area are Ngaatjatjarra and Ngaanyatjarra (Thieberger 1996). The population is approximately 182 (Brooks & Kral 2007).

Benxiang Zeng, DKCRC camel project officer, conducted one semi-structured interview with four older men and one senior woman at Papulankutja.

People’s past association with camels

No information was obtained from interviewees on this subject.

Awareness of feral camel presence

Interviewees confirmed the presence of camels on their land, and said that numbers had been increasing over the years; it was not unusual to sight groups of 50 to 100 camels.

Awareness of the impacts of camels

According to the interviewees, during the previous summer camels had caused damage to community houses – one dying in an outstation house – and to bores and taps on outstations. They were also perceived to ‘destroy the bush’, damage waterholes, and negatively impact kangaroos, with the result that there were said to be fewer kangaroos to hunt and eat.

Camel management

None of the interviewees had participated in camel management activities in the past two years, nor did Papulankutja have yards or facilities to load camels. Interviewees thought a good use of camels was to sell meat for humans (particularly when made into stew) and dogs. It was stressed that appropriate consultations with senior community leaders who were not present at the interview must be held before camel management activities were undertaken.

Job creation for locals was the major focus of suggested management strategies. For example, one person commented: ‘We can muster it [camels] using collar, and build yard, motorbikes are OK; we know well we can do it.’ Other suggestions included ‘turning camels away’ and ‘donat[ing them] to poor country for meat. Get them back to where they came from’. The culling of camels was said to be an acceptable camel management option provided camels were not killed ‘close to the main roads and communities, but in the bush, for eagles, dingoes [to consume]’. While most did not know the price of a camel, one interviewee had heard that once it was \$500 but that the price had dropped to \$300. A \$30–\$50 return was said to be too low for people to consider selling them.

Interviewees indicated that they would like help to manage camels. The following management activities were suggested: mustering for live removal and export of camels to country of origin, donating camel meat to poor countries, exclusion from community and culturally significant places. The latter strategy would include land management activities such as fencing and provision of water points away from communities.

No information was recorded from interviewees on how they obtained information about camel management; however, as described earlier, the Ngaanyatjarra Land Management Unit project officer for the region provides people with relevant information on an ongoing basis (see camel management section for Warakurna).

1.1.4 Kanpa

Background

Kanpa is located approximately 100 kilometres south-west of Warburton. It is on the Ngaanyatjarra Lands in the Central Desert region of WA. In addition to English, Aboriginal people speak dialects of Western Desert languages. The population is approximately 43 (Brooks & Kral 2007).

A semi-structured interview was held with a man and woman, both middle-aged, from Kanpa. Benxiang Zeng, DKCRC camel project officer, conducted the interview at Warburton.

People’s past association with camels

No information was recorded on this subject.

Awareness of feral camel presence

Interviewees confirmed that there were camels in the Kanpa region. Although the number was said to have increased over the years, there were ‘not too many camels in [Kanpa] community at the moment, but too many in Warakurna and here [Warburton]’.

Awareness of the impacts of camels

The interviewees said that camels created problems for the community and country by damaging ‘houses, land, rockholes, sacred site, bush tucker’. They were also said to be ‘dangerous to health, driving and children’s safety’. They were thought to cause problems for other animals in that they damaged bushes and waterholes on which the animals depended.

Camel management

None of the interviewees had undertaken feral management activities in the past two years; however, they thought it was a good idea to sell camels and were also in favour of culling. For example: ‘Do it. Camels have nothing to do with Aboriginal culture.’ The interviewees pointed out that not everyone in the community necessarily shared their view however, and that some people were concerned about Christian symbolism associated with camels: ‘There are some people talking about the story of three wise men riding camels.’ Interviewees indicated that they would like help to manage camels. They were open to any suggestions concerning feasible management activities: ‘Whatever they want to do. Get rid of them. But it is important to consider whether culling camels will transfer some camels' diseases to people or other native animals.’

No comments were recorded regarding how the interviewees obtained information on camel management options. However, as for other Ngaanyatjarra communities in the region, the project officer for the Ngaanyatjarra Land Management Unit is actively involved in discussions with people about feral camel issues (see earlier camel management section for Warakurna).

1.1.5 Kiwirrkura

Background

Kiwirrkura (or Kiwirrkurra as it is also spelt) is located in the Gibson Desert in Western Australia approximately 430 kilometres from Kintore and 730 kilometres from Alice Springs. Pintupi is the predominant Aboriginal language of the community. The population is approximately 196 (Brooks & Kral 2007).

Semi-structured interviews were undertaken with two senior male leaders of the community, both of whom are traditional owners of country in the region. Informal discussions were also held with a number of other residents, including male and female elders and younger men and women in their 20s and 30s.

People’s past association with camels

A number of Pintupi people at Kiwirrkura had first contact with Europeans in the 1960s, with some others having first had contact as recently as 1984. Many of the former were brought in to Papunya by Europeans who travelled with camels, using them to transport European food items which they introduced to Pintupi. These older people thus associate camels with coming into the communities, where they met other relatives and obtained rations. Interviewees said that they did not encounter camels prior to contact with Europeans when they lived as hunters and gatherers. For example, one senior man said:

I was born here at Kiwirrkura and lived here. This is my country. I walked 500 kilometres to Haasts Bluff and then lived there. I saw quiet ones there [belonging to the missionaries]. No camels were here [i.e. at Kiwirrkura] then. After 25 years I came back to my country and saw lots of camels – lots of camels sitting down outside; before it was never like that. Next time [i.e. in the future] we'll have no trees.

Other people recalled stories of missionaries, Aboriginal people, and pastoralists using camels. For example, one woman recalled first seeing camels while she was travelling with close kin from the site of old Balgo Mission to Kayili and encountered Europeans droving bullocks to Billiluna.

Awareness of feral camel presence

There is a high density of camels in the Kiwirrkura region and they are said to be increasing: 'Too many [are] coming in.' On average, residents see camels at least once a week, particularly when hunting, an activity which occurs frequently at Kiwirrkura. People reported seeing groups of camels, with numbers in a group ranging from less than 10 to 20–100 camels. One senior male said there are 'thousands of camels in the bush', with hundreds along the roads, and that 'you can't drive without seeing them. They are to the west, north, and south – wherever you go'. In hot and dry weather some camels are occasionally seen drinking water from a pipe near the old store. Mostly, however, they are seen walking around the sand dunes, in mulga and bloodwood areas, and on the roads to Balgo and Kintore. In addition to the Kiwirrkura area, 'lots of camels' have been seen at Jupiter Well, Mt Webb, Winparrku,²⁸ Yumarri, Kurawarri, and crossing Lake Mackay. They are said to be 'all around in the bush' and to 'come and go all the time', particularly in the late afternoon and early morning, whereas at midday 'they sit in the shade and hide themselves'.²⁹

When asked what they thought/felt about camels, many older people expressed compassion for camels and felt a sense of obligation based on the fact that camels once worked for them, carting rations and taking them to their relatives. At the same time, people recognised that the situation had changed dramatically since earlier days and that 'something needs to be done'.

Awareness of the impacts of camels

Community

Apart from damaging water pipes and taps, camels are not as yet damaging houses. However, as indicated by the following quote, camels wander onto the airstrip, preventing aircraft from landing and potentially endangering lives: 'Sometimes we can't land on airstrip because camels are there. Pilot can't land. We have a high fence around it but still camels are breaking it.' Camels are also said to impact roads: 'They sleep on the [dirt] road, making a big depression. They make it dangerous to drive. If you run into one it can lift your car. Camels will kill you on the road – too dangerous.' Another person commented: 'You have to drive slowly – they won't give you room, they'll go in a single line down a road.'

Country: environmental and socio-cultural dimensions

As the following comments indicate, feral camels are perceived to have a negative impact on country: 'They hang around here for water. They are eating and pulling out bush tucker; making a mess in rockholes. We can't drink water where camels have been. We've had three years drought. There's not much grass or trees for camels to eat – might as well get rid of them.' Camels are said to be drinking and polluting waterholes, sometimes dying in or near them, with the result that 'you can see bones everywhere'. One of the senior men was concerned that his country is not able to sustain the high number of camels that are increasingly entering it: 'Too many camels are coming in. We've got nothing to give them. We don't have much trees and grass, not much water.'

²⁸ The WA site, not the NT one that is more widely known.

²⁹ Gordon Sanders, project officer for Ngaanyatjarra Land Management Unit, has also seen camels around Lake Mackay; however, he says that the numbers aren't as dense as those he has observed in the APY lands, where he previously worked (2008, pers. comm. 8 May).

The high number of camels is having an increasing impact on people's use of traditional country. For example, one man said: 'At night time you can't sleep if you are camping – you have to light a fire [to keep the camels away] to sleep. They make noise.' He added: 'We light fires to frighten camels when we take kids for bush tucker.' The same man said that you can't drink water from rockholes anymore because camels urinate in them.

The general perception was that camels are not affecting other animals as they do not seek to harm them. One man explained his thoughts on the matter as follows: 'They are like neighbours, friends. They travel together, *yapa* [Aboriginal] way, cross country every day. They drink water and go for months and months.' However, another man said: 'When you are chasing *marlu* [kangaroo], camels are running too; they frighten them away.'

Camel management

No camel management activities have been undertaken in the previous two years. However, the two senior spokespersons for Kiwirrkura believed that camels need to be managed and their numbers reduced. One stated: 'Camels cause a lot of problems. That's why we want to get rid of them and make them [into] *kuka* [meat]. It's good.' The other man commented that 'we need to muster them and send them away. Muster them up. Clean out the country. They are too much breeding up, eating trees and plants'.

Interviewees opposed shooting camels for waste, but accepted the killing of camels for meat. For example, one person said: 'It's no good. Not for waste ... In the past they used camels for carrying rations.' Another added:

Some whitefellas shot 20 camels along the road. That's cruel. We don't shoot for nothing, camel not hurting you, not swearing at you, not doing anything wrong [to you]. Camel is important being again – you can't waste him, camel want a life too. Muslim people used camels a long time ago. They are half Muslim, half Christian. OK to have young fellas shoot for meat.

He indicated that he perceived the camel issue as a complex problem that involved conflicting emotions. For example, he said: 'Every time I drive I feel sorry for camels, and I worry for my country.'

People said that they would like the government and/or other groups such as the Ngaanyatjarra Land Management Unit to help them manage camels but felt strongly that management strategies should create opportunities for Aboriginal people. For example, one senior man said: 'People should work, putting yards, putting them on a truck using motorbike to muster, selling overseas. Young fellows to fence rockholes. Proper work, not just cleaning up rubbish. Cut all the timber, build stockyards. Mobile abattoirs [are] a good idea.' Generally, people thought it was a good idea to sell camels to make money for the local community and land owners. There are no camel yards or facilities to load camels onto trucks. No one had been involved in selling camels, and people did not know the going price of a camel.

Interviewees commented that this camel survey was the first time that an outside party had discussed camel issues in detail and shared information with them.

1.1.6 Balgo

Background

Balgo, also known as Wirrimanu, is located in WA in the Great Sandy Desert to the east of the Canning Stock Route. It is approximately 860 kilometres from Alice Springs. The predominant Aboriginal languages of Balgo are Kukatja and Walmajarri. Other Aboriginal languages also spoken by members of the community include Ngarti, Pintupi, Mandiltjarra, Wangkatjunga, Tjaru, and Warlpiri. The population of Balgo is approximately 450; however, at the time of the survey many people were attending meetings at Lajamanu and Kiwirrkura and the CEO estimated the population to be only 150–200, including children.

Four semi-structured interviews were held with groups of men and women ranging in age from 17 to 60. In addition, project officer Benxiang Zeng and I attended the Wirrimanu Aboriginal Corporation Advisory Committee meeting, during which we provided information and had a wide-ranging discussion with sixteen community members. The latter included men and women ranging from 30 to 75 years of age. The meeting facilitator, B Lee, acted as interpreter.

People's past association with camels

Balgo community is comprised of people from widely differing geographic locales and associated histories. A number of senior men and women grew up in the Great Sandy Desert and worked on cattle stations on the edge of the desert and surrounding Balgo. Others came from the Pintupi area to the south and others from further north. Many older people first saw camels when drovers and stockmen used them to herd livestock in the region. For example, one older woman recalled: 'When we were younger, we saw droving people with camels. First off there were two, then four, then six then eight. There were only a few, then there were lots more.' Subsequently, some men caught and broke in camels, and others bought them to ride. One man recalled that 'Nosepeg Thomas Skein, an Aboriginal man and Helicopter's uncle, used to break camels in and travel from Gordon Downs to Ringers Soak to Balgo with them'.

Another man described riding camels to attend ceremonies:

When I walked around old Billiluna, Gordon Downs, everywhere – there were no camels then. I rode camels when I was a kid, about eight to ten. When old Tom Bradshaw was alive, at Gordon Downs Station, [which is] now called Ringers Soak (some people call it Kunajarrayi). My father was an old well-digger. Ceremony time he took me to Gordon Downs. Tom Bradshaw was an Afghan; he owned camels. He used to get tucker from old Halls Creek mining town, then take it back [on camels] to Gordon Downs and Lewis Creek to sell.

There are currently two pet baby camels at Balgo. People commented on the similarities between camels and humans; for example, one person said that 'they cry like little kids'.

Awareness of feral camel presence

The general consensus was that feral camels do not usually come into Balgo, except during hot weather when an individual may venture in. For example, one man commented: 'They don't come into Balgo. They might wander around and go back and forward but you don't see many.' Another added that 'the first rain, they go back to the sandhills'. However, people said that larger numbers of camels can be found further south-west of Balgo, around Yaka Yaka, an outstation of Balgo. For example: 'On the weekend I went to Yaka Yaka – big mob camels there, too many. One camel was dead in the rockhole.' Another person commented: 'Not at Balgo, but at Yaka Yaka you can see 20 to 100 sometimes.' As indicated by the following quotes, the further south people travel the more camels they see, with large numbers frequently observed in the Kiwirrkura-Piparr area and near Well 33 on the Canning Stock Route:

- 'My country is Kiwirrkura – plenty there and Well 33.'
- 'I see them when I go to Kiwirrkura through Lake Mackay – that's where you see big numbers, and Kintore, Nyirripi, Lamanpanta, and Yaka Yaka – big mob there, and Uluru.'
- 'I saw them at Lake Disappointment and Well 33. The local people there shoot camels and eat them. They taste like bullock.'
- 'We go to the Great Sandy Desert, to Piparr. We see camels there when we go hunting; they are everywhere in the Great Sandy Desert looking for water.'

Camels are occasionally encountered south-east of Balgo on the Tanami road between Balgo and the NT border, and on the access road to Balgo from the Tanami Highway. For the most part they are said to be few in number; however, the art adviser said she saw 15 in March 2008, and in the previous years 30

on the NT side of the border. In dry weather camels are infrequently seen between Balgo and Mulan to the north-west. Occasionally people saw camels coming out of the sandhill country and heading toward fresh water in Lake Gregory and Lake Maddock. For example, one person commented: ‘[I] saw three or four camels last year at Lake Maddock, a freshwater lake to north.’

When asked what they thought/felt about camels, most said they liked camels, with some expressing compassion and a sense of obligation to them because of past experiences. For example: ‘They brought a lot of tucker during the wet season with wagons. We rode them. We still love camels’; ‘They are good animals. They’ll take you to waterholes. Kids like to see them.’

Awareness of the impacts of camels

Interviewees said that camels are not damaging infrastructure at Balgo, nor are they in sufficient numbers to cause significant problems to the surrounding country or animals. For example, one man commented: ‘Really, around here we don’t have any problems with camels. They don’t like fire – they move away [prescribed burning was underway at the time of the interviews]. They move around a bit in the dry time.’ Another person added: ‘Camels are not damaging sacred sites here, but they do at other places.’ People thought that camels did not pose problems for other animals.

Some people said that camels are impacting roads, waterholes, and bush tucker in the Yaka Yaka area and further south, as the following examples illustrate:

- ‘They damage the roads, they walk on the road. They destroy rockholes. Sometimes they fall in rockholes. Spoiling soak water.’
- ‘Sometimes they get sick from having no water and suffer. Sometimes they drink water and fall in waterholes – this happened at Yaka Yaka a long time ago.’
- ‘They are ruining our bush tucker, stepping on it and eating it. They might ruin bush medicine too.’

One person said that ‘sometimes chase you up a sandhill’. However, some interviewees said that the issue of camel impacts was relative and should be seen in the context of the impacts on country that Europeans have caused, such as mining (there are an increasing number of mines to the south of Balgo). One person regarded them as having adapted to the country: ‘They are living together quiet. Camels are living in their country.’ As the following examples illustrate, other people perceived cattle, goats, and dingoes to have more impact on country than camels: ‘Well now we have cattle and goats in the country. They are changing it too. We have deep waterholes in my country; camels don’t go drinking there, only birds’; ‘Dingoes more danger, and bullocks on the road. A lot of tourists are feeding dingoes.’

Camel management

At present no camel management activities are undertaken at Balgo; however, in the past the senior male traditional owner for Yaka Yaka had shot camels there for pet and human consumption, and he proposed doing so again in the future.

As the following comments illustrate, most people were strongly opposed to the culling of camels, justifying their position on various grounds including that they only kill animals for meat, that they do not want camels to die ‘for nothing’ on their country, their sense of obligation to camels for their assistance in the past, Christian associations, and that camels are a potential resource which should not be wasted:

- ‘We like camels on our land. Old people say don’t shoot camels, because I rode camels.’
- ‘I’m the senior traditional owner for Yaka Yaka to Marawa. I don’t want anyone shooting camels between Yaka Yaka and Marawa ... I love animals. I can’t shoot for nothing. I hate people shooting camels for no reason. All right to shoot them for meat. I’ve done it in the past. I made a camel stew. I was looking for kangaroo but couldn’t find one ... You never know, one day we might need camels. The Arabs might want them. One day people might come from overseas and want to talk business.’

- ‘Don’t agree. Too cruel. They can go back to their right country. We don’t want them dying on our country ... No we don’t like that, they come from Jesus time.’

However, after discussions about the potential problems caused by increasing camel numbers, one person reflected: ‘Better shoot camels if they get too many, otherwise they might eat us.’

The preferred management strategy was removal by truck. Interviewees were interested in receiving assistance with camel management and stressed that it should involve the creation of jobs for local people. Most interviewees thought it was a good idea to sell camels to make money for the people and community; however, they did not know how much camels could sell for, although one person suggested \$1000. At Balgo there are no yards to hold camels that are mustered, nor facilities to load camels onto trucks. Stockwork involving mustering and live removal of camels was the most popular suggestion for camel management. One man said, for example: ‘I want to learn how to train camels and then sell them anywhere. I’ve only done stockwork with horses’. While most people envisioned camels being trucked, one person suggested that: ‘Young fellas could muster them and take them away. You could drive them like the olden way if no roads.’ Some people suggested that young people should be trained to use camels for tourism rather than let the animals wander around and die in rockholes. They also suggested that camels could be shot for meat with one person explaining his views as follows: ‘Good to shoot camels for meat. We can shoot camels for dogs and some of us eat camels. Camel is clean meat. No sickness [from it]’. A few people also suggested that water points should be provided for camels to give them access to water and keep them away from communities. For example, one person said: ‘Government should put in trough and dams for camels. I don’t like to see them suffering. The tanks would also be used by people camping out, and shooting emus, turkeys and kangaroos’.

Interviewees indicated that they received little information on camel management at Balgo but would like more. Some had heard about camels when visiting Mulan (see below). For example, one person said: ‘Sometimes we see camels on TV. Once it was brought up in a meeting at Mulan’; another person said: ‘don’t hear much. I’d like to hear more about it’.

1.1.7 Mindibungu/Billiluna

Background

Billiluna, also known as Mindibungu and Kururrungku, is located approximately 180 kilometres south-east of Halls Creek in Western Australia, at the north end of the Canning Stock Route. The main Aboriginal language spoken in the community is Walmajarri. The population is approximately 119 (ABS 2006 Census). Discussions were held with small groups of people, including males and females ranging in age from 30 to sixty. Five semi-structured interviews with key informants from each group were recorded.

People’s past association with camels

Most people interviewed did not have strong past associations with camels, although one man’s deceased brother had owned 12 camels at Gordon Downs, and the man himself had ridden camels from Gordon Downs Station to Sturt Creek. This man has a pet baby camel named ‘Bart’, which he found orphaned between Mulan and Billiluna at Limestone Bore, and is feeding with milk.

Awareness of feral camel presence

According to those interviewed, camels do not come in to Billiluna. Camels are seen infrequently during hot, dry weather in the Red Rock, Limestone, Wolf Crater areas between Mulan and Billiluna, along the Sturt Creek and toward Lake Gregory. They are said to be increasing in the area, with people noticing more and more tracks. Although they are said to be few in number still, one person reported seeing 20–30 along the Sturt Creek on one occasion. Mostly camels were spotted further south in the desert areas near the Canning Stock Route.

Awareness of the impacts of camels

People said camels were ‘not a problem’ for country, other animals, or the community in the Billiluna area. While most said they were not worried about feral camels, one person was concerned about camels potentially suffering by ‘going through fences and getting tangled up’.

Camel management

No activities are undertaken to manage camels and/or reduce numbers, and there are no camel yards or facilities to load camels at Billiluna. Some people did not agree with shooting camels for waste, commenting that it made them ‘feel sorry’, while others said that if camels increased they could be shot but that the carcasses had to be buried or taken away in case dingoes were to eat them and breed up.

