WILDLIFE-HUMAN INTERACTIONS

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1 "State of Play"

1.1 What do we know?

The juxtaposition of the extremely rich biodiversity of southeast Queensland with the most rapid urbanisation in Australia has inevitably resulted in massive environmental impacts. However, the proximity of large numbers of people to a rich fauna has also greatly increased wildlife-human interactions, both positive and negative (Jones and Thomas 1998).

Positive interactions

• A large proportion of Brisbane householders enjoy interacting with native species of wildlife in both houseyards and suburban areas generally (Thomas 2000).

• Most (75%) Brisbane residents attempt to attract certain species to their houseyards; 44% planted vegetation specifically for this purpose (Thomas 2000).

• Many Brisbane residents (about 40% of households) feed wildlife in their houseyards, a participation rate similar to other Australian cities and world-wide (Rollinson, O'Leary and Jones 2003). This is an extremely controversial issue with many arguments both for and against but virtually no relevant research support for most issues. This practice remains a major research priority for this region.

• Viewing and interacting with nature is now regarded as having significant benefits for human wellbeing and health (Maller, Townsend, Brown and St Leger 2002).

Negative interactions/conflicts

• A diverse number of species are involved in negative wildlife-human interactions in south-east Queensland, some of which have developed into significant conflicts. These conflicts may be classified simplistically as follows (with some examples):

(a) Reduction of 'quality of life'
- noise associated with Torresian crow roosts
- defacement of ceilings due to occupation by common brushtail possums
- reduction in numbers of 'preferred' species due to presence of noisy miners

(b) Impact on economic activities
- loss of commercial fruit crops by grey-headed flying fox
- damage to stored items by Torresian crows
- destruction of stock by dingoes/wild dogs

(c) Destruction to property
- damage to gardens and plantings by Australian brush-turkeys

- damage to lawns by bandicoots

(d) Potential or actual danger of injury
- swooping on human intruders by nesting Australian magpies
- dangers associated with the presence of elapid snakes

• Numerous species have greatly increased in numbers recently, some of which are associated with real or perceived conflicts:
- Australian white ibis are associated with an apparent conflict over unwelcome interactions in parklands and picnic areas
- Noisy miners now occupy large areas of parkland and suburbia to the exclusion of other native species
- Torresian crows are now ubiquitous throughout urban areas in southeast Queensland and are frequently implicated (without evidence) in the decline of smaller native birds. The noise associated with urban crow roosts is also the cause of large numbers of complaints (Sinden 2002).

• Complaints to agencies and relevant organisations have increased steadily over the past decade. This increase relates both to the greater number of key species present in the area, and to a possible reduction in tolerance by individuals over negative interactions.

• Management of wildlife management conflicts in urban environments has becomes significantly problematic over the last decade due to a range of issues including:
- lack of community support for traditional techniques now regarded as inhumane
- lack of ecological and behavioural understanding of certain phenomena
- lack of relevant information on many urban-dwelling species
- increased scrutiny of management actions by the community
- legislation that prevents traditional methods from being used

• Recent appreciation of the importance of incorporating community views and values into the process of developing management plans for managing urban wildlife management issues: the emergence of the 'human dimension'

1.2 Current Issues/Knowledge Gaps

• We need to understand much more about:
- Implications of wildlife feeding in suburban areas
- Reasons for the dramatic increases in numbers of certain species
- Actual levels of impact on native species of super-abundant species such as Torresian crows, Australian white ibis, rainbow lorikeets, common brushtail possums
- Levels of community support for possible management actions of certain natives species implicated in loss of biodiversity (eg noisy miner)
- Technical assessments of effectiveness of a range of management techniques

1.3 What is accessible?

• Considerable information on similar issues from North America
• Extensive research on a few specific issues such as aggressive Australian magpies
• Many agency publications providing 'basic' information on most species of relevance

1.4 What is not so easily accessible?

• Information on many relevant topics in unpublished university theses and agency reports
• Reliable information on management actions applicable to most specific conflicts
• Accurate information associated with the human dimensions of most wildlife-human conflicts in this region

1.5 People involved in wildlife-human interactions

• University-based research groups (eg Suburban Wildlife Research Group, Griffith University; similar groups and individuals at University of Queensland, Deakin University, Wollongong University etc.)
• Specific organisations and research projects such as Australian Research Centre for Urban Ecology (links from www.rbg.vic.gov.au) and Birds in Backyards (Birds Australia)

2 Information Sources

2.1 Documents

Overviews

Conover, M. 2002. *Resolving Human-Wildlife Conflicts.* Lewis, New York.

Hadidian, J., Hodge, G. R. and Grandy, J. W. 1997. *Wild Neighbors: The Human Approach to Living with Wildlife*. Fulcrum, Colorado.

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Sinden, K. E. 2002. *Synanthropy of Torresian Crows Corvus orru in the Greater Brisbane Region: Abundance, Foraging and Conflicts.* Honours Thesis, Griffith University.

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The 'Human Dimension' of urban wildlife management

Decker, D. J. and Chase, L. C. 1997. Human dimensions of living with wildlife – a management challenge for the 21st century. *Wildlife Society Bulletin* 25(4): 788-795.

Dolins, F. L. 1999. *Attitudes to Animals: Views in Animal Welfare*. Cambridge University Press, Cambridge.

Jones, D. N., Enck, J. W., Siemer, W. F., Decker, D. J. and Brown, T. L. 1998. *An Introduction to Human Dimensions of Wildlife Management: Taking the North American Experience to Australia.* Human Dimensions Research Unit Series No. 98-7, Cornell University.

Rohde, C. L. E. and Kendle, A. D. 1994. *Human Well-being, Natural landscapes and Wildlife in Urban Areas: A Review.* English Nature Science No. 22, University of Reading, U.K.

2.2 Websites

• Australian Research Centre for Urban Ecology: www.rbg.vic.gov.au/biodiversity/urbanecology.html
• The Fund for Animals (USA): www.fund.org
• Urban Wildlife Resources (USA): www.erols.com/urbanwildlife
• Wildlife-human interactions in North American National Parks: www.nps.gov/socialscience/waso/SSRR.6.pdf
• Government of British Columbia: wlapwww.gov.bc.ca/eeeb/info
• Virginia College of Natural Resources (USA): www.cnr.vt.edu/fisheries/wildhuman.htm
• Safariweb (East Africa): www.safariweb.com/kwild/wildlife.htm
• Ohio Wildlife Centre (USA): www.ohiowildlifecentre.org
• National Bird Feeding Society (USA): www.birdfeeding.org
• Baltimore Bird Club: baltimorebirdclub.org