Research

Urban wildlife questions put residents in the picture

A recent community survey about wildlife in 38 urban bushland fragments in Brisbane has yielded some interesting findings: a high appreciation and tolerance for wildlife – including 'nuisance' species – among neighbouring residents; a wealth of local knowledge; and a need for further education. The results provide insights into the value of community knowledge and opinion in understanding the dynamics of human–wildlife interactions and how best to manage these.

Survey author Dr Sean FitzGibbon, of the University of Queensland, says community surveys are a useful adjunct to traditional wildlife survey techniques, such as trapping and tagging, as they draw on residents' historical knowledge, can highlight the presence of animals missed by traditional methods and provide a way of incorporating public opinion into management decisions.

'The aim of this survey was to employ community knowledge of wildlife to examine the abundance and distribution of bandicoots and other species of interest in Brisbane's urban bushland fragments, and to gain insights into how these may have changed over the past 30–45 years,' FitzGibbon says.

'We also wanted to identify community attitudes to wildlife, particularly any human–wildlife conflicts, so as to enhance future management of wildlife and habitats in urban Brisbane. Politicians, wildlife agencies and urban planners increasingly recognise that while it may complicate the decision-making process, you get a better outcome if you consult the community and incorporate public opinion into management decisions.'

FitzGibbon's survey was distributed to 300 households adjacent to remnant bushland of varying size (1–350 ha) and structure – ranging from intact native forest to weed-infested mosaics with sparse native vegetation. The survey consisted of 10 multiple-choice and three short answer questions, inquiring after the presence of native mammals, whether residents kept a cat or dog, whether they liked or disliked particular animals, their views on conserving the nearby bushland and their



A backyard Blue-tongued Lizard. Most people on the urban fringe enjoy or easily accept their interaction with wildlife. Tom Brown

'Lack of habitat and habitat connectivity are the biggest issues facing urban wildlife.'

knowledge of animals that may have declined or disappeared.

Fifty-seven per cent of the surveys (172) were returned, demonstrating strong community interest and concern for wildlife. The surveys produced 768 records of 83 animal species, dominated by birds and mammals, while several historical records provided evidence of recent local extinctions – information that could not have been obtained through traditional methods.

The most surprising outcome for FitzGibbon, however, was that 97 per cent of respondents appreciated and were tolerant of wildlife. But their attitude is perhaps represented by a resident quoted as saying: 'If one chooses to live near wildlife then one has to make allowances for any inconveniences they cause.'

These inconveniences include bandicoots digging holes in lawns, brush turkeys scattering garden mulch, fruit bats raiding fruit trees and noisy possums on the roof. 'There are a number of common human–wildlife conflicts that are important management issues, but we received only four complaints about possums and one about magpies, which surprised me,' FitzGibbon says.

While this bodes well for public involvement in the protection of these and other species, FitzGibbon says public education is necessary to ensure this. For example, despite the high level of appreciation and knowledge of wildlife, 32 per cent of cat owners allowed their cats to roam at night – a practice known to negatively impact small- to medium-sized ground-dwelling animals such as bandicoots.

Human activities, such as dumping rubbish and grass clippings (which spread weeds), are also a problem, as are 'edge effects' – the disturbance that penetrates bushland 50–100 m beyond a house or development, reducing the amount and suitability of habitat available for wildlife.

'Lack of habitat and habitat connectivity are the biggest issues facing urban wildlife. To manage this we need to increase people's awareness of the issues and look at ways to improve urban design and how we interact with our greenspaces,' FitzGibbon says.

Funding is now being sought from the federal government to investigate the effectiveness of incorporating environmentally friendly design measures, such as connections between greenspaces and stormwater mitigation measures, into urban design. The project has the support of three local councils (Brisbane, Gold Coast and Redlands), the Queensland Government and the Urban Development Institute of Australia.

FitzGibbon hopes the research will not only aid wildlife and habitat conservation, but that it will stem the trend towards humankind's 'extinction of experience' of the natural world.

'Natural experiences are increasingly absent in young people's urban lives. So managing these areas appropriately will provide that very important connection.'
Wendy Pyper

More information:

Contact:

Sean FitzGibbon: s.fitzgibbon@uq.edu.au

FitzGibbon S and Jones D (2006) A community-based wildlife survey: the knowledge and attitudes of residents of suburban Brisbane, with a focus on bandicoots. *Wildlife Research* **33**: 233–241.