It was generally agreed that if camels were to increase in the area it would be a good idea to sell them, although no one had any idea of the market. People thought that camels could be used for tourism, pet meat, and human consumption, although no one interviewed had eaten camel meat. At present, because of the low camel population, most people indicated that they do not need help to manage camels or their impacts. However, one middle-aged woman who was tertiary educated commented that she thought camels were ‘a pest because they are not native animals’, and that ‘something needs to be done’ to prevent the numbers increasing further in the Billiluna area. She said that camels could pollute waterholes, drink them dry, degrade native plants, knock down trees, and ruin the habitats of native animals.

People’s information about camels was generally limited to what they saw on programs on television concerning their social life and behaviour.

1.1.8 Mulan (Malarn)

Background

Mulan, or Malarn as it is also spelt, is located approximately 100 kilometres north of Balgo, near Lake Gregory in Western Australia in the Great Sandy Desert. The main Aboriginal language spoken in the community is Walmajarri. The population is approximately 150 people. Lake Gregory is part of the Paruku Indigenous Protected Area (IPA), which is managed through the Kimberley Land Council. Tjurabalan people hold recognised native title rights to the area. The stated aims of the IPA include managing tourists and country through education and the sharing of culture, working with community pastoral groups to manage cattle and horses, and training Aboriginal rangers to manage country using traditional and scientific knowledge. The management plan for looking after country includes fire management and reduction, feral animal control, maintaining biodiversity, restoring/maintaining cultural knowledge, and tourism.

Discussions were held with small groups of people and three semi-structured interviews were conducted with a key informant from each group. Two of these groups were female, and the third was both male and female. In addition, another interview was undertaken with the Aboriginal pastoral manager at Mulan, a man in his 30s, and an informal discussion was held with the resident non-Aboriginal land management co-coordinator, Wade Freeman.

People’s past association with camels

People interviewed did not have a strong historical association with camels, although the uncle of one person had ridden camels in the Alice Springs Camel Cup and other Walmajarri people have long had contact with camels in the Great Sandy Desert along the Canning Stock Route (see Richards 2002). For example, in a book of Walmajarri stories about coming out of the Desert, one man, Pompey Siddon described how his father had encountered a thirsty camel, given it water and then, when it was

asleep, killed it and cut it up for meat (Richards 2002, pp. 56–59). Another man, Limerick Malyapuka, described seeing camels for the first time when Afghans rode with them into the desert and used him as a guide to find water.

Awareness of feral camel presence

Apart from a camel that has lived with a pack of wild horses on the shores of Lake Gregory for a number of years, there are said to be few camels in the Mulan area. As a result they are not perceived to be a problem. Feral horses, which bred up from the Arab stock introduced by the Pallottine Mission at Balgo during the first half of the twentieth century, are the main land management issue for the community. Camel numbers are not thought to be increasing dramatically, although during dry weather camels can be seen heading from the desert to the north looking for water. They are also sometimes seen in the bush to the south and west and alongside roads. One person said that he saw 6–10 camels once a month while hunting. As Balgo people had also commented, camel densities were said to be far higher to the south of Mulan in the Canning Stock Route area and at Yaka Yaka.

When asked what they thought/felt about camels, people responded with diffidence. Some said that although camels were used for transport in earlier days they are now more like a pest. While people were wary of bull camels in season, they found that feral camels avoided people.

Awareness of the impacts of camels

The pastoral manager, a local Aboriginal man, said that camels knock down fences, which could be a problem for their cattle operations if the numbers were to increase. At the moment, however, they were not seen to be causing any negative impacts on the environment, other animals or the community: ‘They are just wandering around, finding a place to sit.’

Camel management

No one is currently undertaking camel reduction activities at Mulan, nor have people been involved in selling camels, although they sold horses to a sheik in Dubai who apparently wanted to improve his Arab horse bloodstock. Most people did not agree with shooting camels for waste. The pastoral manager explained: ‘We don’t like to shoot camels because they are harmless animals and we are stockmen. A bloke from Kununurra wanted to shoot wild horses here but we didn’t want it – we sold some overseas.’ However, one person said that camel numbers should be controlled to prevent them from becoming a problem: ‘We have our own problem with horses ... if camels come it will make it worse. Shoot the bulls, just leave one or two.’ People have not tried camel meat yet at Mulan and do not see camels as a potential food source for the community. If camel numbers increased, people said that they would be interested in the possibility of using camels for tourism at Lake Gregory and mustering and selling them. People did not know the going price for a camel, nor did they have yards to hold feral camels or facilities to load camels on trucks. At present, because Mulan is on the edge of the feral camel range, there is little need for assistance to control feral camels and their impacts in the area.

Information about feral animal problems in general was available from the IPA and land management coordinator. However, the major focus is on horses, which are perceived to be a problem for the community.

1.2 The South Australian communities

1.2.1 Amata

Background

Amata is located approximately 40 kilometres south of the NT/SA border at the base of the Musgrave Ranges in the APY Lands. It is approximately 500 kilometres south-west of Alice Springs. The main language spoken in the community is Pitjantjatjara. The population is approximately 290 people (ABS 2006 Census), although it can vary dramatically.

People's past association with camels

A number of people at Amata had either ridden camels across country as children or had heard stories of their parents or grandparents travelling around on camels before they had access to motor cars. In the past it was not uncommon for Aboriginal people from this region to own camels, some having bought them from Afghans. For example, one man said that: 'I had a camel when I was a boy, and a saddle. I rode it to Finke and that area, Erldunda, and Ernabella. At Erldunda they had a cart with two camels (one spare) and put swags in it and pulled cattle out of bogs. No motor cars'. Another man recalled that his 'old father-in-law, he was camel man. He used to be a station boy and make runs with camels – worked with Afghans'.

Awareness of feral camel presence

People were aware of camels both in the wider region and near Amata at different times. They commented that in dry conditions camels came from the west to feed around the community and access water. Camel movement near communities was noticed generally around September and in summer. For example, one man observed that 'sometimes they come in when the wind is blowing, they follow the wind. At night they travel and smell water – when pressure coming'. During droughts the camels are 'just going over the fences' and people have to chase the camels away from their houses. Camels are said to move away from communities following rain. The interviewees perceived camels to be increasing in the region.

Sightings of camels varied from every day to weekly and monthly, depending on the season and people's patterns of travel. For example, if a person stayed in Amata they might not see a feral camel for a long time, especially after rain had fallen. The numbers observed varied, depending upon where people travelled. For example, one person reported seeing 'about 300 going through Mulga Park coming from WA'. People saw different-sized groups along roads and tracks; they frequently numbered less than 10, sometimes 10–50, and occasionally 100–300. Camels were commonly seen at the following locations: 'everywhere on the road to Mulga Park'; Kanpi, Angatja, Napari, Wingellina, Pipalyatjarra, and Kalka; 'Alparra area (just south of the NT/SA border) head[ing] north to Ayers Rock'; and in 'cattle paddocks east of here'. They were said to come right in to Angatja and other homeland areas such as Cave Hill.

When asked what they thought/felt about camels, two people said that they didn't think about them much at all. However, interviewees who had worked with camels expressed respect and understanding toward them. More than one person shared the following sentiment: 'Some people don't like camels because they don't know them.' Another person observed that 'camels have a memory like a human being. If you get cheeky, he'll remember you and go for you'. Others were concerned about the risk posed by angry bull camels in the bush. One person observed that it was dangerous to release a pet camel in the bush: 'You got to watch a young camel that you break in; if it goes in the wild it will like to see Anangu and try to play with Anangu. In the wild he'll kill you. Don't let a camel go in the wild that you've broken in – send him to market. A lot of people are getting young camels and growing them up and then letting them go. That's dangerous. That happened to me – one kicked me in the back – I sent him to market.'

Awareness of the impacts of camels

Communities

When asked if they thought that feral camels caused a problem for the community, most people indicated that problems did happen during dry times when camels came into Amata in search of water. The types of problems described included: breaking fences, houses and taps; messing up water; drinking stock water; being 'all over the road'; breaking infrastructure and solar panels; and getting into tanks.

Environmental dimensions

When asked if feral camels cause any problems, most people said that problems occurred with larger numbers of camels rather than individuals. One person commented, for example: 'With more camels it will turn into a desert.' People listed the problems caused by camels as follows: messing up rockholes, illness caused by camels dying in rockholes, eating bush tucker such as quandongs, eating trees and grass, breaking infrastructure, difficulty of controlling large numbers, and fear of bull camels. Examples of responses are as follows:

- 'At Aparra [near the NT/SA border] we have spring water and also at Alparra. Camels are sitting all around, pushing on top of waterholes – and horses also – making a big mess. They eat bush tucker and trees, they just go over fences, walking through and damaging them. They rip up everything.'
- 'They're eating a lot of bush tucker; we have no quandongs left at Angatja – we used to have a lot but no more left.'
- 'They strip all the trees, die in rockholes. Any water near infrastructure, they'll try to break it. They are poor buggers, if they know there is water they will try to get it. They can be persistent.'
- 'Sometimes people are frightened of camels and if travelling won't seek out water. My uncle perished near Junjunjarra coming into Wingellina. He broke down and was too frightened of bull camels to get water.'
- 'If camels die in a rockhole, owners of the rockhole will get sick and they'll move away, out. Some people are getting scared to camp out.'

People were particularly concerned about pollution of water sources and surrounding landscape: 'Lots of camels are dying at waterholes at Angatja and at lake. We have spring water and they are coming there and dying'; 'There are a lot of bones and smelling carcasses at Angatja. We chase them away but they still come in and die. Camels will go to another country and come back.' An interviewee said that when tourists visit the area they take them on a detour to avoid the dead camels.

When asked whether people thought that feral camels cause a problem for other animals, the majority thought that they didn't; however, one person stated: 'Yes, when they eat grass and kangaroo got nothing to eat, then the kangaroos will go somewhere else.' Another interviewee reflected: 'Maybe. Kangaroos run off to the bush, they get frightened of camels when there is a lot. No emus and kangaroos where there are big mobs of camels.' When asked to consider in the abstract if camels caused a problem for country, some people reiterated previous comments about specific impacts on bush tucker and rockholes; others thought that, relatively speaking, the impacts were negligible.

Camel management

Everyone interviewed indicated that they wanted the government or other groups to help them manage camels as a way of providing meaningful employment for young people and income. Many people's focus was on managing the negative impacts of camels rather than on reducing the camel population per se. For example, one man was worried that the government solution to the camel problem would be to kill the camels rather than using the opportunity to assist Aboriginal people to develop enterprises.

Kinds of management activities suggested included mustering camels by horse and motorbike for live removal, selling camels for meat and other products, land management activities such as the fencing of areas to be protected (for example, the lake at Angatja), putting in bores to trap and water animals, shooting unhealthy camels for pet meat, and tourism. Despite a shared perception that camel numbers need to be controlled, all interviewees said that they did not like shooting for waste. They considered it to be cruel and said that it made them feel sorry for the animals. More than one person emphasised that camels were a resource not to be wasted. For example: ‘We want to have them trucked away and sent for people overseas who have no food, like Africans.’

Other examples of responses include the following:

- ‘Some people shot them at Watinuna because they broke yards. I don’t like just shooting camels [for waste].’
- ‘It’s not right. Afghans brought them and they did a lot of work. It’s wasting money.’
- ‘I really don’t like it at all. There is a proper way to do things. What do you do with humans? If you have a big mob, do it the proper way. Healthwise, the dead carcasses could affect the watertable. Why do they put people in coffins? I reported a bloke at Coffin Hill who started to shoot them. Not used to shooting camels [i.e. for nothing]; it’s wasteful. The country will dry up. They were there before fences were. Young ones are energetic. They should cull unhealthy ones for dog meat.’
- ‘Camels are making country dry – should make more bores and use them to trap camels.’

At the time of the research, no interviewees were involved in camel management activities. However, some had previous involvement, some of which was substantial. One man said that a few years earlier he had helped his father ‘muster camels at Harry Creek Homeland to be taken to abattoirs’. Another man had experience with camel tourism and the sale of camels for meat, which he briefly described:

My dad taught me about camels, he broke them in for riding. I broke them in and used them for tourists. We had a lot of camels 1988–99; we did this all this time. When my father passed away, we pulled out. We ran ‘Desert Tracks’. We took tourists on camel rides to Ayers Rock – my Dad did this. I broke in wild camels, and we sent wild camels to meat works in Alice Springs. Sometimes five, sometimes ten.

He said that his family had ‘had a business plan and a truck for camels’. He also had shot camels for local meat consumption. His sister recalled: ‘My father sold camels for maybe \$80 a head. He sold them to a camel man, a whitefella. He trucked them.’ She said that her husband and a European camel man had built camel yards at Angatja. The father of this woman is now deceased, however in the early 1990s he had run a cross-cultural tourist operation in which he and his family caught camels and used them to take tourists for rides and to learn about Anangu culture. The Bureau of Rural Resources assisted them with this venture by providing:

... technical and marketing advice on the management and commercial use of the camels. This analysis paints a gloomy short-term prospect for commercial use of camel meat, but points to opportunities for the use of camels in tourist ventures. The program has also provided what the Anangu call ‘kick-start’ grants to allow the operation to develop (McNee nd, p. 12).

Desert Tracks subsequently undertook two feasibility studies into camel tourist rides, but found that risk associated with the ventures was too great (Diana James 2008, Anthropologist, pers. comm. 22 August).

While only two of the people interviewed had been directly involved in selling camels (see earlier), everyone interviewed thought that it was a good idea to sell camels to make money, particularly ‘when the price was up’. One person thought that NPY Land Management was trying to get into selling camels but thought that not a lot was happening as yet. People’s responses to questions concerning how much a camel could sell for varied from people not having any idea to knowledge of market forces and to estimates of \$80–\$1000. For example, one person said: ‘Depends on the market. Price varies; all depends what size.’ Another said that quality was also important in determining price. One man said:

‘We need to talk about the price – we’ve got to find out the price for feed, mustering, trucks to cover the costs and get a profit. We need to work out how much we’d get. Someone will have to help with money side.’ Yet another person said: ‘\$200 for one, maybe \$9000 for a lot of camels. We want to sell them for as much as we can.’ There are no yards to hold wild camels that are mustered, nor facilities to load camels onto trucks at Amata.

People were interested in obtaining information that could assist them in land management. For example, one man said: ‘We want to learn more. Want to take Land Management people to show them the rockholes and the damage that camels are doing. Springs are still coming up but all [vegetation] dead around.’ While some people indicated that they could get information to assist with camel management from NPY Land Management, some others said that the only information they got about camels was from television and what they saw and heard from other Anangu.

1.2.2 Pukatja/Ernabella

Background

Pukatja, or Ernabella as it is also known, is located approximately 440 kilometres south-west of Alice Springs in the APY Lands. The main language spoken in the community is Pitjantjatjara. The population is approximately 332 people.

Six semi-structured interviews were conducted with middle-aged and older men and women. In addition, informal discussions were held with a group of younger men in their late teens and twenties.

People’s past association with camels

Until the mid 1970s many Aboriginal people (Anangu) in the Pitjantjatjara and Yankuntjatjarra region used camels as a means of transport. A number of people interviewed for this survey recalled missionaries introducing them to camels. ‘I used to ride camels with missionaries. It was between Amata and Watinuna that I saw camels for the first time and had a ride of missionary camels. [Later] I travelled from Pipalyatjarra in [the] west to Ernabella on camels with Nora Rupert’s father and Nora. Nora’s father owned the camels,’ said one woman. Anangu obtained camels from Europeans, who replaced them with motor vehicles. Two of the women interviewed had owned camels, and one recalled: ‘We used to go away during Christmas holidays. We’d travel from here to Pipalyatjarra.’ Camels were used to visit kin at ration depots, missions and cattle stations, and to attend ceremonies in distant places. One woman recalled travelling on camels on more than one occasion to visit family at Mulga Park. Another said: ‘My brother used to have a camel. Before, Fregon and Amata people travelled for business to Warburton on camels. Sometimes we’d travel to father’s country and come back.’ It is rare today that camels are used for transport, but it has happened.

Awareness of feral camel presence

The interviewees had never seen feral camels in the vicinity of Pukatja/Ernabella, which is surrounded by rocky hills: ‘I only saw one here when one man, an Anangu, came riding a camel from Jiwarru Homeland four years ago.’ However, they indicated that camels are ubiquitous in the homeland areas, where they ‘stay around the bores because of water’. Feral camels were regularly seen in the west and north-west of Pukatja/Ernabella toward Fregon, Mulga Park, Lyndsey Well, from Officer Creek to Amata, around Umuwa, Watinuna, Kunapiti, Blackhill, Kenmore Park, near Mimili, and at Docker River. The numbers are said to be increasing from the west. ‘There were thousands coming from west through to Umuwa, Amata. On Homelands near Umuwa and near Jaja; other side of big mountain Jiwarru. At Mutitjulu area – going from Watinuna we drove through Amata to Mutitjulu – saw a lot of different groups all the way,’ observed one person. Another said: ‘Toward Pipalyatjarra right through Three Way to Docker River. Most camels are near Amata; when they had rain, they disappeared a bit. Also outside Mt Olga and Ayers Rock – can see camels in large groups, sometimes up to five hundred.’

Different-sized groups of camels are regularly sighted; often they number less than 10, sometimes 10–50, and less frequently 100–500.

People responded to the question ‘What do you think about feral camels?’ on a number of different levels. One person admired the qualities of the animal: ‘Camels can go a long distance without water and without tiring. No worries. Are good for travelling. No trouble.’ Another commented that ‘kids get excited when they see them’. Others perceived feral camels as a significant threat to their environment. For example: ‘Don’t like them. Like to see our environment and land *ngurra wirru* [i.e. good country; country in a state of wellbeing]; good, healthy country. More bush tucker. At the moment there’s nothing – camels have eaten it.’

Awareness of the impacts of camels

Impacts on community

Although camels were not damaging infrastructure at Pukatja/Ernabella, they were having a negative impact on the homelands, breaking pipes, bores, and tanks and chewing taps. ‘When they come into the homelands they break water tanks. When there are 20 or more you can’t chase them,’ commented one person. Another added: ‘No one living in homelands because of lack of vehicles and camels are coming into homelands and doing a lot of damage.’ They were also said to be damaging fences, and were acknowledged to be a problem for pastoral areas.

Camels are perceived to be a safety risk in that they ‘wander around at night and sleep on roads, too dangerous. *Anangu* know this and drive carefully’. One person explained that camels sometimes used roads as a firebreak when patch burning was being undertaken, creating a safety hazard. Another person added: ‘Camels damage cars – big damage when you run into them and they fall onto [the car]; they can kill people too.’ A person at Docker River was said to have hit a camel only recently. Another person said that you couldn’t just leave children at home and go hunting as people once did, because camels might endanger the children. ‘When my parents were alive, they lived on their own country and went hunting. They’d leave the children behind when they did this. At that time they didn’t know about camels.’

Environmental dimensions

Feral camels were perceived to have a significant impact on the natural and cultural environment in the wider *Anangu* region. They were said to be ‘a big problem – not a small problem’. ‘They are ruining the country’ was a commonly expressed sentiment. Camels were said to eat bush tucker, denude the country of vegetation, create erosion and dust, and pollute rockholes and other areas. One person pointed out that camels were not the only animals damaging the country and that feral donkeys and cattle, which wander around the homeland area, also ate bush tucker.

The following are some examples provided by interviewees of camel impacts:

- ‘The rockholes at Aparra, the other side of Amata, heaps of camels rushed to the rockholes, pushed each other over and died. Rockhole is bad now.’
- ‘Camels are making the country dry, eating all the bush food, and trees, and drinking water.’
- ‘Camels are destroying bush tucker too. We had a lot of quandongs (*wayanu*) around this side of Kunamarta, but not many anymore.’
- ‘Yes, camels are damaging the land, eating bush tucker and trees. They’ve eaten all the quandong trees and they are not growing anymore. Drinking all the water and messing up rockholes.’
- ‘The camels are eating all the trees and making the country dry. Stomping on all the grass – not just camels but bullock also; making dust [lets dust run through hand to demonstrate] and making it dry – no grass.’ [The interpreter adds that she is seeing willy-willies everywhere now because of all the dust and lack of vegetation cover. She says that she’d like to see native vegetation regenerated.]
- ‘Bad for the land. Causing problems for *Anangu* and the land.’

When asked to consider camel impacts on country in the abstract, interviewees reiterated comments concerning waterholes and vegetation. For example: 'I am worried for our country, bush tucker, and trees.' To take another example: 'Making water rotten; sometimes they fall in and die in waterholes – no good for country.' The same person reflected that exotic plants introduced by camels were now a problem for country: 'Some people say buffel grass was brought in by camel saddles, and ruby dock. That's a problem for country; spreads all over. Came with missionaries when they travelled through to Warburton. Ruby docks and other introduced grasses kills native flowers.'

People's perceptions of camels' impacts on other animals varied. Some thought that camels did not pose a significant problem: 'Camels live together and don't cause a problem for other animals. Maybe they frighten kangaroos. They drink rockhole water. Kangaroos don't drink from rockholes but after rain and from grass. Parakeelya, that's the one they drink and eat at the same time. Maybe, if you see a lot of camels around then you don't see kangaroos nearby.' However, others perceived camels to have a negative impact on other animals when there were high densities of camels because they drank water on which native animals depend: 'They frighten them away. The animals have gone somewhere. Kangaroos only drink rockhole at night time but camels are drinking the rockholes dry and damaging them. They are our hunting animals and they've gone because of no water. And emus too – they are frightening them away, drinking their water. Emus go in the afternoon to rockholes to drink water – but not anymore because there is no water.' One person was concerned about camels destroying the shade under which native animals rested.

