

## **Background Paper**

### **Responsible pet ownership and the protection of wildlife:**

### **Options for improving the management of cats in the ACT**



A Background Paper prepared for the ACT Responsible Cat Ownership Steering Committee

**By Kathy Eyles, PhD Scholar,  
Fenner School of Environment and Society, ANU**

**and**

**Michael Mulvaney, Senior Environmental Planner,  
Conservation Planning and Research, Environment and Sustainable Development  
Directorate, ACT Government.**



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## **Disclaimer**

The views and opinions expressed in this paper are those of the authors and the Steering Committee and do not necessarily reflect the views of the Australian Capital Territory or indicate its commitment to a particular course of action.

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## **Executive Summary**

Cats are important companion animals in the Australian Capital Territory (ACT) with about a quarter of Canberra households owning a cat. All cat owners are required to de-sex and microchip their cats, and in certain suburbs cats must be contained to the owner's property at all times. Contained cats have a longer life expectancy and improved health as they are less likely to sustain injuries and pick up feline diseases. Importantly, cat containment also benefits the community with less nuisance from roaming cats and predation of native wildlife.

Canberra's bush setting means most residential suburbs are nestled around the nature reserves of Canberra Nature Park. Living so close to nature brings human benefits from everyday interaction with wildlife but also means native wildlife are more vulnerable to predation from roaming domestic cats. The effectiveness of the ACT's existing cat containment laws is limited due the small number of suburbs subject to 24 hour containment and little enforcement where the laws do apply.

This paper explores ways to improve the management of cats in the ACT, building on the existing management regulations. It draws on three key sources to present the case for reform, including:

1. a comparison of domestic cat regulations, education and compliance programs in each state/territory;
2. a survey of community attitudes towards cat ownership and management controls in the ACT; and
3. ecological studies highlighting predation risks for the ACT's woodland and grassland wildlife species.

The comparison of cat management policies and practice elsewhere reveals that most states are moving towards uniform regulations, education and control programs, with the ACT lagging behind on cat registration, stray and feral cat management, community education and compliance. A 2011 ACT community survey suggests these management responses would be supported by Canberra residents, including those most affected by cat ownership controls. The survey reveals strong support from ACT residents for cat containment and also for the introduction of a system of cat registration and control of stray cats in the urban area.

A review of cat predation and tracking studies suggests significant predation risks for threatened and 'of concern' fauna in the ACT, especially day active reptiles, small ground-foraging woodland birds and flightless insects. Domestic cats have been recorded travelling up to 900m into ACT nature reserves and 50% of Canberra suburbs are located within 500m of threatened fauna habitat, and a further 27% within 1000m of threatened fauna habitat.

This paper recommends an integrated package of reforms (regulations, education and stray cat control) in the ACT to address cat welfare, nuisance and predation. The paper also identifies the need for much better alignment between cat containment laws and wildlife conservation objectives and threat management plans.

Nine inter-related actions have been recommended overleaf to improve the management of cats in the ACT with the dual aim of promoting responsible pet ownership and ensuring protection of vulnerable wildlife. The actions include adoption

of a system cat registration, a targeted extension of cat containment, and increased public education, compliance and enforcement.

These actions are designed to enforce and build on existing legislative provisions, bring the ACT in line with cat management legislation and programs in other jurisdictions, and work in concert with the ACT's wildlife conservation policies.

## **Recommendations of the ACT Responsible Cat Ownership Steering Committee**

### *Legislative Reform*

1. Amend the *Domestic Animals Act 2000* to establish a system of cat registration in the ACT (as applies for dogs under Part 2) with a similar fee structure to surrounding NSW shires (See section 10). Fees raised should form part of a dedicated funding program for community education and enforcement of cat management provisions of the legislation and other cat related matters undertaken by Domestic Animal Services (DAS), the Registrar, or their representatives (See also Recs. 6-9 below).
2. Make a declaration pursuant to section 81 of the *Domestic Animals Act 2000* to declare all reserved areas (wilderness area, national park or nature reserve) subject to cat containment, making it an offence for owned cats to roam in reserved areas (See Option d – section 9.1).
3. Amend the *Domestic Animals Act 2000*, to ensure non micro-chipped and/or de-sexed cats are not able to be reclaimed from a shelter without the cat being micro-chipped and de-sexed (See section 9.2).

