

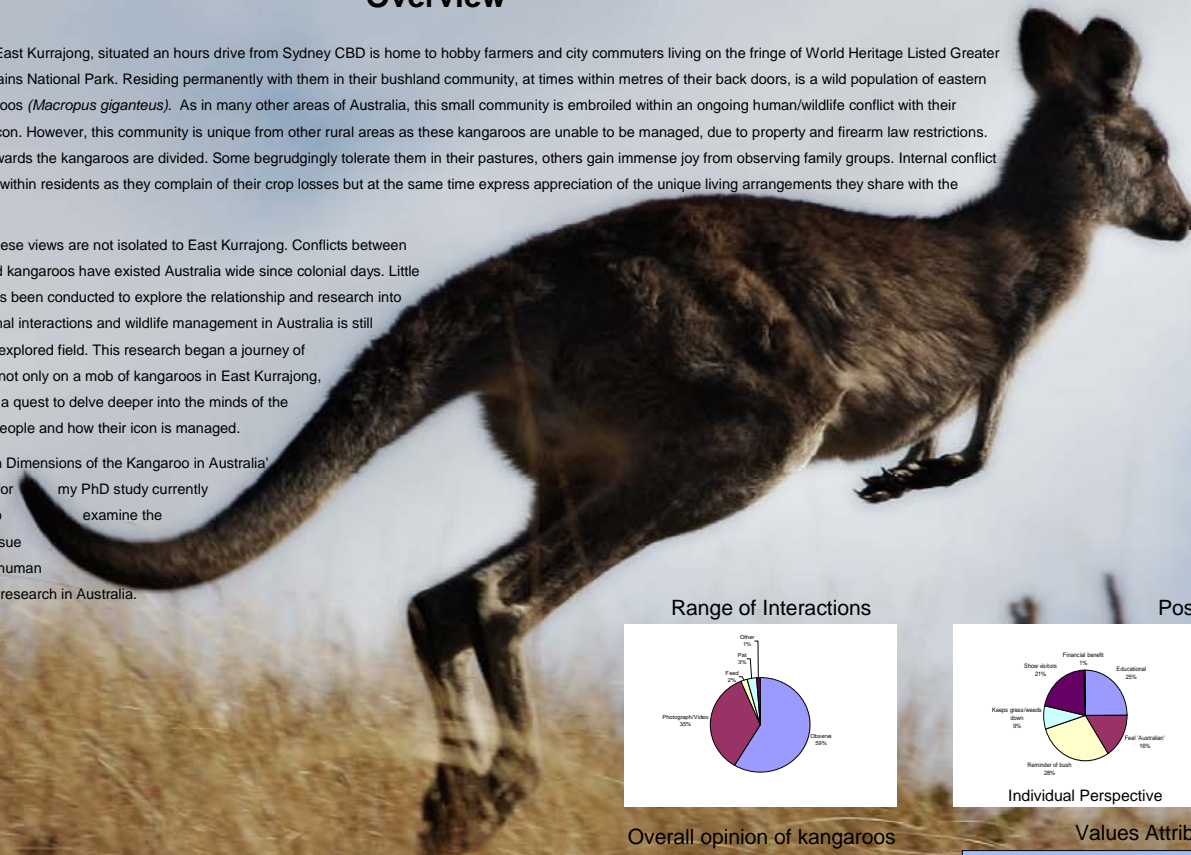
The Nature of Human/Wildlife Interactions: A Case Study of Eastern grey kangaroos (*Macropus giganteus*) in the Hawkesbury, NSW, Australia

Overview

Semi-rural East Kurrajong, situated an hours drive from Sydney CBD is home to hobby farmers and city commuters living on the fringe of World Heritage Listed Greater Blue Mountains National Park. Residing permanently with them in their bushland community, at times within metres of their back doors, is a wild population of eastern grey kangaroos (*Macropus giganteus*). As in many other areas of Australia, this small community is embroiled within an ongoing human/wildlife conflict with their Australian icon. However, this community is unique from other rural areas as these kangaroos are unable to be managed, due to property and firearm law restrictions. Feelings towards the kangaroos are divided. Some begrudgingly tolerate them in their pastures, others gain immense joy from observing family groups. Internal conflict even exists within residents as they complain of their crop losses but at the same time express appreciation of the unique living arrangements they share with the kangaroo.