Camel management

Most interviewees wanted camel numbers reduced as the following quotes indicate:

'We want to see camels mustered and sell to other country and take them away from Anangu land. They're growing up [increasing] and damaging the country'; 'They should sell camels and send back to their own country, because they are not from our country; they got no *Jukurrpa*. *Jukurrpa wiya* [no Dreamings, Dreaming stories or associations]. They belong to other countries.' One man stressed that the issue of camel management was a community matter: 'If the community wants to get together and look at it [reducing camel numbers], they should. It's important to see bush tucker and have good water – it's a community decision.'

All the interviewees were opposed to the culling of camels, on the grounds that they did not like waste. For example: 'Don't like Anangu shooting camels and leaving in bush. Not good,' said one senior community spokesperson. One person discussed the association of camels with Christianity and the related belief that killing camels for waste would bring environmental repercussions:

Bible stories. Some people say that when people kill camels and donkeys their country won't produce any grass, because they'll have no rain. They think about Jesus time when Three Wise Men went on camels and brought presents for Jesus, and Jesus rode on donkeys. They say can't kill camels or donkeys because it will bring dry times, [it's] like bad luck. One man at Victory Downs killed donkeys and it became dry, a drought. Killing for meat is OK, when you are going to eat it.

No camel management activities are undertaken at Pukatja/Ernabella. However, people said that the Anangu Pitjantjatjara Yankunytjatjara Land Management Unit [APY Land Management Unit] is involved in camel management: '[They] ask[s] who owns the land and what they want to be done. Traditional owners should get something out of it.' Another person said that 'near Umuwa APY Land Management have fencing and keep camels in paddock'. Another said: 'Land Management mob at Umuwa have been mustering and shooting. Killing and leaving them there. Troy's been organising helicopters going around Fregon and Officer Creek. Some [camels] on roads, and some in bush. He's got one or two young fellas helping. Some Anangu not happy ... [They don't understand] what camel can do to country.' Most people were not aware of camel prices, commenting that 'it depends on the market'. There are no camel yards or facilities for loading camels at Pukatja/Ernabella.

Interviewees were interested in camel management activities that could provide work for young people and income for the community. They want the government to help with mustering and related sales, obtaining camel products such as human and pet meat and wool for craft activities, land management (e.g. fencing protected areas), and tourism. One person wanted to take tourists for rides through the sandhills on her father's country to the north. She wanted to start the business in association with 'Desert Tracks', the award winning Anangu tourist operation. Another man said that he would like to see the following happening: 'Put in fences to protect things. Send camels to market for money. Let's start doing it in homelands so they can start cleaning things up and getting money for second-hand cars.' Showing me her beanie, which she had knitted using camel hair, one woman said: 'We like camel wool – could use it in the Art Centre for making things. Someone sent some once. We liked it and made hats.' Pukatja/Ernabella operates a successful arts and crafts centre, Ernabella Arts Inc., which employs many women and some men in pursuits such as spinning, weaving and knitting, painting and glass production. Their products are sold through Maruku at Uluru–Kata Tjuta National Park and other selected outlets throughout Australia.

People received information on camel issues and management from the APY Land Management Unit at Umuwa. One woman said that she sometimes heard programs on the radio about camels and recently saw a documentary on AUSTAR about a camel muster further north. She added: 'White people were doing it but, really, Anangu should do this business.'

1.2.3 Mimili

Background

Mimili is located within Yankunytjatjara traditional country. The main Aboriginal languages spoken in the community are Yankunytjatjara and Pitjantjatjara. Mimili was once a pastoral lease known as Everard Park, and is now Aboriginal land. According to the municipal services officer (MSO), the community normally has a population of between 250 and 300 people; however, at the time of the survey it was school holidays and many people were absent. Five semi-structured interviews were conducted at Mimili as well as discussions with groups of men and women. In addition to information concerning the Mimili area, some interviewees told me of their previous involvement in camel management at Fregon and their aspirations regarding the matter in general. I also spoke to Thalie Partridge, Threatened Species Officer for the APY Land Management Unit. She shared information with me about the impact of camels, people's concerns about them, and management practices undertaken in the Watarru Indigenous Protected Area (IPA), which is situated to the east of the WA border and due west of Mimili and Fregon.

People's past association with camels

As occurred elsewhere in the Yankunytjatjara–Pitjantjatjara region, camels were widely used as a form of transport until the 1970s, when people began to use motor cars. Hamilton notes that this period was 'a bridge between the use of camels, which had been enthusiastically taken up by many Pitjantjatjara people in the region in the 1940s and 50s, and the adoption of motor vehicles' (1987, p. 51). One man in his late 40s said that he'd 'travelled around to Ernabella and Angus Downs, to Tempe, through Areyonga and back. Then from Areyonga to Mimili. Maybe 400 k. Went straight through Angus [Downs] to Tempe and Areyonga. We'd stop at rockholes, camp every afternoon, then travel in the morning again. Mum owned three camels and I used to ride a little one'. Another man said that his father had five camels, which he used to carry swags and water: 'We travelled from Wallatina to Mimili, and Coober Pedy to Granite Downs.'

There are two pet camels at Mimili. At the time of the survey a number of people perceived them to be a growing nuisance. The larger white camel (called Alice) had become disruptive: chasing and attacking strangers and causing dogs to bark at night when she wandered around while people slept. One man

observed that '[pet] camels are like dogs – the big one knows the locals – gets cheeky with strangers, with people from Umuwa'. The owner of the camel, a man in his 60s, had agreed to have the camel removed by APY Land Management in the near future.

Awareness of feral camel presence

People at Mimili said that there were 'too many' camels 'all over the place across the Lands'. People reported seeing them 'every time we go hunting or walkabout – camels everywhere'. Different sized groups of camels were seen, often numbering less than 10, sometimes 20–40, and, on occasion, 80–100: 'Big mobs hanging about the bush.' They were said to come to the graveyard area but no closer because they were frightened of people's dogs. Camels were perceived to be increasing in number. Apart from Mimili, other areas where people frequently saw camels include: Fregon, Mimili to Indulkana road, Mintabie, Wallatinna, Kulitjarra, Teeta Bore west of Sandy Bore, and in the Walalkara and Watarru IPA areas.

Awareness of the impacts of camels

Impacts on community

As indicated earlier, camels are not perceived to be a problem in Mimili. However, people spoke of camel damage to houses and infrastructure such as windmills and fences in the homelands: 'Couple of homelands already damaged. When summer comes there will be more. At Umpukulu and Angatja taps and pipes have been damaged; they nearly pulled the water taps off. They are damaging fences and country ... camels don't know fences; they can [get] through any way,' said one man. 'Big mob of camels Yami's [Lester] way [Wallatinna], breaking fences. Working boys tried to shoot – but they keep coming in,' said another.

People at Mimili were concerned about increasing camel risks to road safety. For example, one man said: 'Sometimes when we come back from Mintabie, late, at night time, we might get an accident. Camels are on the road. There was one accident on the Fregon road – one girl got crippled.'

Environmental dimensions

Men and women of all ages at Mimili expressed concerned about camels damaging sacred sites, rockholes, and country and about the potential for them to cause more problems as they increased in number. 'They can go in sacred water lakes and sites; people are worried about that. I've got photos of dead camels [around them],' said one senior man. A younger woman added: 'They are breaking down fences and damaging rockholes. We can't walk around [i.e. freely]. One big rockhole west of Teeta Bore, we saw two dead camels inside and one donkey. We couldn't get them out yet as it was too smelly.' Camels were also said to be damaging vegetation such as trees, native tobacco and quandong (*mangata* in Pitjantjatjara, *Santalum acuminatum*) and 'causing problems for our country. Breaking and pulling branches down – it's not how it used to be. Eating *mingkulpa* [bush tobacco, *Nicotiana* spp.]. Sometimes damaging sacred sites, falling in rockholes.' The men and women were interested in the solutions depicted in *The Camel Book*, although some men were concerned that the fencing of rockholes would prevent native animals from drinking. For this reason they were interested in the Patjarr Spider, which is made out of a Toyota wheel rim attached to spokes, and is used to straddle rockholes to prevent camels from falling in the water and dying. The Spider is a Ngaanyatjarra Land Management invention and the name Patjarr derives from the place where they were designed (Tangentyere Landcare 2006, p. 13).

In relation to the issue of the impacts of camels on other animals, some interviewees at Mimili perceived that they were negligible because camels lived by themselves. However, others considered that camels frightened away kangaroos and ate their food, and that this was also a problem for people:

‘They frighten *marlu* away – they stink, you can smell them for two or three miles’; ‘We have to go a long way to find *kuka* [meat] because camels hunting them away. Making the country dry. No grass – our tucker can’t grow.’

Thalie Partridge (2008, Threatened Species Officer, Anangu Pitjantjatjara Yankunytjatjara Land Management pers. comm. 30 April) said that Anangu have expressed concern about the impact of camels in the Watarru IPA area, in particular the destruction of the burrows of the endangered great desert skink (*Egernia kintorei*), known in Pitjantjatjara as Tjakura.

Camel management

Limited camel management activities have been undertaken at Mimili. One interviewee said that she worked as a ranger and in that capacity undertook land management activities such as fencing protected areas. Some individuals have killed camels for local consumption and also caught and sold them to overseas markets. Most people believed that camel numbers need to be controlled, with one person strongly urging: ‘Get rid of them. Should finish them. We only want to see our *kuka* [meat], *marlu* [kangaroo], emu and turkey. That’s our food – not camels’. Another commented: ‘There are too many. We are worrying about it. We want to get rid of all the camels, clean them up.’

However, while people at Mimili were concerned about camels, most were opposed to the culling of camels, perceiving it to be wasteful and cruel. For example, one man, who had mustered and sold camels previously, said: ‘They can’t do that, *wiya* [no], because too many. Too much of a mess just to kill. Not to waste, only for meat.’ Another man said that he liked animals, and that ‘if people are worried about them [camels], we can do something – mustering. But a big job’. Two people shared the following sentiment: ‘you can’t shoot them – something might happen’. At the same time, one of them reflected that ‘mustering [for live removal] cost a lot of money’, and that although he did not like it, he understood that in order to manage camel impacts it might be necessary to ‘muster them up a long way from the bush and shoot them’. This person had observed Anangu killing camels at Wallatina to help prevent damage to station fences (see earlier comment). Another person explained the basis of his opposition to culling as follows: ‘My thinking – I don’t shoot animals just for nothing – cruel – only to eat. I shoot camels to eat, not to waste. It’s cruel. I believe in Jesus.’ The young female ranger was concerned that the dingo population might increase if camel carcasses were left around: ‘Dingoes breed up and that’s a problem.’ In general, the interviewees liked camel meat, although they preferred meat from native animals.

The camel management option favoured by people at Mimili was to have them ‘trucked and taken away’ for sale. People believed this was a viable option because it had occurred at Fregon and in other parts of the Lands in the early 1990s. Indeed one senior man, Sandy Dodd, said:

A lot of people at Mimili used to truck them and muster them. Me and Roger Kayapipi ... we mustered them at Fregon and got money. We trucked them overseas ... Roger does rides now from Ayers Rock to Fregon with camels. He’s a tjilpi [senior older man]. A couple of years back we worked for three or four years. Nobody helped us [i.e. muster] – it was only me and Roger. Paddy McHugh [from the Australian Camel Farm in NSW], a whitefella, helped Roger build camels yards at Fregon. We mustered them using Toyota, motorbike and put camels on a race and loaded them. Sometimes two trucks. We got probably \$7000–\$8000 for a whole truck – but price going down. This was about 1990 ... We want camel yards at Sandy Bore, we need motorbike and Toyota. It was really good, wirru [excellent] ... Me and Roger, we know. We did it rough way [i.e. without much help] but we made a lot of money trucking them. We’d train up young fellas, make jobs for people. We’d put rope around them and use Toyota to guide them – sometimes they jack up on the race.

In 1992 the Fregon camel venture was written up in an article for the *Australian Magazine*. It said that a camel farm had been established at Fregon. The community had sold 50 camels within Australia, 18 to the United States, and had made yearling sales in Sydney (Hancock 1992, p. 28). It quoted Roger Kayapipi explaining the rationale behind the camel farm as follows:

The community and camel farm work together to support each other ... There are social as well as economic benefits. It supplies work and occupations for some of our people and we know they won't get into trouble ... (Hancock 1992, p. 28).

Kayapipi stressed that community wanted the approach to camel management to be 'low-key' in the sense that local people should maintain control of the processes. As the author of the article pointed out in regard to camel catching techniques: 'Catching camels the Pitjantjatjara way is anything but low key; it combines traditional skills and modern technology' (Hancock 1992, p. 28). He described how the men use Toyotas and motorbikes to travel to areas where they know camels are located, and either herd them into mobile stockyards or back to Fregon 'where they are wormed, tagged, drafted, and eventually broken in' (Hancock 1992, p. 28). The interviewee, who had worked on this venture, stressed that he wanted to be involved with camel mustering activities again, just working with Anangu and being independent: 'I really want to truck them away and earn money to get rid of them.'

Not surprisingly, given people's familiarity with the Fregon camel venture, most interviewees at Mimili were aware that the price of camels depended on the market. There are no camel yards or facilities to load camels at Mimili; however, as indicated earlier, there are said to be some at Fregon. People wanted government assistance to manage camels with the proviso that Anangu got jobs from the process and made money. 'Who are we going to see to get motor cars, bikes, and trucks to muster camels?' asked one man. Another commented: 'Government should help, not send some white people but give jobs to Anangu, because Anangu knows the camels and should make money.' Suggested activities focused on managing camel impacts such as fencing waterholes and yards, cleaning out waterholes, and mustering camels for live removal. The Threatened Species Officer for APY Land Management Unit informed me that the control of camels near the Watarru IPA is a high priority in the APY Lands.

1.2.4 Walalkara

Background

Walalkara IPA covers an area of 700 000 hectares extending west from Officer Creek to the south-west of Mimili in the Great Victorian Desert. The area is the traditional country of the Robin family. I spoke by phone to Jeannie Robin, Project Manager for Kuka Kanyini Walalkara, who was in Adelaide. As well, on my behalf, anthropologist Diana James spoke to other members of the Robin family at Fregon and forwarded me notes on the interview.³⁰ Subsequently, in November 2008, I had further discussions with the Robin family in Alice Springs. In the following, I briefly provide some information on the Kuka Kanyini Project associated with the Walalkara IPA.

Kuka Kanyini is an Australian Government project which enables the traditional owners of the Walalkara IPA to use their traditional law, knowledge, and skills, together with those of western science, to care for their country. The Robins are assisted by the Alinytjara Wilurara Natural Resource Management Board in this endeavor (ATNS website). Jeannie Robin explained the aim of the work:

We are trying to care for the plants and animals that have always been here – our kangaroos, euros, itjaritjari [marsupial mole, Notoryctes typhlops], nganamara [mallee-fowl, Leipoa ocellata], and desert skink.

The mallee-fowl and great desert skink (*Egernia kintorei*) are rare and endangered species. As well as these species, the Walalkara IPA has an especially high diversity of reptile species. As part of their work the Robins fire country, monitor plants, animals and their nests, and maintain rockholes. Feral animal control is a major management issue (ATNS website).

Awareness of feral camel presence

According to the Robins there are sometimes more camels in the Walalkara area than at other times, depending on available water, and there are more camels west of Walalkara than on the IPA itself.

³⁰ A video was also made of the discussion.

Awareness of the impacts of camels

The Robins perceived that, when in large numbers, wild camels cause many problems on their country. Examples were provided as follows:

- ‘They fall into waterholes and die there; eat out vegetation that other animals rely on; eat bush tucker.’
- ‘Camels eat *ngatunpa* (*Acacia victoriae*); *mingkulpa* (wild tobacco, *Nicotiana* spp.)’
- ‘Cause damage by stamping ground around soaks.’
- ‘Camels foul and reduce the water available to other animals.’
- ‘Many wild camels are bad for country they tramp it, destroy water, other animals leave to find water elsewhere.’

One person told the story of a clever camel that had lifted the wire covering from a rockhole, which they had cleaned and secured. The camel subsequently slipped in and died but as it was so large the rockhole could not be cleaned out until the camel became bones. Jeannie Robin, Project Manager for Kukakanyini Walalkara, spoke at length about her deeply felt worries about the impact of camels not only on country, but also on the knowledge and use of country by future generations as follows:

*We have a big problem with camels. We are worried about [impacts on] mallee-fowls. Camels eat bush tucker like quandong and they stomp on mingkulpa (*Nicotiana* spp.) and bush medicine like irmangka irmangka (native fuschia *Eremophila alternifolia*³¹). We want to have more food on country. We want the rockholes to be clean for [native] animals and people to drink. If nothing is done when old go [i.e. pass away] their children will grow up and they won't know bush tucker, one day, in 20 years [time] there will be camels everywhere. There will be no trees, no bush tucker. One day, there will tjilpi tjurta ngurrpa [i.e. all the old people will be ignorant, no longer knowledgeable about country]. We want our country to grow healthy. There is rubbish dirt everywhere, sand, kumpu [urine] and kuna [excrement]. One day that rockhole will be gone, just camel tracks everywhere ... I worry that there are many camels at Walalkara.*

As indicated earlier, the Robins perceive that camels cause problems for other animals by eating and stomping on vegetation and fouling and reducing the water that other animals rely upon, thus causing them to move elsewhere and the land to become less productive.

Camel management

The Robin family strongly believes that camel numbers need to be controlled. They feel that, because camels cause so many negative impacts in the Walalkara IPA, it is a matter of high priority to manage camel impacts by any means possible. A spokesperson for the Robins at Fregon described their preferred option: ‘We are keen to start our own business shooting camels and butchering them for dog meat. We'll sell it to Alice Springs’. The family thought that this was the best plan, a good business that they could manage themselves. However, Jeannie Robin stated:

We need government to help us get rid of camels. We need help with motorcars and helicopters. Robin [father] is happy to shoot them. We want to have country with more food. We want the rockholes to be clean for animals and people to drink. [In order to do this] ... first get rid of all camels – truck them away or kill them. We need help from the government to help country be strong. If they don't help all the sand and kuna [excrement] will fill the rockholes. Then we won't be able to find the rockholes.

Although there was an apparent difference in perspective between Jeannie Robin and her family concerning the preferred plan for camel management, what is important is that the Robins perceive that immediate action is needed to reduce feral camel numbers. Subsequent discussions with the Robin family in Alice Springs resolved that their priority now is to reduce camel numbers on their land. They are interested in receiving assistance with aerial culling.

³¹ Commonly the leaves are crushed and mixed with fat then used as a rubbing medicine like Vicks. There are also other methods of preparation.

1.2.5 Iwantja/Indulkana

Background

Indulkana, also known as Iwantja, is located a few kilometres west of the Stuart Highway and 59 kilometres east of Mimili. The MSO estimated the resident population to be 320; however, at the time of my visit there were few people in Indulkana due to people's attendance at a funeral at Mimili. I had an informal discussion with three young men in their 20s and with the MSO, and, while at Mimili, I had spoken with an Indulkana man, aged about 60, who had arrived there while I was interviewing people. People said feral camels did not pose a problem for Indulkana directly, and that it would be more useful to speak to people at Mimili.

Both the young Anangu men and the MSO said that there were no camels at Indulkana, which they indicated was because camels don't like the rocky topography on which Indulkana is situated. The MSO, who had been at Indulkana for six weeks, said: 'I've been right through all the hills with emergency services guys and never seen a camel yet. Trough out here 2 ks to the east, no camels there; a rockhole to north-west ½ k, never seen a camel there ... there's a bore 3 k away on top of the range, can see for miles [but] no camels. No camels here.'

The young men were reluctant to speak about their views on camel management and at first said that they were not interested in camel management work. After I had discussed *The Camel Book* with them, however, they became more interested in the issues and said that they would consider killing and butchering camels for consumption as shown in the photos of Docker River. They said this was the first time they had spoken to someone about camel issues. They did not agree with the culling of camels for waste. The Indulkana man with whom I had spoken at Mimili echoed this sentiment. He said that he used to ride camels as a 'young fella', and that it was 'mean' to kill camels for nothing. He said that he was worried if camels were killed for nothing the country would become dry. At the same time, he was worried that there were too many camels and that they were 'eating all the trees' and damaging rockholes. He said one solution was to 'send them back to the Afghans'. He also expressed interest in the land management activities depicted in *The Camel Book*, in particular protecting rockholes using a Patjarr Spider (see earlier discussion).

The MSO suggested that one way to help create a market for camel meat, which he had heard was healthy meat, was for Aboriginal stores to bulk buy it and sell it in communities. There are no camel yards or facilities to load camels at Indulkana.

1.3 The Northern Territory communities

1.3.1 Mutitjulu

Background

Mutitjulu is situated within Uluru–Kata Tjuta National Park (UKTNP). Aboriginal freehold title was granted to the traditional owners in 1985, and subsequently leased back to National Parks and Wildlife. Conditions of the lease include the recognition of Aboriginal interests. The Aboriginal people have joint management of the Park. The Aboriginal population of Mutitjulu in 2006 was 217 (ABS 2006 Census). The main Aboriginal languages spoken at Mutitjulu are Yankunytjatjara and Pitjantjatjara.

Miriana Jambrecina, Natural and Cultural Resources (NCR) Manager, UKTNP, conducted one semi-structured interview with a group comprising 17 senior, middle-aged, and young men and women at Mutitjulu.