### *Policy*

4. All new ACT suburbs should be declared cat containment areas prior to housing development (See Option b - section 9.1).
5. Cat containment should be expanded to consolidate existing declarations and targeting identified priority areas for conservation of threatened and significant wildlife species (such as North Gungahlin and parts of Belconnen- See option e - section 9.1 and Figure 4). The intention to apply cat containment should be supported by community education in the affected suburbs (See Rec. 7 below). Transition provisions should be applied to allow existing cat owners a reasonable period of time to comply prior to enforcement of cat containment.

### *Community Education and Enforcement*

6. An ACT wide public education program should be developed to promote responsible cat ownership and underpin the ACT legislation, and rolled out on an ongoing basis (See sections 4.1 and 5.3).
7. The public education campaign should highlight ownership responsibilities under the *Domestic Animals Act 2000* for compulsory de-sexing and micro-chipping of cats and containment in declared areas. The campaign should also target people currently feeding stray cats encouraging them to either, adopt

and care for the cat, or take it to the RSPCA shelter for re-homing (See sections 4.1 and 5.3). Funding implications with regards to potential increase in cats being taken to shelters will need to be considered.

8. A program of compliance and enforcement should be rolled out by DAS in concert with the public education campaign, using a system of (friendly) warnings and information to assist compliance. Offences against the Act to be pursued for repeat offenders (See section 5.1).
9. A government-supervised trapping program (targeting stray and roaming cats) should be implemented in the ACT to underpin cat management and compliance activities. The trapping program must be humane, targeted, and carried out by competent people according to best practice to minimise any welfare impacts on trapped cats (See sections 4.2 and 9.2).

## 1. Glossary of cat terms

For management purposes, cats are described using three categories — domestic, stray and feral — although individual cats may move between these categories within their lifetime (after Sharp and Saunders 2008).

*Domestic cats* - are owned, cared for and live with humans.

*Roaming cats* – are owned domestic cats allowed to roam outside an owner's property

*Stray cats* - are un-owned but at least partly rely on humans for feeding and/or other husbandry. They cannot survive away from humans and live in urban suburbs.

*Feral cats* - survive without any human contact or assistance.

## 2. Overview – Cat management in the ACT

Cats are important companion animals, increasing human well-being and promoting a sense of care and responsibility. Based on a 2011 phone survey of 1277 ACT households, around a quarter of the 130 000 Canberra households own at least one cat and owned cats have an average age of seven years (ACT Government 2011a). This is a similar rate of cat ownership as reported elsewhere in Australia (Baldock *et al.* 2003). About 11% of ACT households own more than one cat, with the total estimated domestic cat population being around 56 000.

While cats have a societal benefit and intrinsic value to their owners, community concerns arise when owned cats are allowed to roam beyond the owner's property and about stray and feral cats. These concerns revolve around three main issues: the wildlife they hunt; the potential for nuisance behaviour; and the relatively poor health and welfare of stray and feral cats. In the 2011 ACT phone survey, 77% of cat owners said that they contained their cat(s), with over half containing their cats only at night.

Predation of native wildlife is of particular concern in the ACT. Most Canberra residents live in close proximity to and value natural bushland and native wildlife (ACT Government 2010). This is a result of Canberra's urban planning, which places the city within a natural bush landscape with residential suburbs nestled around the thirty-four nature reserves that make up Canberra Nature Park. This unique urban structure has created an extensive urban-bush interface of over 1000 km and more urban interface to nature reserves is added every year with new suburbs being developed in Gungahlin and the Molonglo Valley (TAMS 2011).