However, these views are not isolated to East Kurrajong. Conflicts between humans and kangaroos have existed Australia wide since colonial days. Little research has been conducted to explore the relationship and research into human/animal interactions and wildlife management in Australia is still a largely unexplored field. This research began a journey of exploration not only on a mob of kangaroos in East Kurrajong, but initiated a quest to delve deeper into the minds of the Australian people and how their icon is managed.

'The Human Dimensions of the Kangaroo in Australia' is the topic for my PhD study currently underway to examine the kangaroo issue and further human dimensions research in Australia.



Research Questions

1. What is the nature of the interaction between resident and kangaroo?
2. What impacts do the kangaroos have on the residents and what values do the kangaroos hold?

Objectives

1. Explore the range of interaction between the kangaroos and residents
2. Investigate the positive and negative impacts of the kangaroos on the residents and the community
3. Explore the tangible and intangible values of the kangaroos to the residents and the community

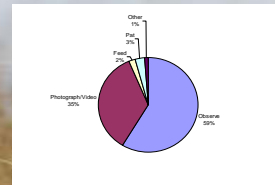
Method

An ethnomethodological approach was used with this research using a hand delivered survey to 100 residents consisting of 57 multiple response questions investigating the interactions between residents and kangaroos, impacts occurring and what value the animals held.

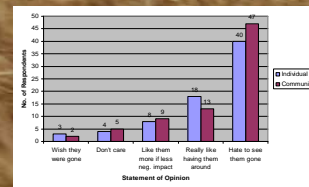
Results

* Response rate: 81% * Sex ratio of respondents: 51% female; 48% male * Land Use: Agricultural 51%; Residential only 50%
The following graphs display resident/kangaroo interactions and positive and negative impacts from individual and community perspectives

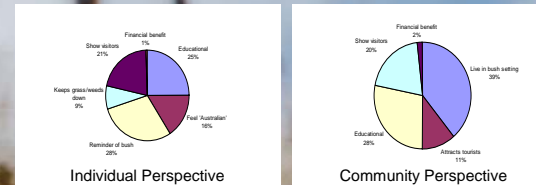
Range of Interactions



Overall opinion of kangaroos



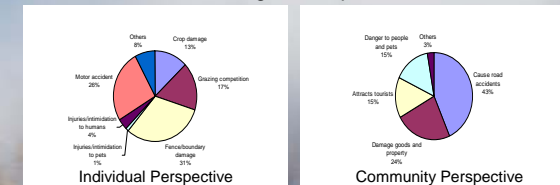
Positive Impacts



Values Attributed to Kangaroos

- **Intangible Values based upon Kellert's Typology of Biophilia Values**
 1. Naturalistic: the desire to connect with nature
 2. Ecologist/Scientific: the kangaroo's place in the ecological environment
 3. Aesthetic: visual appeal of kangaroo due to their close, ongoing presence
 4. Symbolic: a constant reminder of an Australian icon
- **Tangible (economic) Values**
Negative values attributed due to property and vehicle damage, income loss

Negative Impacts



Conclusions

- **Nature of interaction between kangaroos and residents**
Conflict: kangaroo/resident and resident/resident, PLUS appreciation, protection, affection and respect
- **Impacts of kangaroos on residents**
Both negative and positive impacts identified, with positive impacts outweighing the negative Majority of residents would hate to see them gone
- **Values attributed to kangaroos by the residents**
Confirmation of biophilia theory – residents strong desire to connect with nature Kangaroos gave residents a 'sense of place'
Very high level of satisfaction with kangaroos in community

Recommendations

- Communicate the results to the community and use precaution if and when implementing change
- Further research on kangaroo population, damage mitigation, human dimensions of management and ecotourism opportunities

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