People's past association with camels

Camels were used by older people in the area as a mode of transport until the 1970s. Camels enabled them to increase their mobility. They visited both Aboriginal sites and European settlements such as Areyonga, Ernabella, and Docker River, while procuring dingo scalps, which they exchanged for food. Strings of camels were owned by senior men, who periodically broke in feral camels to add to their number (see Areyonga discussion below). When Bill Harney was a ranger at the Rock from 1957 to 1962, he frequently encountered traditional owners of the area travelling with camels. Reflecting on Aboriginal use of camels, Harney wrote:

Naked hunters for ages they had now adapted themselves to camel transport after the Afghans and Arab camel-men had been pushed off the roads by motor transport. I asked one of the men where he got the camels from. "Some we buy from another one blackfellow ... pay with puppy-dog scalp ... some we catch in bush where mob run wild." (Harney 1988, pp. 135–6).

It is perhaps easy to understand the affection many adults hold for camels today after reading his description of children playing with camels:

... some of the children were scrambling over the huge camels' backs ... the kiddies were sliding down the beast's neck in a similar fashion to school children on a slippery-slide. The great beast seemed to enjoy the fun ... it would give out a series of gurgles and when this happened the kiddies would snuggle up close to the creature to rub it between the ears.' (1988, p. 136).

As remarked by the anthropologist Layton, Aboriginal people developed considerable camel skills:

Gould and Fowler (1972) refer to feral camels being hunted for meat and criticize this as nothing more than an extension of traditional foraging methods. Remarkably, they neglect to record the success of the Pitjantjatjara in mastering the alien techniques of camel husbandry. Not only did they use these animals for their own purposes, but White travellers, such as the anthropologist C.P. Mountford (1950) and the writer A. Groom (1950), were also taken through the area by Aboriginal men with their own camel teams ... During the months of 1962 that F.G.G. Rose worked at Angas Downs, he saw Aboriginal people use camels to travel to Areyonga, Ayers Rock, the Petermann Ranges and Erldunda Station (Rose 1965, p22 and 28–9). W.E. Edwards told me that it was not until the major floods of 1974 that camels were finally replaced by motor transport ... (Layton 1986, p. 80).

Awareness of feral camel presence

The group confirmed the presence of feral camels in the Mutitjulu region. (No further observations were recorded about numbers, frequency of encounters, or location of camels.)

Awareness of the impacts of camels

Feral camels were said to cause the following problems: camels dying in waterholes and making them putrid so that children can't swim in them, damaging trees, and drinking water with the result that birds died due to lack of water.

Camel management

It is clear from people's comments (see below) that, in general, they do not like shooting to waste. However, some people indicated that they would be prepared to consider the culling of feral camels, but only if the camels were shot 'a long way from people and communities' and if the carcasses were buried or removed.

People indicated that they would like the government to assist them with camel management and wanted to be paid for carrying out such activities. They thought that selling camels was a good camel management strategy; however, they emphasised that local people must be involved in the activity and receive payment for work and related income. At the same time it was stressed that camel management

should be undertaken regardless of whether or not it was economically feasible because it would provide social and other benefits: ‘Even if there are no profits in the camel meat market, it can still pay something towards wages for young people to be involved. Don’t just think in terms of making a profit.’ People had little knowledge of the market price for camels, one person commenting that they thought a camel might fetch \$900. Other suggestions for camel management activities included providing water-points to attract camels away from culturally significant places, castrating camels, killing camels for meat and fat for use with bush medicine, and using camels for tourism. For example:

- ‘Shoot the old injured camels and move the rest out.’
- ‘Muster and castrate male camels.’
- ‘Build a fence with a dam, camels come to drink and can’t get back out, good way to muster.’
- ‘Make a dam to tempt camels away from waterholes and stop them dying in the summer.’
- ‘Put a fence between SA and NT and then control camels in NT.’
- ‘Create a market for meat.’
- ‘Supply meat to community – people and dogs.’
- ‘[Use for] tourism.’
- [Use] fat ... for rubbing medicine.’

There are no yards and no facilities to load camels at Mutitjulu. During the survey no information was recorded about how people obtained information about camel management. However, it should be noted that the Central Land Council (CLC) provides land management support to Mutitjulu, and people also obtain information through joint-management activities.

1.3.2 Titjikala

Background

Titjikala, also known as Tapatjatjaka, is located approximately 130 kilometres south of Alice Springs on NT freehold land which was a former excision within Maryvale Station. Maryvale is a non-Aboriginal-owned pastoral lease. The population of Titjikala is approximately 262 (Grants Commission current figure, June 2006). Although the traditional owners of the land are Arrernte, the residents also comprise people who identify as, and speak, Pitjantjatjara and Luritja.

A number of the latter have had a long association with Titjikala, many having grown up there and/or having a parent affiliated with a place in the surrounding region and/or buried at Titjikala. The Lutheran Church has long been connected with the community. The community runs a tourist enterprise called ‘Gunya’, although it had stopped functioning during my visit in 2007 due to the Howard Government Intervention and the cessation of CDEP.

Twelve semi-structured interviews were undertaken with men and women ranging from senior members of the community, to middle-aged people, and younger people in their 20s. In addition discussions were held during a camel sausage barbecue at the community that involved approximately 30 local people.

People’s past association with camels

Many people at Titjikala have an historical association with camels either through their parents or grandparents travelling with and/or owning camels, or having ridden them themselves. Four of the people interviewed had ridden camels on more than one occasion, and the close relatives of five people interviewed had travelled around the country using camels for transport before they had access to motor cars. One person commented: ‘Dad had five camels; before motor cars we used camels. We used to travel around on them for dingo scalps.’ Another recalled travelling from Maryvale Station to Jay Creek to the ration depot. Some had used camels to collect dingo scalps. One person’s father had owned

two camels, another, five. Walkabout Bore informants remembered the grandfather of one community councillor, a Pitjantjatjara man, having purchased camels from Horseshoe Bend when they were living there as children. Another recalled that:

Grandfather used to have quiet camels; I used to jump on them as a kid. I'd sit alongside my grandfather and ride. Old Mick Doolan – he had three camels and would travel from place to place with them. He got them from Horseshoe Bend – used to be a lot of people there. We used to travel from Maryvale to Finke on camels – ration days; sometimes travel around here looking for mingkulpa [bush tobacco Nicotiana spp.].

A senior female traditional owner recalled her involvement with camels as follows:

My grandfather caught camels in the bush, and horses too. I rode camels and I worked at Deep Well Station and rode horses, mustering cattle – a long time ago. Men's work to catch camel; but women rode them too. We was walking around with camel a long time ago: hunting and for pituri [bush tobacco].

There have been two pet camels at Titjikala, one as recently as 2006.

Awareness of feral camel presence

Everyone interviewed reported seeing camels in the wider region and thought that the numbers were increasing each year. Numbers seen ranged from five to 20. Three people reported seeing groups of up to 50. When people went hunting or travelled away from Titjikala they would see camels: sometimes fortnightly, sometimes monthly, sometimes more or less frequently.

Sometimes camels were sighted during dry spells on the sandhills to the east and south-east of Titjikala, five to ten kilometres away, and near the aerodrome. If they came closer to Titjikala for water at night people's dogs chased them away. The station fence also helped keep them out. Most commonly, camels were sighted further away from Titjikala in all directions, but especially near sandhills and bores. Women reported seeing camel tracks when they went hunting for goannas, and men reported seeing them when hunting for kangaroo in the mulga. Other locations and occurrences of sightings were described as follows:

- 'In winter when we gathered mulga wood for music sticks 50 k from Titjikala, especially at Francis Well to east.'
- 'At Alice Well and on Finke road, and in desert walking around the sandhills. Long way; when we go to Rodinga Siding way we usually see them.'
- 'Everywhere wild camels, towards Mt Burrell and Robinson, Chambers Pillar way, big mobs walking around, going past. At Alice Well there are a lot of donkeys.'
- 'At Phyllis Dam just to east – one white bloke has six camels in a paddock there ... four weeks ago we saw tracks of eight to 11 feral camels, with little ones walking along side.'
- 'Up to east of Titjikala mostly, Bluebush Dam and Nine Mile.'
- 'When I go kangaroo shooting to the west in the mulga – we see camels there. Three weeks ago saw them about 10 k away.'
- 'We see them when we go kangaroo shooting Santa Teresa way, [usually] about six to nine. Over at Finke there's heaps. Mt Dare, other side of New Crown Station, there are really wild ones, big and little ones, families. And some people who have homelands see them there.'
- 'They hang around Kanya near the orchard; they come in for water at night. We see them on the side of the road when we go to Finke. Thursday last we saw them near Titjikala Bore when we were going to Alice. Last year we saw a lot there too. The station owners made a dam for bullocks and water comes from the windmill and attracts camels. Also plenty of salty water there – camels come at night and go back early in the morning.'

When asked what they thought/felt about feral camels, eight out of the 12 people interviewed said they were frightened of bull camels in season. One observed that ‘camels usually follow the wind. [For example] they come up from the south in winter. Then the bull camel is on his own and will get wild and come after you, jealous of that lady camel’. One person said: ‘They’re a nice animal but cause a bit of humbug, breaking fences,’ and another felt sorry for them ‘because they took our families around the bush a long time ago, when there were no cars. They used the camel a lot’. One person said that there were too many camels. People also said that they were good to eat, particularly when there were no kangaroos around.

Awareness of the impacts of camels

Environmental dimensions

Most people thought camels caused problems and gave examples as follows: bulls chase people in season, they damage fences, ‘eat and smash trees’, and ‘eat bush tucker’. Half those interviewed thought that camels caused problems for country, reiterating earlier examples provided to illustrate damage to the environment. One person expressed concern about camels potentially damaging sacred sites, and another mentioned waterholes.

Most people thought that camels were not a problem for other animals, although some said they ate the food of native animals. One person was concerned about camels eating trees and thus reducing shade for native animals.

Socio-cultural and economic dimensions

Two-thirds of the people interviewed believed that camels did not directly impact Titjikala; however, people were very concerned about the danger posed by bull camels. Some said they were reluctant to go hunting far from the road when bull camels were in season in case they encountered one. People said they lit fires to quieten camels and keep them away. They also spoke about avoiding hunting in places where camels have recently been sighted, as the following examples illustrate:

- ‘I’m worried about bull camels – I run to the tree or car for safety [when hunting].’
- ‘When we go hunting we see camel tracks, we see them by the fence the other side of the highway. Someone will come back and say, “We saw plenty of tracks there – don’t go there”.’
- ‘We saw lots of camels when we went to Pipalyatjarra and Amata, between 50 and 100, from sandhill to sandhill. They’ve eaten all the shade. We have to make bush fires when we walk there. They go into homelands for water, standing together; people are frightened. I was frightened – you never know, they might come up to us, close.’

Camel management

The community had some involvement in camel management activities: three of those interviewed had killed camels for family and/or community consumption; one had mustered camels on Andado Station, and eight said they had been involved in trying to sell camels. The NT Government website, Bush Tel (<http://www.bushtel.nt.gov.au>), lists ‘camel mustering as a business enterprise’ as one of the services at Titjikala. It appears, however, that this did not get off the ground due to some differences in opinion with a neighbouring pastoralist. One person commented, for example: ‘We wanted to [reduce camels]. When we were on CDEP, people tried to get mustering organised to sell camels and make money for community, but we had problems from Maryvale Station manager.’

Most people thought camel numbers need to be controlled but that Aboriginal owners of the country need to be consulted about the matter. However, with the exception of two people who said it was all right to shoot camels if necessary – one of whom specified that it had to be done away from Titjikala and roads – people did not agree with camels being culled. The major reasons people gave for not wanting culling were that they thought it was cruel, because they felt sorry for the animals, and didn’t

like waste. One person associated camels with the Bible and the Three Wise Men and said that for this reason they shouldn't be killed. Two people expressed concern that if camels were killed and left to rot, dingoes would feed on them, with the result that the dingo population would increase. They said it was fine to shoot camels for meat and products. One person spoke about the benefits of eating camel meat: 'It's really nice to eat, healthy meat. If you are thin and you eat it, you'll get fat. When sick, it will make you healthy; good for diabetics and sick people.'

Of the 12 people formally interviewed, everyone thought it was good to sell camels and wanted the government to create jobs for them to help manage camels. The types of jobs and uses for camels suggested were as follows: mustering (10 out of 12), tourism (three), butchering and skinning animals for meat and hides (two), land management activities such as fencing of important areas (one). There are no camel yards or facilities to load camels at Titjikala.

People wanted more information on camel management options. They said that apart from this survey they had little access to information on camel impacts and management.

1.3.3 Mpwelarre/Walkabout Bore

Background

Mpwelarre, also known as Walkabout Bore, is an outstation of Titjikala. It is located on the old Hugh River Stock Route along the Deep Well/Orange Creek road, approximately 100 kilometres from Alice Springs. It is classified as a family outstation and in 2007 had a population of 18 (Grants Commission figure, 2007). The older residents, who are the traditional owners of the land, speak Arrernte, Luritja, and English. The camel survey included informal discussions during a camel sausage barbecue and semi-structured interviews. The latter involved a senior female aged 62 and two senior male traditional owners in their early fifties.

People's past association with camels

Residents of Walkabout Bore have a long and ongoing association with camels in a variety of capacities. Older members of the family 'grew up with camels'. Their father, Jack Kenny, who was a stockman and is now deceased, used camels to pull a wagon as the main means of family transport until the late 1950s, when he purchased a motor vehicle. Some of the men have been involved in mustering and breaking in camels, and the sale of camels both for overseas trade and the meat works. One member of the community currently runs tourist ventures using camels at the Alice Springs Camel Farm and has won the Camel Cup on more than one occasion. There are currently 50 camels being pastured in fenced camel paddocks on the outstation. Informants recalled travelling with camels as children from Horseshoe Bend on the Finke River, where they lived at the time, to visit Henbury and Erldunda Stations, and Haasts Bluff and Areyonga ration depots. They had not eaten camel meat when young, stating that they'd 'only learnt lately' to eat camel fillet and rib-bones, but they only killed a camel to eat if it was 'a wreck'.

Awareness of feral camel presence

Mpwelarre/Walkabout Bore is located within Orange Creek station, a non-Aboriginal-owned pastoral lease. Informants had sighted feral camels outside the homeland, which is completely fenced in within the pastoral area. They said that their sightings of camels varied from weekly to monthly to fortnightly, depending on the time of year and whether they (the informants) were travelling. Camels were said to be increasing in the wider region. Numbers seen were generally less than 10; however, groups numbering between 10 and 50 were also sighted on occasion.

Camels were seen near the outstation: 'In winter bull camels from Orange Creek and Maryvale hang around outside, interested in [our] female camels inside'; 'When bulls on heat they come up to our boundary looking for females [which are in the yard]. Yesterday saw a fresh lot of tracks to north.' Camels are also regularly seen near the Hugh River, as the following comment illustrates: 'My brother

saw fresh tracks there in the morning and late afternoon; couple of months ago my son saw 30 head there. Sometimes down the road on the station bore.’ Large numbers of camels were sometimes seen to the east and south of Maryvale, on Andado Station (observed when fencing there), and ‘out in desert near Horseshoe Bend’. On one occasion camels were observed on the sandhill area when people were en route from Walkabout Bore to Alice. These camels were alleged to have been released from the Bohning Trucking Yards (approximately 90 kilometres to the north) after the RSPCA complained to the owner about the conditions of their confinement.

As a result of their close working association with camels, the two male informants were not frightened of them; however, the female informant said that even though she had ‘a real feeling for camels’, she was scared of the bulls and observed that ‘even pet camels, bulls, can get nasty when they grow up’. Informants had a pragmatic attitude to camels; they acknowledged they were increasing and that they had to be managed.

Awareness of the impacts of camels

Environmental dimensions

When thinking about possible problems caused by camels, informants tended to view the problems as less serious than those caused by cattle and horses on the neighbouring stations. They believed that cattle and horses degraded the environment more than camels because they eat ‘everything’. For example, one informant said that ‘cattle and horses eat everything anyway, bush tucker – nothing to eat now – it’s real dry’, and that the neighbouring station was ‘moving cattle out because it’s overstocked’. One informant observed that ‘if you put them in paddocks, they’ll smash trees; they feed on trees more than grass. Out bush they are less destructive, because they mostly eat bigger trees’. The trees favoured by camels in the area were said to be mulga, acacia and whitewood. Camels were not thought to be a problem for other animals as they didn’t attack them and kept to themselves.

Socio-cultural dimensions

When asked if camels caused a problem for country, informants responded ‘not really’, reiterating comments made about the environment (see earlier). In relation to damaging water sources, one informant commented that ‘camels have flat feet. They might make mess if there is water lying around’. They felt that other animals such as horses were likely to do as much damage.

Camels were not perceived to cause problems for Walkabout Bore, although they were said to damage pastoral fences: ‘Bulls are the main ones; they break fences trying to get in. Smashing troughs and fences, especially now it’s dry and hot. Long as they smell water, they’ll go straight to it. Fence at Horseshoe Bend is a wreck.’

Camels have provided many positive benefits to this community, including social lifestyle, and economic dimensions (see below).

Camel management

Although they themselves had not undertaken any camel reduction activities in the previous two years, the men had mustered camels with their brother at Horseshoe Bend and Palmer Valley Station and had also been involved in selling camels. They worked for wages for the then (non-Aboriginal) owner of Horseshoe Bend, who sold the first lot of camels overseas: ‘The Arabs ... bought them to breed with their camels because they reckoned camels in Australia bigger and better.’ Later camels were sold to the meat works. One man said that he’d worked with camels since he was 16, when he left school, until four years ago when he broke some ribs after falling off a motorbike during a camel muster. The female informant’s son ‘catches them for Camel Farm in Alice Springs’.

The following were seen as potential uses for camels: tourism, hides, boots ('good leather') and meat. Camel meat was said to be 'pretty good meat – fat melts away when it cooks. Rib-bones are soft – you don't need an axe [i.e. to butcher rib-bones] like for cattle'.

All thought that selling camels was a good idea; the men stated that camels could fetch up to \$5000 for a few but that 'it depends on the market. Sometimes people want young ones, others want bulls, sometimes cows – for all different things', and that sometimes it was not viable to sell camels because it 'cost more to pay the freight'. There are camel yards at Walkabout Bore and they have loaded camels onto trucks there.

The informants said that camels needed to be managed. Although they felt compassion for camels and didn't like them to be killed, the men recognised that it was necessary sometimes: 'Culling – they'll have to do it, especially in the Simpson Desert. If they have to, it's all right. Shooting camels by helicopter and leaving them to die is cruel, but you got to do it because in sandhill country you can't chase them with a Toyota. They'll beat you in the spinifex. Around here we don't need to, as the neighbouring station gets a permit to cull them. Parks and Wildlife do it; and the stations also ask my nephew at the Camel Farm if he wants them.'

One informant said that he was keen to help the government manage camels, as he'd like a job, and he'd had a lot of experience, not only mustering, but also tracking camels and also in the aerial culling of horses:

I'd be happy to help culling elsewhere – tagging them and putting radio collars on [their] necks. Three Germans came out and we caught them camels, put radio collar around their necks and let them go. We tracked them from Horseshoe Bend to Allambi Station, just down from Santa Teresa. Camels will travel but come back to same area – if they get stirred up, they'll move. The bulls buck the young ones out to find their own cows and start their own herd. Foals will go to different mothers in a mob – one bull camel will look after cows and their foals.

Information about camels and camel management was obtained from the radio, television, videos and *The Camel Book*. One man commented that he'd heard an item about camels on the radio the previous day: 'I heard on the radio that Mal Brough is giving money for culling camels. We could have a job there.'

1.3.4 Nyirripi

Background

Nyirripi, also known as Waite Creek, is located approximately 150 kilometres west-south-west of Yuendumu and 440 kilometres west-north-west of Alice Springs. It is inalienable freehold land within the Warlpiri Land Trust area. The first language of the majority of residents is either Warlpiri or Pintupi, with English and other Aboriginal languages, such as Luritja and Kukatja, also spoken. The population is approximately 320 (Grants Commission current figure, June 2006), although it fluctuates. There are several outstations surrounding Nyirripi.

As part of the camel survey, four semi-structured interviews were held with men and women aged from 20 to 60. In addition, informal discussions were held with other members of the community.

Past associations with camels

As the following quotations illustrate, a number of families at Nyirripi have owned and/or used camels in the past. 'My father and uncle [both deceased] rode camels. My father's area is Pirlinyanu ... Might be they had 20 or 10 camels. They used to travel from waterhole to waterhole. When I was little, I used to ride them. In the olden days there were not much camels,' said one senior man. Another younger man recalled: 'I used to ride camels with my grandfather, Kanyarla. He had three or four camels at Yuendumu.' During the 1970s camels were gradually replaced as modes of transport by motor cars.

The community has a history of keeping camels as pets. Previously they had two camels which were named after bush tucker, Yakajirri and Yuparli. One ran away and the other was taken to the Camel Farm in Alice Springs. They currently have one camel called Gypsy. However, she has become a nuisance, sticking her head into people's houses, chasing strangers and interrupting Gospel singing sessions. It is planned to have her humanely removed.