Collectively these nature reserves protect nationally significant remnants of Yellow Box-Red Gum Grassy Woodlands and Natural Temperate Grasslands which are amongst the most extensively cleared and fragmented vegetation types in Australia. These nationally endangered ecosystems provide habitat for 18 nationally threatened flora and fauna species (ACT Government 2004; ACT Government 2005) and many uncommon and declining species, particularly woodland birds of conservation concern (Bounds *et al.* 2010). Habitat fragmentation also means these component species are more vulnerable due to restricted range, isolated populations and reduced genetic diversity (NRM Ministerial Council 2010). Ecologists argue that biodiversity impact should consider the wide variety of dependent species, such as the woodland bird suite,



and not just focus on impacts on listed threatened species (Possingham *et al.* 2002). The *ACT Nature Conservation Strategy 2013 – 2023* identifies invasive species (weeds and animal pests); overgrazing; drought; inappropriate fire regimes; and land clearing as critical threats to the ACT's biodiversity.

Wildlife conservation is a challenging task in a city where most suburbs are interspersed with endangered vegetation and important wildlife habitat. The ACT Government uses a combination of policies, regulations and community education to manage urban nature reserves and to encourage responsible behaviour by residential neighbours and nature park users.<sup>1</sup> Cat management regulations require compulsory de-sexing and micro-chipping of domestic cats and containment of cats to their owner's property in new suburbs adjacent to nature reserves. It is also illegal to take cats into Canberra's nature reserves.<sup>2</sup> Unlike dog management, there is little enforcement of the regulations that apply to cats.

In 2011, the ACT Government commissioned a community attitudes survey about cat ownership and management to assist the development and implementation of policies related to domestic and stray cats (ACT Government 2011b). The results of this survey provide the impetus to explore opportunities to improve management of domestic cats in Canberra and to tie future action more closely to wildlife conservation objectives.

This paper examines ways to improve the management of pet cats and address their potential predation impact while also ensuring the welfare of all cats (domestic, stray, including semi-owned cats and feral). It proposes measures for minimising predation and other impacts of roaming and stray cats, while recognising the need to also address other threats to wildlife such as habitat clearing and degradation.

### 3. The impacts of cats on native wildlife

The significance of domestic cat predation on native wildlife is widely debated given difficulties in distinguishing this impact from other threats like habitat loss, disturbance caused by human activities and predation by stray and feral cats. It has also been argued that pet cats prey more heavily on introduced species than native wildlife (Nattras 1992; Fougere 2000).

There is scant empirical evidence about the level or significance of impact of cats on populations of specific prey wildlife (Dickman 1996; DEWHA 2008). Only a handful of Australian studies have assessed the impacts on prey species and small mammals in particular (Dufty 1994; Scott *et al.* 1999; Banks 2004; Lilith 2007). Lilith studied cat predation of native mammals in bushland reserves adjoining urban subdivisions in Perth. She found that habitat quality was the main determinant of the richness, diversity and number of small native mammals, not predation by domestic cats.

Cat prey studies do, however, strongly suggest that the impacts on wildlife may be significant at the population and community level, with domestic cats preying on a wide variety of native animals. For example, a survey of responses from 421 cat owners in Adelaide and rural parts of South Australia and Victoria found that about 62% of

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<sup>1</sup> [http://www.tams.act.gov.au/\\_data/assets/pdf\\_file/0005/502169/Explore-Canberra-Parks-and-Recreation-Guide.pdf](http://www.tams.act.gov.au/_data/assets/pdf_file/0005/502169/Explore-Canberra-Parks-and-Recreation-Guide.pdf)

<sup>2</sup> s. 81 *Domestic Animals Act 2000* (ACT)

domestic cats caught birds, 59% caught mammals and 34% caught reptiles, while some caught frogs, insects and spiders (Tim Harding and Associates 2008). The animals caught included both introduced and native species. Koenig *et al.* (2002) reviewed Wildlife Information, Rescue and Education Service (WIRES) injury and mortality statistics for blue-tongued lizards in Sydney and found that domestic cats killed mainly juvenile blue-tongued lizards, especially just after birth in midsummer and that domestic pets were a major threat to lizards in outlying suburbs. Rowley *et al.* (1991) studied a colour-banded population of the splendid fairy-wren (*Malurus splendens*) from 1973 to 1988, including 34 cooperative breeding territorial groups in woodland and heath near Perth, Western Australia. The study found that 65 of the 655 known nests and their contents (i.e. 10%) were destroyed by cats. In another example, over a three year period 37% of 57 radio collared ringtail possums in Manly Dam Reserve were killed by cats (Warringah Shire Council 1998).

The potential toll on wildlife is also evident from WIRES statistics for Sydney, which show that cat attack is the most common reason for rescue of injured wildlife (WIRES 2010). The ringtail possum is the most attacked native animal in Sydney with figures for 2005–2006 showing that of 280 animals attacked by cats, 156 were ringtail possums. WIRES statistics over a five year period also reveal that Sydney's bushland interface has the highest cat attack rates, with 1002 cat attacks in the Blue Mountains, 491 cat attacks for the Northern Beaches, and 489 cat attacks on the North Shore.

The RSPCA was able to categorise the cause of injury to 1798 animals brought to its Canberra shelter during 2008. Cats injured 252 (13%) of these animals, compared to 7% by dogs and 27% through collision with a motor vehicle. Animals injured by a cat included 32 species of native bird, two species of bat, two species of lizard and the brushtail possum. The most common animals brought to the shelter with cat injuries were the crested pigeon (64), red wattlebird (21), crimson rosella (20), pee wee (13) and eastern blue-tongued lizard (10). Of the cat-injured animals brought to the shelter, 207 (82%) were native to the Canberra area. The 2012 RSPCA figures record that cat related injuries were recognisable in 5.6% of the 2075 injured animals brought to the shelter, compared to 4.5% with injuries attributable to dog attack and 16.8% injured by cars. In both the 2008 and 2012 figures, the crested pigeon, red wattlebird and crimson rosella accounted for more than 40% of all cat-injured wildlife brought to the shelter. The brushtail possum and blue-tongued lizard comprised more than half of those animals brought to the shelter that had been injured through dog attack.

As pointed out by Tidemann (1994), the effect of domestic cats moving beyond suburban edges into remnant habitat is akin to the effects wrought by a predator newly introduced to an island environment. While the cat is mobile, many of the native fauna species in remnant habitats are relatively immobile and exist in patchily distributed and isolated fragments. Populations have been isolated and reduced largely because of habitat clearance, but domestic cat predation can be the final straw that leads to local extinctions (Preisser *et al.* 2005).

The behaviour of native animals may also change in response to the risk of predation. For example, an animal that perceives a high risk of predation will not stray far from cover, thus limiting foraging and available food resources. Reduced nutrition may impact on the rate of mortality and the number of young that can be successfully raised. In a review of 166 predation research studies across a wide range of taxa, Preisser *et al.* (2005) estimated the non-lethal effects of predation to be greater than the lethal effects. Effects of predator intimidation became more pronounced at higher food chain levels,

rising to 85% of the total predator effect on prey. Effectively, the impact on prey magnifies by 5.6 times the estimate that would be obtained by considering the kill rates of the predators alone. The rate in relation to native wildlife and cat predation is unlikely to be as high as 5.6 as the native wildlife has not evolved with cats and is unlikely to have sophisticated behavioural responses. Nevertheless, it is almost certain that the direct impact of cats on wildlife is greater than just that of the kill and injury rate alone. A discussion of the potential predation threats for Canberra's native wildlife is explored in Section 7.

#### **4. Cat management elsewhere, including preventative management**

State and territory governments in Australia are moving towards uniform legislation and programs to manage cats.

Table 1 sets out the key elements of legislation to manage domestic cats in each state and territory (see also Appendix 1) and also identifies any statewide education programs to encourage responsible ownership and compliance. Most states and territories either support or require de-sexing. De-sexing domestic cats has several significant management advantages as de-sexed cats:

- are less likely to wander, therefore less likely to become lost or injured e.g. hit by a car;
- are less likely to have cat fights and therefore less likely to sustain fight related injuries and diseases such as feline immunodeficiency virus (FIV);
- are less likely to spray and mark their territory;
- can live longer, healthier lives;
- are more affectionate, better companions;
- are less likely to suffer from anti-social behaviour<sup>3</sup>;
- are prevented from displaying undesirable 'on heat' behaviours such as restlessness and being highly vocal; and
- are unable to breed and will not contribute to the pool of unwanted cats.