Awareness of feral camel presence

People frequently see 'heaps' of feral camels when hunting and travelling in the Nyirripi region, particularly in the south and north-west. For the most part, numbers range from 10 to 50, with groups of 100–500 occasionally sighted to the west of Karrku [Mt Stanley] in a mulga area where men regularly hunt kangaroo. Other places where camels are frequently seen include: Ethel Creek, Tjiiparrpa (described as a 'breeding ground' for camels), en route to Yuendumu and the outstation Winjiarrdu, which is along the Kintore road. Feral camels are said to be increasing in number and coming 'closer and closer all the time' to Nyirripi. Camels have been sighted on the sandhills surrounding the houses and sometimes near the oval and sewerage plant on the edge of town.

The general perception of feral camels was that there are now 'too many', and that they are causing problems for the natural and cultural environment. A number of people said that they 'get frightened' of bull camels (see below), but that 'kids like them'.

Awareness of the impacts of camels

Camels are said to be damaging rockholes – falling into and 'dying in rockholes and doing *kumpu* [urinating], and drinking rockholes dry'. One middle-aged man who'd seen a dead camel in the waterhole at the site Kunajarrayi commented: 'They're urinating, we can't drink from waterholes anymore.'

They are also said to be eating bush tucker such as *wanakiji* (bush raisin, *Solanum centrale*), an important food in the area; *kanta* (bush coconut or bloodwood apple from the desert bloodwood, *corymbia* sp.); and *pantajarrpa* (parakeelya, *Calandrinia balonensis*), a succulent commonly found in the sandhill country around Nyirripi. Others observed that large groups of camels damaged trees by eating them and pulling down branches.

As with many Aboriginal informants elsewhere, when asked if camels damage country, people referred to the negative impacts on water sources and vegetation, with one younger person stating that as yet they were 'not really damaging sacred sites' apart from important waterholes. However, an elder who had an intimate knowledge of the surrounding country believed that camels were 'killing all the country: bush tucker, rockholes, making a mess, finishing it off'. The latter perception contrasts with the view reported by Nugent twenty years earlier that camels were not thought to contribute to land degradation or to eat bush tucker (1988, p. 17).

In general people did not perceive feral camels as being a major problem for other animals. Two people said that camels ate different food to native animals such as kangaroos (for example, trees rather than grass) and hence didn't pose a problem for them.

As yet camels are not damaging houses at Nyirripi, although one was said to have damaged the sewerage plant fence in an attempt to get access to a sprinkler. One woman said that, in general, 'when camels come they pass through, just travelling. They see the community and turn back'. She blamed the pet camel Gypsy for attracting ferals, noting that the previous month some camels had come to the oval because they'd smelt her, but that dogs had chased them away.

Camels are perceived as a potential threat to human safety in the Nyirripi region, both on and off the road. Camels are said to wander onto roads, where they roll around and sleep. In mulga country they can be difficult to see until the last minute, increasing the risk of road accidents. This had happened to one man the previous year: 'I ran into a camel – a big bull one. It was on top of the bonnet. A troopie.

We fixed it up.’ He estimated that it had cost him \$150 for parts, including a new radiator. Another man said: ‘Once, around 2000, we were going to Alice Springs for the football carnival on Buslink. It [the bus] hit the camel. It was asleep on the road. That’s the problem, difficult to see them.’

In addition to road accidents, the fear of encountering mad bull camels in season is discouraging some people’s use of, and access to, country. For example, one middle-aged man said: ‘I don’t go hunting much – only at weekends, Saturday and Sunday. Every time I go, I worry about camels chasing me – [they’re] too dangerous. We don’t go camping out [i.e. for fear of the bull camels].’ Another man said: ‘Winjiardu is my country; it’s an outstation [also]. We can’t go there – too many camels. If I take a water tank [out there], it will attract camels. I don’t like to stay there [for this reason].’ People have numerous stories about encounters with bull camels; for example: ‘When we break down, bull camels [can] chase people. One bloke walked from near Kintore when his car broke down. He was chased by a camel and had to climb a tree.’ However, a female interviewee thought that camels were becoming used to people at Nyirripi and because they were no longer ‘wild’ they posed less of a problem than when they first came to Nyirripi: ‘Nowadays they are used to people and stand and watch people.’ She said that when her family went camping out, ‘we light a fire. They can smell people and they get frightened’. One person expressed concern about the possibility of sickness spreading from diseased camels, observing that ‘some are diseased – mangy, sore lips, and diseased’.

Camel management

At present no camel management activities are being undertaken at Nyirripi, although one older man said that in previous years he’d shot camels for meat with people from Yuendumu. People were aware of land management activities being undertaken at other places and had talked with a representative from Greening Australia about camel impacts on the environment and camel management options. So far, they said, nothing had eventuated from the talks, although they had indicated they wanted to protect rockholes and other water sources from feral camels. It appears that the Greening Australia proposal was to fence rockholes. The activity required the rock surface to be drilled which was unacceptable to many people and a halt was called to the project (James Young 2008, CLC Land Management Unit, pers. comm. 12August).

A number of people at Nyirripi eat camel meat and see it as a good use of the animal. In what is something of an irony, given that camels are often associated with the symbolism of Christmas, camel was first eaten by some people at Nyirripi when a fundamentalist Christian Brother served it up to them for Christmas dinner one year. They said that they were only informed hours later, when it was too late, that they had eaten camel. Apparently camel meat was a staple food when Nyirripi was first established as an outstation, however when electricity and store goods were introduced consumption dropped (Nugent 1988, p. 17). One man said that although he felt sorry for camels because they ‘cart[ed] a lot of things; carted bread, margarine, swags, everything ... flour bags and water’, he ate camel meat when it was fresh and available.

There were a range of views on the acceptability of culling camels. Many people were against it; however, some people said that camels could be culled, particularly if it was done away from Nyirripi and roads and if the carcasses were destroyed. One younger man summed up the situation as follows: ‘Some people don’t like it. I feel it’s OK to shoot camels.’ He added that mustering camels for removal and sale was his preferred management option. Another man said: ‘camels are eating us out’ and that if absolutely necessary, camels could be shot ‘a long way away’ from the community and roads. However, he stressed that outside parties would need to consult the traditional owners before any camel management activities were undertaken in the area. Some people were concerned about dead carcasses lying around near communities. For example, one man said: ‘We are a bit worried about the number of camels. When we go hunting we always see camels. Not one but hundreds. Need to take them away. They can shoot camels but then burn the carcasses so it doesn’t spread disease.’ By way of clarification, he added: ‘We don’t want people to shoot camels on our land.’ He observed that the

neighbouring European pastoralist ‘was always shooting them’, but he wasn’t clear about his reason for doing so. ‘Maybe foot and mouth disease,’ he surmised. One of the senior men in the community was totally opposed to the culling of camels, commenting that camels had lived in the area for a long time and deserved what he perceived was better treatment: ‘It’s no good [i.e. culling feral camels]. The camel lives along his home. There were no camels before here, but they been growing up more.’ His solution was to have them trucked out.

In addition to land management work to protect culturally significant areas, most interviewees were keen on the idea of mustering, trucking, and selling camels to create jobs and make money; however, they needed assistance to do so. One man also emphasised the need for consultation with traditional owners before anyone mustered camels. One woman viewed the camel problem as an opportunity to create jobs for young men, commenting that ‘there’s a lot of young people out here with no jobs’. Another man added: ‘I want to sell camels to make money for community ... I can catch camels, put a hole in nose and make smoke [to break them in].’ Some people had heard that a camel could sell for \$1000, while others did not know the price. There are no camel yards or facilities to load camels onto trucks at Nyirripi.

People have limited access to information about camel management. Some people at Nyirripi had seen a video about camels at Watarru in South Australia, which had been given to them by an Aboriginal man from Fregon who appeared in the program. As mentioned earlier, they also discussed issues with a Greening Australia representative.

1.3.5 Yuendumu

Background

Yuendumu is located approximately 300 kilometres north-west of Alice Springs, in the southern Tanami Desert. Established as a government settlement in 1946, it is now Aboriginal land, and part of the Yuendumu Land Trust (LT). It is bounded on the west by Mt Doreen PL, on the north by Central Desert LT, on the north-east by Mt Denison PL, on the east by Yalpirakinu LT (formerly Mt Allan PL), on the south by Ngarluju (formerly Mt Wedge PL), and on the south-west by Yunkanjini LT.

The main Aboriginal language spoken at Yuendumu is Warlpiri, with Anmatyerre and Pintupi also spoken. The population is 999 (Grants Commission current figure, June 2006), although this can vary dramatically. Thirteen semi-structured interviews were conducted involving eight men and five women ranging in ages from 22 to their mid-60s.

People’s past association with camels

While only three of the interviewees had strong historical associations with domesticated camels, an interviewee pointed out that ‘a long time ago a lot of old people used to ride camels, when Yuendumu was first set up’. Another man, who is in his mid-60s, recalled Aboriginal people using camels at Mt Doreen and said that as a young boy he had ridden them. Japangardi, a man in his mid-50s, said that his father’s brother (who he also called father) owned several camels, some of which he had caught and others he had obtained in return for labour on the Mt Doreen wolfram field. He reminisced:

I used to love camels. We’d travel from Yuendumu to Mt Denison – a lot of people lived there. My father had family at Willowra, we’d travel short cut on camels. He taught me how to ride camels and I loved it. He taught me the safe manner for handling and control of camel. I took orders and learned. He used to have saddle and sometimes without saddle; when I had experience with saddle, I could handle without ... It was a good life, a good way to see country, all the names of the rockholes and soakages, and the country. A slow journey. It was a story time for me. I can remember these places, because when I was a little boy they taught me about country ... When I was a little boy I walked from Pikilyi to Yuendumu – I know what it’s like. And then to travel by camel. There is a difference between foot walk and camel. Both good, but camel is better.

In the 1980s the interviewee and his brother had ‘chased camels for fun. We tied them, put smoke on them to breathe and made them tame. We handled them around. Camels are easiest to handle, not like horses’.

Awareness of feral camel presence

According to interviewees, feral camels do not enter Yuendumu, but there are said to be large numbers between Yuendumu and Papunya, Yuendumu and Nyirripi, and on Mt Wedge and Mt Allan. Lesser numbers are increasingly encountered between Willowra and Yuendumu and in other areas where spinifex predominates. For example, one interviewee said that the previous year he had seen camel tracks while on a CLC trip in the Tanami Desert to the north-east. (I was also on this trip and noted that camel footprints were now ubiquitous in the area.) People reflected that in the 1980s feral camels were few and far between in this area. Another interviewee commented that now, when she participates in cross-country CLC trips, she always sees camel tracks in the Tanami; she added: ‘When you go past Mt Theo, you’ll see tracks everywhere.’ When people hunt and visit sites and/or travel between communities, they see camels along roadsides and in the bush. Generally, people observed smaller groups to the east of the Tanami Highway, with much larger concentrations of camels to the west.

People’s perceptions of camels varied. Several interviewees were frightened of wild camels and of having car accidents (see examples below); others thought that they were ‘all right’ and a good resource. One person considered that they belonged to country: ‘I feel camels are potentially useful for community and are significant for country. There’s no *yapa* [Aboriginal person] looking after country [i.e. in remote areas] but the camels are there. They belong to that area.’ Another person commented on the ‘fit’ of camels with the desert and people: ‘He’s a nice animal to look at, he fits in with the desert. Everybody got motor car but if they go back in time they might get camel. Camels really understand people, like a dog. Camel and human being understand one another. Camel knows its owner.’ Here, the interviewee is referring to domesticated not feral camels.

In contrast, as the following quotes indicate, other interviewees emphasised the alien qualities of feral camels and their lack of ‘fit’ with country, born of the fact that they have no Dreaming. For example, a senior Warlpiri woman said: ‘We don’t like camels in our country. They don’t belong there.’ She pointed out that feral or wild camels are different to domesticated ones: ‘Sometimes people have camels and grow them up – but they’re different. They treat the owners like parents.’ Another interviewee, who is not from the area but whose wife is, said: ‘Well, Afghans brought camels. I’m not against them because they used them for camel trains; they [were like] couriers – to get mail to another town. It was a good use. Today they became a pest because no one taking care of them. Nobody owns camels, because no one’s Dreaming.’ Another middle-aged woman said: ‘They don’t belong here ... They’ve got no Dreaming. No Jukurrpa. They are *yapakari* – strangers – not belonging to us.’ Yet another senior female interviewee stated: ‘They don’t belong here. They are just lost and walking around. They’re strangers, messing up country.’ An elderly traditional owner lamented: ‘There are too many camels, we can’t manage it.’ A measure of the closeness of people’s observations of feral camels can be gained from comments such as: ‘Once we saw tracks of crippled camel near Tilmouth Well hill; the camel had a long toenail.’

Awareness of negative impacts of camels

As mentioned earlier, it was said that feral camels haven’t come into Yuendumu and thus are not impacting housing and infrastructure now, but ‘they are getting closer’. They are having a negative impact on the wider community in other ways. Camels are beginning to affect how Warlpiri use their land. For example: ‘Some places people can’t camp out because of wild camel.’ Another person made a similar statement: ‘We worry about them when we go camping out. We make a fire, hoping that they might see the fire and go away.’ Another person commented: ‘We frightened they might bite us ... If you’ve got kids, you have to watch out in case they bite.’ People are also concerned about road

safety risks: ‘When I drive at night, I get frightened in case I hit them at sunset and have an accident. Same as horse, cow. But I drive slowly.’ Another male interviewee said: ‘They don’t get off the road.’ Tragically, on 13 June 2008 (after the interviews were conducted), a Warlpiri man and child were killed when their vehicle, a Landcruiser, hit a camel on the Tanami Highway approximately 150 kilometres north of Yuendumu. Two children and a woman were also injured in the accident.

Four interviewees said that they do not see much camel damage apart from broken fences, and that they did not perceive camels to cause significant problems for country, especially when compared to cattle. They commented that the camels they saw were only passing through: ‘Not much damage, they are more like travellers. They can go a long way without water’; ‘They don’t cause problems. They respect, they are sensible, not like cattle. They drink, drink, drink but they don’t hang around a waterhole. They behave and go away.’

Two interviewees thought that while they can damage sacred waterholes, they are not causing significant damage to the vegetation. For example: ‘Camels spoil waterholes and lake areas, like Karrinyarra [a sacred site] on Mt Wedge. Little bit of damage. Cattle are worse. They [camels] just roam around and eat which food they run into, not like nanny goat, which eat down young mulga everywhere ... camels have soft foot. The only mess you’ll find is where they are sleeping. Trees, plants, they don’t damage much.’

In contrast, the other interviewees thought that camels were having a negative impact on sacred sites, waterholes, trees – including significant Jukurrpa trees – and country:

- ‘They eat all the trees; at soakage – they drink all the water. They eat *yinirnti*. Sometimes they eat Jukurrpa trees. At P ... [sacred site in the Tanami Desert, visited in 2007 during a CLC site survey trip] they are really making a mess. The trees are all dying. Not green. That makes us sad. It belongs to traditional owners. Jukurrpa – I don’t want to see those trees dying. They are dying. I want to see them all green.’
- ‘They can eat out trees, like Jukurrpa: *wankinpala* and *yinirnti*. They can go for two months without water and eat trees: *wardiji*, *ngarlkirdi*, *wajanpi*, and *wataki*.’
- ‘They are making a mess of our country, drinking all the water and messing up all the soakages and creeks. They are eating too many trees, *yinirnti* and others.’
- ‘Camels take a lot of water from waterholes. They eat trees and grass. They have really strong urine. You can smell them from a distance. Sickness might come if there’s a lot and people smell it.’
- ‘They damage *yinirnti* trees – we saw they’d eaten them at P ... [sacred site in the Tanami Desert, visited in 2007 during a CLC site survey trip]. Makes me sad to see the camels messing up the soakages and country.’
- ‘Specially when we visit our country, we see it’s a problem. There’s waterholes and soakages. Their feet get stuck in the waterholes and it will die there. They damage sacred sites. They like to eat *pirarla* and *yinirnti* – can damage trees.’
- ‘They cause problem for country because they smell a lot, break all the trees, drink the water.’
- ‘They causing problem for country. We can’t catch him. They are everywhere. Last year I [senior traditional owner] went with ranger mob and had a look around my country [Mt Nicker area in the Tanami]. [We were] lighting fires to make country green ... Plenty camels there, mulga country. And in creek at Mt Nicker, they’re drinking water. Talk about plenty camels; him [camels] eating *yinirnti*, gum trees, Jukurrpa trees.’
- ‘Too many animals will breed disease; people get sick from dust.’

On the question of whether camels were causing a problem for other animals, 10 interviewees perceived that they were not a problem. Two said that they did not know and one interviewee perceived that camels were a problem for other animals in that they drank ‘other animal’s water, like kangaroo and dingo’.

Camel management

Of the 13 interviewees only one had participated in activities to reduce feral camel numbers and/or impacts. He had sold two camels: ‘I gave them names; they used to follow me around. I took them to Newcastle [Waters] and sold them for \$100 each.’

Most interviewees thought camel population numbers needed to be controlled, with the preferred management strategy being live removal. Perceiving them to be a potential resource in the future, two people did not want them all to be removed. One person suggested biological control: ‘They should inject them and stop them reproducing. Maybe rangers [could do this].’

Two people were prepared to consider culling as a management option. One of these, a young woman, said it did not worry her if camels were culled: ‘Many times we see dead camels. We only worry for skinny camels.’ The other interviewee, a man, indicated that it was not his preferred management option but that ‘if there is a good reason to shoot camels then OK’.

However, all other interviewees said that they did not like camels being shot, unless it was for meat and/or the carcasses were removed. People’s reasons for opposition to culling included: a cultural ethic against killing an animal unless it is to be used, people’s association of camels with Christian symbolism and the fear of repercussions if camels are shot and not used, the fact that camels are suited to the desert environment, dislike of the sight and smell of dead camels littering the country and fear of disease spreading, and the fact that camels once worked for people. A senior male who had used camels in the past put forward the last reason. Interestingly, he did not object to camels being killed for their meat or if they were suffering: ‘Good tucker, good meat. I ate it at Mt Doreen when I was younger. It rained and the camel got stuck in the sand. We killed it and ate it.’ The following examples are indicative of other interviewees’ thoughts on the matter:

- ‘I strongly feel nobody should shoot camels ... Camels are like four-wheel drives of the desert, they can climb sandhills ... round them up and send them overseas.’
- ‘I don’t like just to shoot them. They looked after everyone, carted water and things for people.’
- ‘Wouldn’t want to look at dead camels; makes us sad, and smells.’
- ‘You’ve got to think of people’s health as well – could cause outbreak of disease. If shoot, should burn them to get rid of them properly. *Yapa* [Aboriginal] way, not right to shoot.’
- ‘Jukurrpa, *yapa* [Aboriginal] way, you can’t shoot animals for nothing. Must be for a purpose, like eating.’
- ‘I used to work as a ranger. I respect animals, any animal. If you shooting it for skin or hunting, that’s all right. But killing it and leaving it is not right. A couple times a fella shot kangaroos and left the skinny ones, just taking the tail. I said to him, ‘I caught you shooting for nothing. You can’t do that. You are wasting for the future, for people to eat. That’s against the Law. That’s why we respect animals, that’s Jukurrpa.’
- ‘No, we don’t like to see the camels lying on the ground. We feel sad. Camel belongs to *Wapirra*, God, too. We don’t like to see any animal killed and lying there. That’s Jukurrpa. Can’t kill animals and leave them. At least bury them, but we don’t like them shooting them.’
- ‘God brought the camel up. Three Wise Men. *Yapa* way it’s not right to kill animals. People might get in trouble.’
- ‘They shouldn’t do that. It’s sad, because God created everything on the earth today ... Some people reckon that if they shoot camels they’ll get sick, pneumonia will come.’

Suggested uses for camels included: sell to produce income for the community, tourism, safaris, racing, meat and clothes products. One person said that camels might come into their own again as transport, particularly at outstations because ‘people don’t have vehicles to travel around. It is slow but you can get there and [get] a lot of information about country’. The most popular idea was to sell camels. One senior female traditional owner said: ‘The only way they can help [i.e. be of benefit] is to create jobs, make cents.’ A middle-aged man commented: ‘I was thinking that [i.e. to sell camels], because there are too many outstations. They should have a resource with camels.’ One person thought that there was potential for overseas sale because he perceived that Australian camels were healthy, whereas Arab camels were skinny. He added: ‘It’s sad to us to sell them to Arabs, because they are not happy, they’re miserable – fighting.’

A shared perception was that money from the sale of camels should go to workers and traditional owners of the land. Several interviewees commented that feral camels were not owned by anyone until the point when they were handled. For example: ‘Nobody owns wild camels. People catch them and then they own it.’ Related comments that other interviewees made included: ‘Aboriginal people not boss for camel’; ‘They belong to the bush, people don’t own them – they walk around themselves, wild ones.’ One person said that ‘the country – well the *ngurra* [country] is owner of camels and then the TOs [Traditional Owners] of the country and they should have a say and workers get paid’. In relation to knowledge of camel prices, nine of the interviewees did not know the price, while the following figures were suggested by others: \$500, \$2000, and \$10 000 for a white camel. One interviewee said that the price depended on the market. There are no camel yards at Yuendumu or purpose-built facilities to load camels onto trucks; however, there are yards and loading facilities for cattle outside Yuendumu at Four Mile.

All the interviewees wanted the government and/or CLC to assist them with camel management, particularly if it created jobs, provided opportunities for training, and provided income. Suggested activities included mustering for live sale and products such as meat, tourism, and ranger land management activities such as fencing of waterholes and protected areas. However, although there was support for the removal of camels to abattoirs for meat processing, there was not general support for the killing and butchering of camels on country around Yuendumu. Examples of people’s responses are as follows:

- ‘Should give money to CLC to manage feral animals.’
- ‘We need something to protect soakages and waterholes. We talked about it last year to CLC; thought they’d do Nyirripi area first.’
- ‘Young people should get trained in jobs, mustering and selling them for meat.’
- ‘Like cattle, mustering up. If they created real work with good money, I’d be obliged to work on it. Best to take them back to where they belong.’

Information to assist with camel management was obtained from CLC, the camel operation at Undurana near Hermannsburg, and from neighbouring pastoralists.

1.3.6 Willowra

Background

Willowra, also known as Wirliyajarrayi, is located approximately 350 kilometres north-west of Alice Springs on the Lander River. It is within the former Willowra Pastoral Lease, which is now held by the Wirliyajarrayi Aboriginal Land Trust. It is bounded to the east, north, and west by Aboriginal freehold land and to the south-east by the non-Aboriginal-held Anningee Pastoral Lease. Willowra is traditionally regarded as Lander Warlpiri country, with Anmatyerre interests in the south. The main Aboriginal language is eastern Warlpiri. The population is approximately 300 (Grants Commission current figure, June 2006). At the time of the interviews cattle were being agisted on Willowra.

In addition to informal discussions, eight semi-structured interviews were conducted with men and women ranging in age from 25 to 60. All of the interviewees were traditional owners of land in the wider Willowra region.

People's past association with camels

While most Willowra people do not have a strong association with camels, older people remember Warlpiri and Anmatyerre people working with camels at Aileron and Kaytetye people working with them at Barrow Creek. For example, one senior male interviewee recalled: 'One of my uncles, old Japaljarri at Aileron, owned camels and carted rations and tobacco. He was paid privately.' He also said that 'a couple of old fellas went around and taught business [i.e. men's ceremonies] Aboriginal way'. As a young man he rode camels at nearby Coniston Station: 'Randall Stafford [the non-Aboriginal owner of what was then a grazing licence (see Vaarzon-Morel 1996)] had a lot of camels and olden time wagon. Six camels used to pull that one. He used to come up the Lander to Whitestone, where he used a scoop chained behind the camel to make wells for cattle.' During the late 1990s there were four pet camels at Willowra.

Awareness of feral camel presence

While a few camel tracks were spotted on the lower Lander prior to the late 1970s, interviewees said that in the past five years they have been increasing in number and coming closer to Willowra. Indeed, while I was conducting an interview a camel came into view south-west of the houses to drink at the cattle trough there. Individuals and small groups of two to 12 camels are frequently sighted on the back road from Willowra to Yuendumu, with groups of 40–50 sometimes seen. One younger female interviewee said that she had seen fresh camel tracks only the previous day, while hunting in her father's country 15 kilometres to the east of Willowra. Older and middle-aged interviewees said that they had observed many feral camel tracks in the Tanami area to the north-west of Willowra the previous year when on a CLC country visit (see also Yuendumu section on 'Awareness of feral camel presence'), and also when travelling through the area in private vehicles. All were surprised to see the area thick with tracks, particularly around waterholes and claypans, with one senior male traditional owner commenting on the colonisation of the area by camels as follows: 'What, they think they owners of the land now?' Other interviewees said that they had observed some feral camels while travelling from Willowra to Ali-Curung, to the north-east, via a back road but that there were 'still only a couple'. The camels are said to be coming from the west and south-west, from Nyirripi and Papunya direction along the Mt Allan and Mt Denison boundary line, but were still mostly west of the Stuart Highway. However, camels were making their way south and north. One person reported having seen four at Possum Well, halfway between Willowra and the Stuart Highway. Another person, who often spent time in the Ti Tree area, said that she now sometimes sees a few camels in the south-east while hunting along the road to Mt Skinner. At the time of my visit, a CLC pastoral unit coordinator and an ILC representative were visiting Willowra to assist with the cattle operation. They reported having seen three camels 15 kilometres to the north of the Willowra at Warlpiri Well the morning they spoke to me, and on the previous day while on a run to check on cattle had seen tracks up and down the Lander.

Feral camels were still enough of a novelty in the area for one interviewee to say that she still got excited when she saw them. However, she also said, as did other interviewees, that she was wary of bull camels: 'I'm a bit scared of bull camels coming close. If we go camping we light a fire and sit next to the fire.' Another interviewee said: 'We don't like camels here. If we go out bush, we are frightened of them. We light a bush fire and keep them away.'

Awareness of negative impacts of camels

Interviewees said that they had not observed feral camels causing problems at Willowra, but one observed that 'if they breed up, they'll start making trouble'. However, most interviewees said that camels were a problem for cattle station infrastructure and for country. As discussed at a separate CLC

cattle meeting the first morning of the interviews, feral camels were causing major problems for cattle operations by breaking fences. One senior traditional owner and stockman said: 'We are worrying about camels because they are breaking all the fences. We were talking about it at a meeting this morning.' They were worried about cattle straying onto other properties through the broken fences.

People were also concerned about camels damaging sacred sites, including important water sources, and eating Jukurrpa trees. 'We are worried about soakages, important ones ... and worried about them eating *yinirnti* trees at P ... [an important sacred site in the Central Desert Land Trust where there are sacred *yinirnti* trees which are regarded as part of the site complex].' Another person commented: 'It is a problem – they smell the water and come to the soakage and kneel down; when they surround the soakage and kneel down they damage it, and sometimes camels fight and cause damage. At P ... they are eating Jukurrpa trees. They also eat *wanakurdu*.' Yet another interviewee said: 'They're messing waterholes and soakages. They soak themselves and roll all over the mud. We don't want to use the water then. And bush tucker – they have big feet that they stomp on plants.'

As the following quote illustrates, some people's fear of camels is beginning to affect their customary use of their country: 'I'm sometimes scared hunting alone, or walking to get seeds. We drive the car close and look out for camels.' Most interviewees were not aware of camels affecting other animals; however, one thought that they did, in that they competed with them for the water: 'Making them frightened at waterholes so that they'll go away and die [i.e. from lack of water].'

Camel management

Apart from fencing for the cattle operation, no interviewees were undertaking activities to reduce feral numbers and/or impacts, or had sold camels. One interviewee said: 'One time we rounded up about 40 head and put them in the yard – but no one came along and bought them. We didn't know who to contact.'

Most interviewees considered that the camel population needs to be controlled. However, all were opposed to aerial and ground culling, because of Christian associations and the belief that killing camels would result in repercussions (see also Nugent 1988, p. 6). For example: 'We are worrying about Jesus and how we are going to do it. All of us worrying about camels, donkeys. We can't shoot animals because everyone reckon we won't get rain, makes country dry.' Another interviewee said: 'They belong to God. If they get shot, God will punish us ... [A neighbouring pastoralist] was shooting donkeys, and God punished him. He got sick and passed away on the road.' A younger interviewee said that she wanted some left in country so children could look at them.

The preferred management strategy was live removal, with most interviewees considering the idea of selling camels favourably. One interviewee, Maxie Martin Jampijinpa, who is experienced working as a stockman, has formed his own mustering team for hire (see Central Land Council 2008, p. 14). He said: 'If something happened with the market, people would be happy to sell them, muster them up.' He said that there were facilities to load cattle and cattle yards at Willowra but that 'panels are too low'. He said that 'we would like to have a truck with a big freezer, to put it [camel meat] in freezer ourselves and sell. We used to put wild cattle and bulls in freezer'. However, other senior men were opposed to killing camels, even for meat, on Willowra. Few of the interviewees knew how much money they could generate by selling camels, but the stockmen knew that it depended on the market. Once camels are handled, they are regarded as being owned by the owners of the land whose country they are on.

People wanted assistance to manage camels, in association with job creation and income opportunities for local people. Suggested management activities included mustering for live removal, and protection of culturally significant areas. Examples of responses are as follows:

- 'Jobs for young men to help muster camels, put on the truck and send to Alice Springs.'
- 'Good to make jobs for young people – fencing waterholes and [building] fences.'

- ‘At Mt Bennett in the Tanami there are a lot of rockholes and sacred sites we are worried about. Need to fence them off.’
- We were only thinking ourselves, if someone could come and muster camels. Whenever we see eight or more camels it makes us think.

Members of the cattle company said that they received information to assist with camel management from CLC, while others said that they received little information. All interviewees indicated that they wanted more detailed information concerning opportunities to manage camels.

1.3.7 Laramba

Background

Laramba is located approximately 205 kilometres north-west of Alice Springs. It is an excision within Napperby Pastoral Lease. The population is approximately 297 (Grants Commission current figure, June 2006; see NT Government 2007). The main Aboriginal language spoken in the community is Anmatyerre.

Eight semi-structured interviews were conducted with seven men and a woman, ranging in age from 24 to 73. Of these one male was a councillor and four were traditional owners of land in the surrounding region.

People’s past association with camels

Five of the interviewees had no strong associations with camels. The sixth, a man in his 60s, said he had not used camels himself but that his parents had walked around with camels when they lived near Alice Springs. He recalled that the camels belonged to an Afghan called Siddik who had lived near the Mission Block. One man said that some years earlier he’d had a pet camel which he got from Lake Lewis on Napperby but that it had died.

Awareness of feral camel presence

There are no feral camels at Laramba; however, interviewees said that they saw feral camel tracks when they hunted in the surrounding region. According to one interviewee, the highest density of camels was on Mt Wedge and further west, with one person stating that there were ‘thousands’ of camels there. Camels were also sighted towards Aileron, at Pularidi and Garden Bore on neighbouring Mt Allan, at Lake Lewis, Paddy’s Well, and creeks in the Napperby area, and along bush roads to Willowra and to Tilmouth Well. One interviewee said that he noticed that camels first came in to Napperby after a wildfire six years earlier. Since then the neighbouring pastoralist was said to have culled camels and dramatically reduced their numbers on Napperby. Numbers that interviewees have sighted varied depending on the location. One interviewee said that they had seen 50–100 near Lake Lewis, but for the most part they were reported to number less than 10 in the Napperby area, and were greater in number to the west and north. People mostly saw camel tracks and camels when hunting and also when travelling to other communities in the region. One interviewee commented: ‘Napperby didn’t use to have camels – now thousands all over the country. Lots at Lake Lewis – one died there.’

Interviewees’ perceptions of feral camels varied. One senior man considered them a significant problem on Mt Wedge, his traditional country, and said: ‘Just get rid of them’; he and others were wary, and frightened at times, of bull camels. Others expressed compassion for them.

Awareness of negative impacts of camels

According to the interviewees, camels are not damaging infrastructure in Laramba. Most interviewees perceived camels to have little impact on country in the Napperby area, although they recognised that they broke fences. Three people thought camels could damage waterholes. One senior male, a traditional owner of country on Mt Wedge, where the camel density is said to be high, perceived that camels were damaging sacred sites. Camels were impacting his use of country, because he no longer felt safe to camp

with his family on country where there were large numbers of feral camels: ‘Too many at Mt Wedge. Sometimes we go camping out but worry at night. Can only camp in a house, not bush.’ Another senior man said that ‘on Aboriginal land camels are walking around rubbishing country’. Another younger man reflected that if the camel numbers were to increase further ‘there would be trouble. They’ll be a traffic danger’.

None of the interviewees perceived camels to have a negative impact on other animals. For example, one person said: ‘No. They are separate. Even people, they can smell from a long way, same as kangaroo – they smell and keep away.’

Camel management

None of the interviewees had been involved in activities to reduce feral camel numbers and/or impacts. All thought selling camels was a good idea; however, as one man pointed out, ‘really good – but we got no yards. We’ve got station all around us’. Another thought that ‘station mob sell them too. Santa Teresa mob are shooting camels for meat – same as Docker River, eating camels’. Most people were reluctant to eat camel at Napperby, and declined to have a camel barbecue during the period of the research. One person explained: ‘At Hermannsburg – that’s their idea to eat camel. Not ours. We don’t shoot camels. We feel sorry for them ... We don’t know about eating camels, only bullock, kangaroo and goanna, that’s our meat.’

Although most interviewees said that there were too many camels and that the numbers need to be controlled, all were opposed to culling camels. One senior man, who is also a Lutheran Pastor, stated: ‘Can’t kill them on my land. I don’t like seeing people shoot camels. I don’t shoot camels. All right to shoot camels for meat, but not on my land.’ Other examples include:

- ‘I don’t like camels being shot. Some stockmen, whitefellas shoot camels. It makes me feel sorry.’
- ‘Poor thing, he want a life too, like us.’
- ‘We’ll have no rain because they’ve shot camels. Camels are God’s gift. If you shoot them, no rain. Lutheran Church here.’

Interviewees were interested in outside agencies helping them to manage camel problems. Three interviewees said that they would like ranger jobs to be created to fence waterholes and soakages on Aboriginal land ‘not pastoralist side [i.e. Napperby Pastoral Lease], we can’t do that’. One middle-aged man commented that ‘nobody working here in ranger job, nothing’. Most were keen on the idea of mustering work and the live removal of camels. ‘Muster them up and take them away,’ was a common suggestion. Except for one person who thought a camel might sell anywhere between \$200 and \$500, the interviewees did not know how much a camel might bring. One interviewee, who had been a stockman, said: ‘We need to find out from the market. If just a little bit of money, can’t do anything, a waste.’ While there are no yards at Laramba, one interviewee said that there are steel yards at Mt Wedge and that it is ‘all set up’ to load stock and camels onto trucks.

Interviewees said that they got information about camel management from Central Land Council (CLC), television, and from the owner of Undurana camel yards near Hermannsburg.

1.3.8 Areyonga/Utju

Background

Areyonga, also known by the Aboriginal name Utju, is located approximately 240 kilometres west of Alice Springs. Established in 1940 by Lutheran Missionaries, it is Aboriginal freehold land. The population is 225 (Grants Commission current figure, June 2006). The main Aboriginal languages spoken in the community are Pitjantjatjara, Luritja and Arrernte. Although it is traditional Arrernte country, much of the population identifies as Pitjantjatjara.

Thirteen semi-structured interviews were conducted with men and women ranging in age from 30 to 70. Of these, three women and one man were councillors. One younger man in his 30s had worked for a number of years as a ranger for Parks and Wildlife at Uluru–Kata Tjuta National Park.

People's past association with camels

During the Areyonga mission days many of the older residents used camels to travel to places such as Angas Downs and Tempe Downs stations, where they had relatives and could obtain work. For example, one woman recalled: 'Missionaries brought people here – Strehlow and Albrecht. My father got his camels from the missionary; Pira [Moon] was the name of one ... I rode around on camels. Tjinkala Tiger [now deceased], he had three camels. Sometimes he rode them, sometimes he walked carrying the rope. I was riding with my little brother. We used to travel from Areyonga to Tempe Downs Station.' On occasion Tiger would hire his camels to non-Aboriginal people and act as a guide for them, taking them to places such as the Olgas and Uluru (see Scherer 1994, pp. 62–8). Another woman recalled that her father, who was a traditional owner for Uluru, used to own camels, and she would travel with him and other relatives on the camels from Uluru to Angus Downs and Areyonga. One of the senior male interviewees recalled that the first time he saw a camel was when his father drove sheep from Coniston Station to Glen Helen in the 1940s. Later he rode them himself: 'I bin ride cheeky camel – my brother gave me a ride. I sat behind, he was in front of the saddle. We were in New Haven looking around for sheep. We'd muster them and bring them back for water. All the wee-high [children] did this. My father rode camels and horses. Today we got motor car – you can bring anywhere.' The younger interviewees had comparatively little experience with camels.

Awareness of feral camel presence

Interviewees said that while camels do not usually come into Areyonga/Utju, which is surrounded by rocky hills, they are occasionally seen getting water from the old tank near the airstrip and the creek outside of Areyonga, especially during dry conditions. Three interviewees had observed the tracks of a few camels in the creek bed behind the houses, and said that they came in at night to drink when water ran out elsewhere: 'When they come into hilly country, you know they are desperate for water.' Another interviewee said that 'when we go up the hills looking for *mingkulpa* (bush tobacco *Nicotiana* spp.); we see tracks and camels'.

For the most part, however, camels are seen further away from Areyonga, on the back road to Glen Helen and Hermannsburg, at the turn off to Mereenie and Areyonga 20 kilometres away, between Ayeronga and Haasts Bluff, and on the road to Docker River, Mutitjulu, Mt Liebig, Kings Canyon, and Nyirripi. Camel densities were said to be high in the latter areas and sandhill country. Numbers of camels sighted varied from less than 10 to 100–500. Most people saw camels when they travelled to another place or went out hunting. For some, this meant camel sightings were a weekly occurrence, whereas others saw them much less frequently.

When asked about how they felt/thought about camels, one interviewee replied that they were 'good to eat – rib-bone the best', two felt that they were all right unless they were in large numbers, one person felt that they were not as destructive to the environment as horses and donkeys, and the remainder commented that they were frightened of bull camels and the prospect of the camel population increasing even more than at present. For example: 'Wild camels, they are growing too many. I'm worried they might come in and smash everything. I hear about what happened already at Docker River. If other people see wild camels they light a fire and run away. I don't see them close.' One older man who had long experience with camels commented appreciatively on their social nature and the similar qualities they had to humans: 'They make noise if something is wrong, and they worry for kids; mother might look around for baby one eating grass and hurry it along.' He added that for the most part camels 'sit

down [and mind] their own business' but that 'if you swear at the camel, he'll kill you. I swore at one as a little boy – he chased me, only the fence stopped it. That camel thought when I swore at it, "You're not boss for me". I swore at it, "I'm boss for you, mongrel". They've got good memory; brains'.

In contrast, however, a middle-aged woman emphasised the alien quality of camels: 'That's Bin Laden's camels. Camels don't belong here. They brought it from overseas ... No Jukurrpa for camels. They're not from here – from overseas.'

Awareness of negative impacts of camels

Impacts on communities

Most interviewees said that camels are not negatively impacting infrastructure at Areyonga yet, but some thought it could happen in the future if numbers increased: 'Not a problem for Areyonga yet – but will be if they get more.' One person was concerned about the possibility of infection from camel skin disease: 'Some of the camels have disease on the skin. If they go near Anangu, could cause them to get sick.' Another person said that they damage fences as 'they go anywhere at night – can't see in the dark'.

Environmental dimensions

Most interviewees were very concerned about camels polluting and degrading water sources. For example: 'They making a mess in A ... Spring, and near the old tank and in the creek bed ... they've got no feet for water, they fall in and die and make a mess. Same as horses and donkeys.' Another person added: 'We've got a lot of waterholes, rockholes; both camels and horses wrecking our waterholes. They die and make it smell. It's so beautiful here and they're mucking it up.'

Camels were also said to stomp on bush tucker, rip trees apart and cause dust.

However, the interviewee who had worked as a ranger perceived that 'they do not create as much problems as hoofed animals, which dig in the sand and degrade it. Camels have soft feet; however, they eat out certain bush foods like quandongs'. Most interviewees believed that camels were damaging country; however, some pointed out that it was mostly when there were a lot of camels. Examples of perceptions are as follows:

- 'They are wrecking the country.'
- 'Camels bad for country.'
- Big mess. Chasing water, eating grass. If they live along the bush somewhere, middle of the desert, they all right. If they come this way they not good. Dust ... don't talk about it.'
- 'I heard about them damaging sacred sites and trees.'
- 'They drink water and trash water when there are big mobs, but they only need to drink every so often, not like horses. You realise that fenced ones cause more damage. Anselm's area [west of Hermannsburg] they go to that waterhole.'
- 'They are making a mess in waterholes.'
- 'Camels eat parakeelya, quandong, and conkerberry. Big mob can make a mess – but long as they quiet, they all right. They don't humbug if they have water.' (Quandongs are said not to grow near Areyonga.)

However, three interviewees said that camels were not generally a problem for country around Areyonga, with one interviewee saying the problem was 'mostly erosion to waterholes'.

Five interviewees thought that camels did not cause problems for other animals; however, the remaining eight interviewees perceived that camels competed with other animals for water and, when in large numbers, scared kangaroos and emus away. The general perception was that kangaroos don't compete

for the same food as camels, as the following examples indicate: ‘Camels make kangaroos go away – frighten them and emus. They go separate – a long way. Camels eat tree leaves, not competing with kangaroo’; ‘Camels don’t worry kangaroo. They got own brains – different brains to kangaroo.’

Camel management

There are limited activities undertaken to manage camels in the area. One interviewee said that the young men had tried to fence off important rockholes a few kilometres from Areyonga, where people used to go camping until they became polluted by horses. She said that horses and camels have destroyed the fences.

Some interviewees, but not all, were against culling on various grounds including that they were against waste and were worried that the dingo population would breed up. The following examples indicate these people’s views:

- ‘I’d feel badly. They were living here a long time. Even though they don’t belong here – they came with other people ... Afghans.’
- ‘No good, makes it smell and creates a problem with dingoes. OK to kill for meat to get rid of it.’
- ‘Some people saying we want to shoot them. We saw bodies of dead camels lying on the road to Kings Canyon. We feel sorry for them. Rangers all right to shoot camels but not tourists ... Don’t like just shooting camels and leaving them in the bush.’

One quarter of the interviewees (two females and two males) accepted culling as a camel management strategy. However, some insisted that the carcasses be removed or buried and the killing happened away from roads. For example:

Get rid of the camels. If they could catch them and sell them, it would be a good idea but otherwise shoot them. I’m not worried. Maybe they should dig a big hole and just bury them. If you left them, they’d smell and dingoes would breed up. Lots of people are against it, but I’m thinking, ‘Look at our country. It’s getting wrecked’. Today you have to take your own water – can’t drink out of it [rockhole] – it’s dirty. A couple of months ago there were a lot of dead horses in it – it makes it smell bad. Lots of people say you can’t shoot camels and donkeys. I say the ones the Wise Men rode on are dead a long time ago. And the ones Jesus rode on are dead. These are a different mob.

To take other examples: ‘OK to shoot and make it few camel where there are a lot and no roads’; ‘That’s OK if necessary for country but best to take away [carcasses]. Well, if it’s helping the environment it’s a good cause. Preferably shoot for meat.’

Suggested uses for camels included: meat, tourism, and making money by selling them. All the interviewees thought it was a good idea to sell camels, particularly if they ‘put the money back in the community’. Most people did not know how much a camel could sell for. One man surmised: ‘Must be \$7000 to \$8000 for a big mob of camels.’ Another said: ‘usually about \$1000, depends on the market,’ and another had heard from his brother-in-law at Undurana near Hermannsburg that ‘you get big money if you send them overseas’.

The preferred camel management strategy was to muster camels (by helicopter and/or four-wheel drive vehicles) and truck them to market. People were interested in the government and CLC assisting them with camel management, particularly if it was linked to job creation and people were trained and resourced properly to do jobs. For example, one man suggested that Aboriginal men could be trained up like contractors, who could hire their services out for mustering, ‘long as they got their own gear, Toyota, yard, fence, everything ... good job but need to be trained up’. Another person said: ‘I’d love to see young fellas train up and work with camels. A big mob here. They can learn how to catch camels and sell them.’ Another said: ‘Muster the camels in the yard. Send them to Iraq, Egypt, and overseas

where they come from.’ Other suggestions were land management jobs; for example, protection of culturally significant places such as waterholes. There are no camel yards or facilities to load camels at Areyonga.

Interviewees indicated that most of their information about camels came from what they observed, heard from other Aboriginal people, or saw on television.

1.3.9 Haasts Bluff/Ikuntji

Background

Haasts Bluff, also known as Ikuntji and Kanparrka, is located approximately 250 kilometres west of Alice Springs. Once a ration depot of the Finke River Mission, it is now Aboriginal freehold land. There are three outstations associated with Haasts Bluff, namely Ngankiritja, Utily, and Winparrku. The population of Haasts Bluff is approximately 175 (Grants Commission current figure, June 2006, noted in NT Government 2007). The main Aboriginal language spoken in the community is Luritja.

Six semi-structured interviews were conducted with men and women ranging in age from 23 to 60. Of these, two men were elected councillors. One of these men lived at a Ngankiritja outstation (which the interviewer visited) a few kilometres from Haasts Bluff. Other councillors, including the community president and vice president, were attending a shire council meeting in Alice Springs at the time of the interviews. The death of a community member on the second day of interviews meant I could not interview some people as originally planned.

People’s past association with camels

Many older people at Haasts Bluff have a strong historical association with camels. European missionaries and Aboriginal people used camels for transport during the Finke River Mission time, and later when people moved to Papunya. One senior male interviewee briefly recalled his camel experience as follows:

My grandfather got camels from the bush. We rode them from Papunya to the bush, staying away from the community in school holidays. Sometimes we broke in camels for riding. Good to use for travel – you don’t have to put fuel in.

Two female interviewees in their mid-40s recalled riding camels at Papunya. One of them said:

We rode camels a long time ago with Tutuma, Napanangka’s grandfather. We’d go from here [Haasts Bluff] through the gap to Papunya. He had three camels ... He caught them west of Papunya at Kakali Bore. He broke them in – straightened them out – so camel knew the old people. They had special camel saddles and canteens. Camels carried swags and children, older people walked with them one by one.

Awareness of feral camel presence

Interviewees confirmed the presence of camels in the Haasts Bluff area; however, a cull conducted by pastoralists, who were agisting cattle on Haasts Bluff land, meant there were far fewer in the area than had previously been the case. Some camels had been seen drinking water from the trough to the north of Ikuntji/Haasts Bluff, but mostly they were to be seen along roads further away from the community and near outstations and bores. The interviewee who lived at Ngankiritja outstation said: ‘Used to be camels here but not lately ... they broke the fence for water to get to the trough in the yard near the houses.’ Another said that ‘some camels come into Utily outstation ... they are just travelling past here to Mereenie by the side of the hill. They come from the west, from Mt Wedge and Brown’s Bore’.

People said that they usually saw camels in groups of 10–50, sometimes 100, when they travelled to places such as Kintore, Papunya, Mt Liebig and Hermannsburg. People occasionally saw smaller numbers west of Limestone Bore. Camel numbers were said to be increasing in the wider region.

When asked about how they perceived camels, one man, who is not from the area but has lived there for many years, replied: ‘Get rid of them.’ Other interviewees indicated that they liked camels but recognised that they caused problems. One person summed up his conflicting thoughts about camels as follows: ‘Sometimes I like them, sometimes I don’t.’ Two interviewees said that they were frightened of them (see below), and one person said that they were ‘good for breaking in’.

Awareness of the impacts of camels

According to the interviewees, camels are not causing damage to houses or infrastructure at Haasts Bluff. However, they were said to damage fences, and the interviewee who lived at Ngankiritja said that at outstations ‘camels are causing a lot of problems with houses because camels break fences; they break taps and air conditioner to get water. They damage fences. We start to put it back and they break it’.

For the most part, camels were perceived to be causing a problem for country by damaging rockholes and drinking water, tearing and eating small bushes and bush tucker such as *mungarta* and trees. One person commented that camels had a greater impact on country when it was dry, stating that: ‘You can see the country is really dry. No water.’ However, one female interviewee was uncertain about whether or not they had a negative impact, surmising that ‘they are just drinking from the waterholes, they drink and travel to another place and back again’.

As the following comments illustrate, people’s fear of camels, particularly in the mating season (winter time), is impacting their use of country: ‘If we see camels, we can’t camp there, we are frightened.’ Another person commented: ‘If we go hunting and we see footprints of camels, it scares us. Bulls can be cheeky. They also damage fences, pollute waterholes by doing *kumpu* [urinating].’

Four out of the six interviewees did not perceive camels to be a problem for other animals, stating that they ate different food. However, two male interviewees, one in his 20s and the other in his 50s, believed that camels were a problem, as they frighten kangaroos away. For example, one interviewee commented: ‘They [camels] stop them coming to waterholes. They stop Aboriginal people having bush food like kangaroo tucker. They frighten them [kangaroos] away and drink their water.’ In contrast, Rose (1995, p. 118) found that the people he spoke to at Haasts Bluff were concerned about feral animals competing with cattle for resources and wanted them to be controlled. In part, the difference in perspectives is likely to be related to the lower numbers of camels due to recent culls.

Camels were perceived to be a road risk: ‘We like to see camels but they have strong bodies, can easily damage a car.’

Camel management

Apart from one young male interviewee who had participated in culling camels in the area, and a woman who had helped her brother muster some camels for the abattoir, no other interviewees had been involved in activities to reduce feral camel numbers and/or impacts. The young man had worked for non-Aboriginal pastoralists and described his job as follows: ‘We shot a big mob, because they were damaging the fence, and some [were] diseased with cancer’ (see also Rose 1995, p. 118). Following consultation with CLC, a culling operation was carried out so that the traditional owners could grant a grazing licence free of feral camels. Thus, there was a change in land use from land formerly not used for cattle grazing to land that was fenced and brought under production with a grazing licence. The female interviewee said that some years earlier her deceased brother had ‘caught camels and put them in the yard. He went in a helicopter and mustered them – mix up cattle and camels. He rang contract people. They came and got them in trucks and took them to Alice Springs to abattoirs’. The yards she referred to were at Five Mile, an outstation 5 miles to the south-east of Papunya.

Five out of the six interviewees thought that camel numbers should be reduced, with one (not a traditional owner) stating: ‘Just get rid of them and get the environment back again.’ This person was also prepared to consider culling as an acceptable camel management option, as was a young man who had participated in culling activities (see above). In contrast, the other interviewees were not comfortable with culling, as the following responses indicate:

- ‘It’s cruel, poor buggers. It’s all right to shoot if you are going to use it – but not to shoot and leave it to suffer.’
- ‘Not shoot camels. They are animals, they have a right to life. Don’t waste. It’s OK to kill them for meat.’
- ‘I don’t like. It’s OK to shoot camels like at Kintore [i.e. for meat for local consumption]. But we don’t like to shoot them our side. Only for meat works and to muster, or to eat like at Docker River.’

Interviewees thought that possible camel uses were tourism, export of live camels and meat for human and pet consumption. As indicated above, the preferred camel management option was to muster camels for sale, with all interviewees stating that they would like the government and land management organisations such as CLC to help with camel management as long as it created jobs for young people. For example: ‘Community should talk to CLC. Good for young men to have jobs mustering camels and learning about camels.’ None knew what a camel could sell for. One man said: ‘Depends on what they pay – they just tell the price.’ There are said to be no camel yards or facilities to load camels at Haasts Bluff.

Most people said that they obtained information about camels from the television, and one person also said from the radio. CLC has also actively engaged people in discussions about land management activities in the area.

1.3.10 Mt Liebig/Watiyawana/Amunturrngu/ and Anjalkajarra, Warren Creek

Background

Mt Liebig, also known as Watiyawana (Watiyawanu) and Amunturrngu (Amunturrngu), is located approximately 325 kilometres west-north-west of Alice Springs. According to the 2007 Grants Commission figure the population is 252. However, at the time of interview there were significantly fewer people present due to a recent death and the attendance of community members at local government and other meetings in Alice Springs. The main Aboriginal languages spoken are Luritja and Pintupi.

Six semi-structured interviews were conducted. They involved six men and seven women, most of whom claimed traditional affiliations to land in the Mt Liebig area or to Warren Creek outstation, which is located approximately 15 kilometres west of Mt Liebig. One of the interviews was conducted at the renal dialysis unit in Alice Springs, where the interviewee, a senior traditional owner of Mt Liebig, is receiving treatment.

People’s past association with camels

Interviewees did not have strong associations with camels, although some older women, in particular, had a strong sense of familiarity arising from the long history of camels in the area and their view that because camels were born and grew up in the area they belonged there.

Awareness of feral camel presence

Interviewees reported seeing camels on a weekly basis in the Mt Liebig region, particularly in places where there were bores, horse troughs, springs, or creeks. Camels were sometimes seen at the airstrip a few kilometres away from Mt Liebig, and at night they were said to ‘come to Mt Liebig and line up and drink at the trough, two, three, sometimes four. At night sometimes twenty’. One person commented: ‘Not often they come into community. One came in sick and passed away two nights ago.’ Camels were

seen weekly at Warren Creek outstation, where they come in at night to drink from the horse trough and the overflow of the water tank, which are located outside the community fence. Other places where camels are commonly seen include the following: Ilpilli, between Kintore and Mt Liebig, Brown's Bore and west of Brown's Bore, Yayi Yayi Bore, Kakali Bore, Warren Creek, Lizard Bore, Putarti Springs, Papunya, and Winparrku side.

Generally camels are in small groups comprising less than 10, although in hot, dry conditions groups of 20–50 were sometimes spotted. Estimates of the largest number of camels seen in a group in the past two years varied from 20–50 to 100–500. For example, one person commented: 'Biggest mob more than a hundred. Especially in summer, you see too many camels.'

When asked what they thought/felt about camels, most interviewees expressed compassion for them, with one person stating that 'camels are all right, but we are worrying that there are too many'. One person commented on the changing situation of camels, noting that in earlier days people used to ride them, but that now 'we heard they send them overseas'. Four out of six interviewees perceived that the numbers were increasing.

Awareness of the impacts of camels

Environmental dimensions

When asked in the abstract, half of the interviewees said that camels did not cause problems. However, when asked to consider particular examples of impacts, people reflected further on the matter and provided examples of camels having a negative impact on the environment. It was a common perception that camels are polluting and degrading rockholes, breaking trees and eating bush tucker. For example, one person said:

They damage the land, especially the trees. Eating bush tucker. We get worried about it, eating all the food. They are doing wee and kuna [excrement] near water tanks, dying in the waterholes and damaging bores.

When asked if camels are causing problems for country, three people replied in the negative, with two of them – both older women – giving more weight to moral considerations for the animals than consideration of damage to the physical environment. For example, one stated: 'No, they can sit down, poor things. They belong to the country.' However, not everyone shared this perception. For example, one senior male traditional owner of country in the Mt Liebig area observed: 'yes, they eat the country and make it dry', and another senior male traditional owner for Warren Creek outstation stated: 'We are losing everything. We are trying to teach kids about country but problem with camels making a mess in the country.'

Three interviewees thought that camels did not pose a problem for other animals; however, two said that they frighten animals away and/or drank other animals' water. For example: 'Yes, they make kangaroos run somewhere – when you go shooting you see no kangaroos, only camels everywhere.' To take another example: 'We have a little trough; they force the horses out when they come for a drink.' One person explained that as she only saw camels when she was travelling she did not know whether they were a problem or not.

With regard to the impact of camels on infrastructure, two people commented that camels damage fences and taps and water pipes, and one noted that they break locks on fences. One man from Mt Liebig said: 'we don't trust camels. They go to airstrip and break in and cause road accidents'. Another man from Warren Creek outstation commented: 'They damage pipes. We can't sleep at night, particularly in summer.' He explained that they were kept awake by the noise caused by camels coming into the trough and dogs barking at the camels to keep them away. One person said that 'when hunting we run away – they are cheeky ones'.

Camel management

No activities are currently undertaken to reduce feral camel numbers (for example, muster and sell, hunt for food, shoot to waste), although it was noted that Warren Creek outstation was fenced to stop camels and horses entering the living areas. Five of the six key interviewees said that there were too many camels and that the numbers needed to be reduced.

All the interviewees were opposed to the culling of camels, but accepted killing camels for consumption. Interlinked reasons for the opposition were: people 'felt sorry' for them, Christian symbolic associations, and because it is cruel to kill to waste. One woman said that 'we don't like people shooting them. They are God's animals. You can shoot to eat them'. Another person explained that there would be environmental repercussions if the camels were killed for no reason: 'No, it's bad. When you shoot all the camels, you'll be staying one or two years with no rain. We want to send them [away] live ones.' One man commented that they needed more information about options: 'We need someone to teach us what camels can be used for – like spinning wool and using hides in craft centre.' The preferred option for reducing camel numbers was through conventional stock mustering, trucking and selling activities.

Apart from two male interviewees who said that they could not talk about camel management options because they were not traditional owners for the country, most people expressed interest in having government or groups such as CLC help local people manage camels. Land management activities involving the protection of culturally significant places and infrastructure were also suggested: 'Mustering camels to take them away. Fencing airstrips. But camels also need water, poor things. Can't fence all water sources.' As the following quotes illustrate, the need to reduce the camel population was perceived as an opportunity to create jobs for people: 'Mustering ... we need a portable yard and vehicles, two motorbikes to muster. We don't know where to sell them'; 'Mustering. We need support, and jobs for young people to muster camels to take them away. Like Anselm Impu [at Undurana, also referred to as Tjuwanpa]. My people on outstations want to work.' None of the interviewees had been involved in selling camels and most were not aware of how much a camel could sell for, although one man, who had been a stockman, observed that the price depended on the market. There are no yards or facilities to muster camels at Mt Liebig.

Interviewees obtained information on camel management strategies from Aboriginal people in the wider region who had experience with killing camels for consumption (Kintore) and with the mustering and selling of camels (Anselm Impu, Undurana, Hermannsburg area).

1.3.11 Orrtipa-Thurra/Bonya, Apiwentye Pastoral Company (old Atula) and the Simpson Desert

Background

The Arrernte name for this community is Uthipe Atherre, but most non-Aboriginal people know it as Orrtipa-Thurra (variously spelt Ortipetherre, Ortippa thura, Dortippa-Thurra). It is located approximately 400 kilometres north-east of Alice Springs and is an excision within Jervois Pastoral Lease. The land tenure is NT-enhanced freehold. The population of Orrtipa-Thurra/Bonya is approximately 200 people (NT Government 2007). The main Aboriginal languages spoken are Akityarre, a dialect of Eastern Arrernte traditionally associated with people to the east of the Plenty River (Henderson & Dobson 1994, p. 8), and Alyawarre. Orrtipa-Thurra is approximately 60 kilometres by road and 30 kilometres due north from what was formerly Atula station. The latter ran the length of the Plenty River into the Simpson Desert, and was bordered to the north-east and south-west by Crown land. These areas are now Aboriginal freehold land. The area is still often referred to as Atula by Aboriginal people and, for the sake of clarity, the name is retained here. The Aboriginal run Apiwentye Pastoral Company has a cattle operation on old Atula station. Atula is bounded on the west by Indiana and Numery PLs. Loves Creek PL, an Aboriginal owned cattle station, borders Numery to the west.

Sample

Five semi-structured interviews were conducted with two men and three women at Orrtipa-Thurra/Bonya for this project. One of the female interviewees normally resides at Akarnenhe Well on the former Atula Pastoral Lease, which is now held by the Atnetye Aboriginal Land Trust. In addition, I conducted a phone interview with a spokesperson for the Aboriginal owned Apiwentye Pastoral Company, which runs a cattle operation on the Atnetye area. I also interviewed the senior traditional owner for the Simpson Desert repeat claim area, which occupies approximately a third of the north Simpson Desert adjacent to the Atnetye area. (This interview took place at the dialysis unit in Alice Springs.) Information based on the latter interviews is presented following the Orrtipa-Thurra/Bonya discussion below. As mentioned already, I also spoke with Don Rowlands, Wangkanguru descendant and traditional owner of the lower Simpson Desert, and Ranger, Simpson Desert Conservation Park in Queensland, concerning the lower Simpson Desert and park. Although that area is in Queensland, I include his perceptions at the end of this section as they concern a similar region.

Orrtipa-Thurra/Bonya

People's past association with camels

None of the interviewees had strong past associations with camels, although older relatives had used camels in earlier times at Huckitta Station and other places in the region (see Atitjere/Harts Range section of this report).

Awareness of feral camel presence

Camels do not enter Orrtipa-Thurra/Bonya community living area, which, according to the interviewees, is 'fenced off from cattle and camels'. The camels are said to come 'from around the Simpson Desert' to obtain water from bores and Lucy and Bonya creeks. Interviewees reported seeing tracks of camels, and sometimes camels, while out hunting, particularly in winter time. For example: 'In the winter time, that's the time we look at places, sacred sites and country. Then we see them.' The closest camels are said to come to the community is to Bonya Bore, which is approximately seven kilometres away. While one interviewee saw 18 camels at Bonya Bore before the last rain, the camel population is apparently kept in check through culling activities carried out by Jervois Station. People reported seeing increasing numbers of camels the closer one came to the Simpson Desert, particularly when visiting Aboriginal homelands such as Baton Hill and Akarnenhe, where 'they come close up – no fence around the community. They [are] coming for water at the horse trough'. One person commented that 'at Atula, at the Bore, you'll see 500 or more. Thousands in the desert'. Another added: 'We go to gidgee trees in the bush when we go for kangaroo hunting, [then] we see camels 20 k from community to south-east.' Camels were also seen on the pastoral stations Elkedra and Tarlton Downs. Camels were said to be increasing in the desert. Numbers sighted varied from less than 10 to hundreds closer to the desert. For example: 'Up to 500. Have just seen trees packed with camels at Atula – tree to tree.'

People's attitudes toward camels varied. As the following examples illustrate, the views of three interviewees indicated concern for the rights of camels as sentient beings: 'Sometimes I worry if they've got no water'; 'They are all right ... They like to walk around, find water and big rain they go back to the desert.' Another held similar views but was concerned about the increasing numbers: 'I don't hate them, poor things. They just are running wild and no one using them. But someone's got to do something about it.' In contrast, two younger men, who had worked as stockmen on Atula, were more concerned about the negative impacts of camels on country than obligations toward camels, which they differentiated from native animals. For example: 'Too many camels, can't do anything. They are ruining fences – sometimes bothering cattle. Camels don't belong here – they're not from here; they're illegal immigrants – time bombs.'

Awareness of the impacts of camels

Environmental dimensions

When asked in the abstract if camels caused any problems, two interviewees replied in the negative, and three in the positive. However, when asked about specific examples of their impact on plants and country, three interviewees provided examples of the damage caused by camels:

- ‘Smashing up fences, smashing water troughs. Flatten the good feed country with feet. Stomping all over cattle food and ruining it. They go through trees – especially wild orange. They make a hell of a lot of mess because they roll around in soakage and sacred site.’
- ‘They break fences and sometimes they die. We see them make a mess at the bore. Getting wild when they fight for girl with bulls.’
- ‘Destroying waterholes and fences, bush tucker, and sacred sites – if they fall in and die. Maybe sacred site tree – they’ll eat that tree too – you can’t tell them not to eat it.’

Two of these interviewees who perceived that camels had a negative impact on the environment participated in CLC workshops and/or discussions concerning feral animals and land management (see camel management section below).

While two others said that they damage stock fences, they did not think that camels were damaging waterholes but ‘just drinking’. They implied that although camels ate bush food such as wild orange (*Capparis mitchellii*) and parakeelya (*Calandrinia balonensis*), they did not consider this to be problematic. For example: ‘They just break down fences when they travel. They also eat wild orange, *atwakeye*, [and] parakeelya, *lyempe-lyempe*. That’s what they live on for water. And also eat gidgee leaves. Not damaging, just eating.’

While three interviewees did not consider that camels caused problems for other animals, two male interviewees thought that they did: ‘They eat kangaroo shade. Where are the kangaroo going to live? Camels pushing them away – destroying shade, shelter, and feeding ground’; ‘Yes, destroying feeding grounds of other animals. Plus use up all the drinking water.’

As indicated earlier, camels have not had a negative impact on infrastructure at Orrtipa-Thurra/Bonya.

Camel management

Only one interviewee, a male, has undertaken activities to reduce camel numbers as follows: ‘Sometimes we use camel meat and poison it for dingo bait. Back in 2002 at Atula, I helped Craig Marrott muster camels. They were taking them back to ... west from Alice.’ As the following examples illustrate, despite the fact that not all the interviewees thought that camels caused significant problems to the environment, when they were asked if they thought camel numbers needed to be controlled everyone said ‘yes’:

- ‘Yes, just lower the numbers; possibly get rid of them.’
- ‘Yes, they are increasing, coming in from the desert.’
- ‘Yes, try and sell the camels.’

All the interviewees were opposed to culling, either aerial or ground, for waste. Their views were based on moral considerations of the right of a camel to life unless it was needed for meat. For example:

I don't like that [culling of camels]. Camels only just travel around. Feel sorry for camels that have been shot – little camels and all. Camels can't even walk around on stations. They just shoot them, poor things. They want a life too. It's all right to kill camels to eat, but not us; we don't.

One person justified his position with reference to moral principles associated with both the Bible and Aboriginal religious law:

It's bad to kill and not eat them. In the Bible it says what you kill you eat. You don't kill for fun – you can get boned. Kangaroo is our Dreaming and culture. We follow Laws through that. You'll get a good hiding if you kill for nothing.

Another person, a male, was concerned about the possibility of an increase in the dingo population, carcasses staking vehicle tyres, and the suffering of camels if they were not killed correctly:

That'll be real bad. When you kill a camel, must take everything with you. Cattle will start licking them, dingoes breeding up, flat tyres from bones. OK to kill for meat. But you have to have a high-powered rifle and you need a licence. We don't want them struggling for life. No muck-around job. And need good knives.

Meat for pet or human consumption was commonly perceived as the best use of camels. One of the young stockmen justified the consumption of camel meat on the basis that it was cleaner and greener:

Use them for pet meat – better than shooting roos. Clothes, shoes. Camels are cleaner meat than bullocks, because eating trees. A bullock can drink its own urine – same as a horse. Camel meat cleaner.

As the following examples indicate, mustering and trucking away camels for meat processing and/or sale was the preferred camel management option; however, people needed assistance with such activities:

- 'If it's going to help out with meat, might as well use them for feed.'
- 'Just come with helicopters and muster them and take them. Mustering camels would be good to do.'
- 'Mustering to sell.'

Two of the interviewees, who had worked as stockmen, had obtained information about camels from CLC as follows:

- 'We were invited to Impu's place [at Undurana] as executive members CLC, but couldn't go. CLC's been working with camels. I hear about them at CLC meetings, through television and from family members from others areas that have camel problems.'
- 'We went down to Alice Springs 2004, to Land Management [meeting], CLC was involved. Bit of a ranger business. Peter Latz talked about damage they do to country. They told me about how they ruin the countryside and erosion. Not on TV or anything else.'

Other interviewees did not have ready access to camel management information.

Apiwentye Pastoral Company, formerly Atula station, now Aboriginal freehold land

Awareness of feral camel presence

According to the interviewee, the population of camels on Atula waxed and waned, depending on the season. Prior to the recent spell of dry years, they were usually seen in the cooler months, during the mating season. However 'the summer rains aren't reliable any more; with the dry and different rains patterns, it's changed'. As a result camels are now often seen at other times – sometimes once a week but on average once a fortnight. While the number of camels sighted varies, it is usually less than ten. While noting that camels tend to follow the course of the Plenty River the interviewee said: 'You can't predict where they'll be, they are highly mobile'.

Awareness of the impacts of camels

The interviewee observed that camels are reducing the availability of food for other animals and stealing their water. They also 'use the lick blocks, which are used to help cattle digest dry feed. That is an expense.' She commented that feral camels:

'Ruin troughs and do quite a bit of fence damage, you mend it one day and then need to go back again [i.e. soon after]. It doesn't take more than three to make a mess of things, especially in the dry times. The top feed is taking a thrashing. At one particular bore where

there were a large number, they completely flattened the feed on the ground. They are running amok through the fragile lands. A bull camel in season is unpredictable, mad as a two bob watch. The men in the stock camp get edgy when there are any around'.

Camel management

Some limited camel management actions are undertaken at Atula. The interviewee said that several years ago, when feral camels were causing significant problems, the pastoral company asked a pastoralist who had portable yards and trucks to take as many camels away as he could. This reduced the number for a period. As well, the manager and stockmen occasionally kill a camel for pet meat and human consumption. The interviewee commented that, while camels were once of use, there was little interest in them anymore, from the general public, or about the damage they caused to the land, because 'there was no money in it'. She said that 'what everybody would like is if camels could be used', but failing that 'something had to be done' to reduce the numbers. Culling away from the homestead and stations was an acceptable camel management option, if a commercial solution such as live removal for sale was not feasible. Concern was expressed about the possibility of unpleasant smells emanating from rotting carcasses if camels were killed near human habitation and also about the way culling was to be carried out. Negative media coverage of horses being shot indiscriminately (elsewhere) from helicopters and allowed to suffer had raised awareness about culling methods; it was stressed that shooting should be carried out cleanly and quickly.

Simpson Desert repeat claim area

The senior traditional owner who was interviewed in relation to this area is also affiliated with Loves Creek PL. His outstation, Uleperte, is located just east of the Numery boundary on Illogwa Creek. In relation to the question of camel presence he commented, 'Camels? Don't mention it. There are a lot of camels, too many, they are destroying the land and they break down the fences.' He is worried that about camel damage to his outstation: 'If they come for water they might break the solar bore down. I need a strong high fence.' With the assistance of CLC Land Assessment and Planning Unit, who helped obtain funding, he has cleaned and fenced rockholes and springs in his country in order to 'keep the scrub bulls [feral cattle] out' (see also Mahney 2002, pp. 122–128). He commented that 'They can make a mess outside but not the main springs'. He expressed concern about feral camel damage particularly if they increase in numbers and it is dry, when they are more likely to have an impact on the natural waters.

The interviewee said that bull camels in season affected his use of country: 'When it's cold season you can't go hunting anywhere. You're only safe when you're in the car. You can't camp out. They can easily lay on top of you and kill you just like that at night time. Got to be careful when you drive; very dangerous at night, well, even a day trip: they come out of nowhere from the scrub.' He explained that bull camels usually have a group of female camels, which he described in old stockman's terms as 'a plant, just like a stallion; same thing. There are hundreds of camels in the desert.'

Apart from the land management activities mentioned earlier, no other activities are undertaken to reduce the impact of camels by the interviewee. He said that he needed assistance to undertake such activities; for example, he is currently without transport. He was generally opposed to culling camels, particularly if there were other options such as live removal, but at the same time accepted that it was sometimes necessary. He said that in consultation with CLC Land Management Unit the traditional owners of Loves Creek (of which he is one) had recently approved a cull of approximately 1500 camels because there were too many for the land: 'they were too crowded', he said. However, as the following statement indicates, his preferred camel management strategy was live removal: 'We just can't shoot them; we don't like to do that. We want to sell them away. What I would like is to see them mustered up and trucked away.' When I remarked that there might be a problem with accessing camels in the desert because of the lack of roads he responded: 'We could bring camels into Numery Station and use portable yards'. He had worked on stations from Loves Creek, to Numery 'right down to Queensland'

and the experience had left its mark; his memories of being a stockman in earlier times were positive, clearly influencing his perspective on camel work: It is ‘in the line of [similar to] cattle work and easy to follow [understand].’

Lower Simpson Desert

According to Don Rowlands, it is mainly during drought conditions that larger numbers of feral camels migrate into the south-eastern Simpson Desert region. On a recent fly-over of part of the area in a small airplane coming from Birdsville³² he counted approximately 30 feral camels, most of which were on private property on the edge of the desert. It was his perception that the feral camel population was denser on the NT and SA side of the Simpson. Don’s perceptions of the negative impacts of camels were as follows:

No doubt, they do damage country, squash scrub and vegetation. They roll on the grass and break it down. If they are in big mobs it would be a concern. They are top feeders and can eat out bird nests and shade for animals. They are a threat to the cultural environment. Potentially a danger to sacred sites. I know if they are squeezed into an area and water is scarce, they’ll do a lot of damage

At this point in time feral camels are not a major concern for him and he has not undertaken any camel management activities. Although Don said that he accepted the need for culling when camels were in large numbers, he thought the preferred management strategy for most Aboriginal people associated with the area would be live removal, using helicopters to muster the animals, and/or mobile pet meat operations.

1.3.12 Atitjere/Harts Range

Background

Harts Range, also known as Atitjere, is located approximately 215 kilometres north-east of Alice Springs. It is traditionally associated with Eastern Arrernte people. The Atitjere/Harts Range community is located within an excision of 220 hectares within the Mt Riddock Pastoral Lease. Some members of the community live nearby at the one square kilometre Aboriginal freehold blocks of land at Spotted Tiger Bore and Foxalls Well. While Eastern Arrernte is the main language, the closely related dialects of Akarre (also known as Akarrwelenye) and Akityarre, the Arrernte languages Alyawarre, and English may also be heard. The population is approximately 250.

People’s past association with camels

There are few camels in the Atitjere/Harts Range region at present. However, this was not always the case, and some older people who worked on the Harts Range mica mines have a strong historical association with camels. Aboriginal people and Italians used camels at the mica mines in the Harts Range and Plenty River area to cart water, food, and mica during World War II, when the mica fields were the largest in the world (Kimber 1986, pp. 125–9; Mr Justice Olney 1992, p. 26). The mica was used for electrical equipment such as radar and radio components (Kimber 1986, p. 126). Today, photographs of this earlier mining period are displayed in the Arts Centre, which is a tourist attraction. One well-known cameleer of Aboriginal-European descent was the bushman Walter Smith, now deceased, who kept his working camels in the area until 1975. His widow was interviewed for this survey. She recalled riding camels to ration stations to obtain rations in exchange for dingo scalps and semi-precious stones from mines such as Spotted Tiger, Hit and Miss, and Lindsay:

Used to ride camels, quiet ones. We had three camels; rode to Atula to Plenty to get rations. Jackie Ewes gave me rations at Huckitta Station. Camels called Darky, Billy, and Tommy. Good ones. Riding camels. Proper nice ones. We used to ride and get dingo scalps. My husband was Walter Smith. We lived at Bob Well. We got garnet, amethyst, mica, and dingo

³² The trip was undertaken with pilot and linguist, David Nash, just prior to a camel expedition with linguist, Louise Hercus, and others in mid-2008.

scalps. We rode camels all the time. We got the camels from Undoolya Station, two riding camels. One for swag, boot, everything, and for flour. They died. Two died and one young one went bush (see also Kimber 1986, pp.37–8, 87, 94 for references to the camels named).

Two younger interviewees, a husband and wife, had worked with camels in the tourist industry on and off for some years. They had worked at the Camel Farm at Stuart Well, south of Alice Springs. The man described his job as follows: ‘I took tourists out for hour rides on camels. Then on safari for a week with other workers. It was all right. I worked for two years – five months in each year.’ The female interviewee added: ‘We worked with tourists, lead them out on a camel and tell them how to saddle them. We’d wash them, feed them. At five o’clock we’d finish our work. The next day we’d saddle them up and take them with four or five adults to Rainbow Valley. They rode them. We rode them also. We’d go past Orange Creek station to ... Rainbow Valley.’ There are three pet camels at a nearby outstation.

Awareness of feral camel presence

There are no camels at Atitjere/Harts Range; however, one interviewee reported that ‘last winter they came around the back of the range, behind the community. I was out hunting and saw the tracks’. People mostly saw camels during winter when they were travelling and hunting to the east of Atitjere/Harts Range. They were seen along fence lines on pastoral stations such as Jinka and Tarlton Downs and in areas on the edge of the Simpson Desert; for example, on Atula Station, which is Aboriginal freehold land and has a cattle operation: ‘Winter time saw a hundred at Huckitta once; couple of camels at Atula; a few around Ambalindum. Winter time they come up in from the desert.’ Another person recalled seeing camels ‘this side of Bonya, over fifty. A while back saw them on Atula fence boundary and then day after saw they’d been shot. A few years ago on the road from Tobermorey saw about fifty’. As indicated in the earlier quote, some of the pastoralists in the region periodically cull the camels on their properties. Usually the camels number less than 10; however, upwards of 50–100 were spotted closer to the Simpson Desert. Camels were said to be increasing throughout the wider region, with most people observing that in comparison to earlier days there were now too many.

People’s views on camels varied from like to dislike and mere tolerance. Some interviewees reported being scared of bull camels in season and lighting fires to keep them away. Others tolerated their presence: ‘They don’t bother me, they don’t eat grass only trees,’; ‘I reckon they’re all right. They cause no harm, leave them be. If you harm them and play around with them, they’ll get vicious. Leave them be until they have a plan to take them away.’ Another said: ‘Let them be. Tourists take photos of them. The little ones [i.e. children] get excited to see other little camels – like different tribes.’ One middle-aged man, a traditional owner, council member, and CLC delegate, expressed serious concern about camel impacts (see below), stating that ‘camels don’t belong to Aboriginal country – they just brought them for exploration days’.

Awareness of impacts of camels

Environmental dimensions

All interviewees said that camels did not cause problems at Atitjere/Harts Range, but were aware that they did in other areas. For example, some of the male interviewees who had worked as stockmen observed that camels affected cattle operations negatively:

- ‘Breaking down fences, especially at Atula station. Cutting through fences.’
- ‘Through feeding. Taking over the country, depriving cattle agistment areas.’
- ‘The bull camels fight and cause mischief for bullocks.’
- ‘They flatten the fences. I used to work at Huckitta Station. They’d flatten the fence down every week. Damaging country for station owners.’
- ‘Breaking into fences; knocking down station owners’ fence.’

Some male and female interviewees also commented that large numbers of camels can have negative impacts on country. For example, the middle-aged man who was a CLC delegate and had travelled to other regions for CLC meetings stated that ‘they just destroying country and most of our waterholes and springs and soakages. I see that happening at Ilpilli between Kintore and Mt Liebig’. He also said that camels could negatively impact sacred sites: ‘Yes. I hear a lot at Mutitjulu way, all around Papunya. Camels are damaging sacred site.’ A woman echoed this sentiment independently: ‘Yes, they might damage sacred sites.’

Other interviewees observed that large numbers of camels can have a negative impact on the environment as follows:

- ‘They knock boundary fences in. It’s OK if there are a few but when there are heaps they really strip the country.’
- ‘Knock ’em fence. Eat bush tucker. [Other than that] I don’t know.’
- ‘Bull camels fighting, going after lot of girls. Proper cheeky ones, they spit at you.’
- ‘They break down trees, wild oranges.’
- ‘Bean trees – at Tarlton Downs they’ve eaten a lot.’
- ‘Trees – they knock a lot of trees down.’

However, one person thought that camels had little or no impact on country: ‘They don’t damage waterholes – just looking for water.’ Apart from eating bullocks’ grazing land, people had not observed camels causing problems for other animals in the region, as the following examples illustrate: ‘Maybe they get cheeky for them. I don’t know’; ‘Some of the other animals have their own habitat and camels their area and habitat.’ No damage from camels was reported to have occurred at Atitjere/Harts Range.

Camel management

As there are no camels at Atitjere/Harts Range, no camel management activities are undertaken; there are no camel yards or facilities to load camels, and no one had been involved in selling camels. In relation to how much people thought a camel could sell for at market, four people said they did not know, one suggested between \$200 and \$300, and two others thought \$500, depending on the market and condition of the camel.

Most interviewees thought that camel numbers should be reduced in areas where there are large numbers. Preferred camel management options included mustering and trucking camels for sale. One person commented: ‘Yes, take them away. Too many camels now. They might kill people.’ However, with the exception of one person who said that it was acceptable to cull camels because ‘camels come from a long way – South Australia; they don’t belong here’, everyone else interviewed was opposed to the culling of camels. Their reasons included: past associations with camels, folklore concerning the drying of country following unwarranted killing, concern about possible increased numbers of dingoes and feral animals such as cats, and concern about dead carcasses littering the country. Examples of responses include:

- ‘Not shooting them; I don’t like it at all. I’ve been working with them and I feel a bit sorry for them. If they want to get rid of them, send them overseas.’
- ‘At Atula and Jerois they shoot them. I seen 20 or more. Someone with a helicopter has shot them. When you shoot a camel or donkey, you don’t get any rain. Why is that? I don’t know. You know at Jerois they shoot camels and they don’t get any rain. It’s still dry. At Huckitta I told ... “Don’t shoot any donkeys, you don’t get rain.” When you shoot camels – a dry place, rain don’t go there.’
- ‘Some of the station owners trying to get rid of them. But they should ask traditional owners. I don’t like to see people kill camels because it’s a bit sad. I like to let them free.’

- ‘No good shooting camels out in the country, because not good to leave them die on the ground – cats and dingoes breed up. Not real good sight when you see them on the ground dead. A lot of our people think best to use camels for meat, not shooting for waste.’

Most people said that camels should be used for meat, two people stating that they could be used for products such as clothes and shoes. For example, one person said: ‘Meat, also other things, leather goods, clothes – depending on quality [of camel]. They should be mustered up ... Camels should go to meat market. Aboriginals ate camels in the past.’ The person who made the previous quote also mentioned the live export trade, stating that ‘some should be given to Afghanistan, the real owners, because they’ve got breeding camels’.

While older people were not interested in the government helping with camel management, and another did not see the need in the Atitjere/Harts Range area given that there are presently no camels, two younger people, a man and a woman, who had worked in camel tourism, were interested in receiving assistance to set up camel tourism enterprises. For example, the female interviewee said:

My husband and I are thinking about getting a camel farm. We know how to make them quiet, put the nosepeg in. But we need help to be able to do this: money, jobs, equipment; motorbike to muster them up and ropes. Others can be trucked and taken away. We’d like to grow some up and train them to be quiet to work for tourists. We know how to look after them.

For the most part, people obtained information from CLC and by word-of-mouth.

Appendix 2: Focus questions for survey with local Aboriginal communities

Interview Time: _____ hours _____ / _____ / _____

Interviewee information

- **Interviewee: Name:** _____ **Sex:** Male Female
Age: Old (60 plus), Middle Aged (40–60), Young (15–25) (25–40)
- Community: Name: _____
- Jurisdiction: WA, SA, NT, Qld

Background (relevant biography and history)

- How long have you lived here in this community?
- Where did you grow up?
- Have you had much to do with camels when you were growing up or later?
- What about your parents?
- Have you worked with cattle or other animals?
- Education and literacy level:

Education	Primary school	Secondary school	Tertiary school	Other
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- Current and past employment:

Subject area 1: Awareness of feral camel presence

- Do you know camels? No Yes
- Do you have feral camels on land surrounding your community? **YES** **NO**

If yes:

- How close in? How fresh are the tracks?
- How long have camels been coming near the community? (Months/years)
- Are the numbers of camels coming in increasing? **YES** **NO**

If yes:

- How often did you see feral camels in the past two years?
More than once a week; once a week; monthly; a couple of times every year; every so often
- What is the usual number that you see?
Less than 10, 10–50, 50–100, 100–500, >500

What is the biggest group of camels you have seen in the past two years?	>100	100–50	50–20	20–10	<10
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- Where is your traditional country?
- Is it your FF? MF? Other
- Camel distribution: Where do you see most camels?
- What do you think/feel about wild/feral camels?

Subject area 2: Awareness of negative impacts

- Do wild/feral camels cause any problems? **YES** **NO**

If yes:

- What about if there are a lot of camels?
- What sort of problems do they cause?
(e.g. damage to houses; damage to land; damage to rockholes; damage to sacred sites; damage to bush tucker resources)
- Have you noticed that they eat/damage any particular type of trees or plants?
- How do they cause damage (e.g. by eating, tearing, stamping)?
- Any stories about camels and problems?
- Do you think that feral camels cause a problem for other animals? **WHY?**
- Do you think that feral camels cause a problem for country? /Are they bad for country? **WHY?**
- Do you think that feral camels cause a problem for your community? **WHY?**

Subject area 3: Camel management

- Do you do anything to reduce feral camel numbers and/or impacts (e.g. muster and sell, hunt for food, shoot to waste, fencing)? **YES** **NO**

If yes: What and where and when?

- Who else was involved in these activities?
- Did you get paid for these activities and how much?
- Who paid you?
- What do you think camels can be used for? (i.e. What kind of things can you make out of them or do with them?)
- Have you ever been involved in selling camels?
- What do you think about selling camels to make money?
- How much do you think camels can sell for?
- Do you have any yards to hold wild camels that are mustered?
- Do you have any facilities to load camels onto trucks?
- What do you think should be done about camels/with camels?
- Do you think they need to control camel numbers?
- What do you feel about shooting camels and leaving them lie in the bush? (Consider: Bad; You can on your land but I won't; OK for me on my land; I will help you do it on my land.)
- Why do you feel this?
- Would you like help from government or other groups to manage the camels in your area?
YES **NO**

If yes:

- What kinds of management activities would you like?
- How do you get information to assist you with camel management (e.g. TV, print, land management organisations, word of mouth)?

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