Table 1 also lists measures to manage the impact of cats on native wildlife using cat curfews and/or declaration of cat management and prohibited areas. These measures are provided under the primary legislation or by the making of local by-laws for cat management at the local government level. The use of planning and development controls to manage cat predation is discussed in section 4.3.

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<sup>3</sup> <http://www.rspca.org.au/campaigns/responsible-pet-ownership/desexing>

**Table 1: State and territory cat management legislation**

State Territory	De-sexing	Registration	Microchip	Cat Curfews or Prohibitions	Community Education
NSW*	No.  Reduced registration fees for de-sexed cats.	Yes.  NSW Companion Animals Register.	Yes.	Cats prohibited in places set aside to protect wildlife.  Local government can make local by-laws relating to curfews.	<i>Responsible Pet Ownership Schools Program</i> for children 5–7 years. (Note: Three year program from 2011 delivered by Bureau of Animal Welfare DPI Victoria). <a href="http://www.pets.nsw.gov.au/">http://www.pets.nsw.gov.au/</a>
Vic.	No.  Reduced registration fees for de-sexed cats.	Yes.  Part of fee goes to <i>Domestic Animal Welfare Fund</i> for public education, research and operation of Bureau of Animal Welfare (DPI).	Yes.	Local government can make local by-laws prohibiting or regulating cats in areas where threatened native fauna is at risk of attack.	<i>Responsible pet ownership</i> education programs for school children and the community via website school materials/visits. <a href="http://www.depi.vic.gov.au/pets/community-and-education/responsible-pet-ownership-for-children">http://www.depi.vic.gov.au/pets/community-and-education/responsible-pet-ownership-for-children</a> 'Who's for cats' campaign. Stray cats: don't just feed, take ownership, or surrender them. <a href="http://www.whosforcats.com.au/">http://www.whosforcats.com.au/</a>
Qld	No.  Ear tattoo when sterilised. Reduced registration fees for de-sexed cats.	Yes.	Yes.	Local government can make local by-laws specifying requirements for cat management.	<i>Cat Smart</i> Responsible ownership radio campaign and materials. <a href="http://test.dsdip.qld.gov.au/laws-and-codes/cat-smart.html">http://test.dsdip.qld.gov.au/laws-and-codes/cat-smart.html</a> <a href="http://www.livingsmartqld.com.au/homes-biodiversity-module/responsible-pet-ownership">http://www.livingsmartqld.com.au/homes-biodiversity-module/responsible-pet-ownership</a>
WA	Yes.	Yes.	Yes.	Local government can make local by-laws about places where cats are prohibited, and where cats are to be confined.	WA Government providing \$3.2m funding to assist local government implement new laws from 2013.
SA	No.	No.	No.	Local government can make by-laws for cat management.  Cats can be seized in remote or fragile areas (reserves, wilderness, and sanctuaries).	<i>Good Cat SA</i> Responsible ownership website. <a href="http://www.goodcatsa.com/">http://www.goodcatsa.com/</a>  <i>Homeless Cats SA</i> campaign. Stray cats: don't just feed, take ownership, or surrender them. <a href="http://homeless.goodcatsa.com/home">http://homeless.goodcatsa.com/home</a>
Tas.	Yes.	No.	Yes.	Councils can declare cat management areas and areas where cats are prohibited.	
ACT	Yes.	No.	Yes.	Cat containment can be declared where there is serious threat to native wildlife.	The ACT has no specific programs, with notification of requirements limited to website and word of mouth information.
NT	No.	No, but by-laws require registration within Darwin and Alice Springs councils.	Yes.	No animals allowed in Jabiru.  Cats at large can be seized in Darwin.	

\* NSW is reviewing its domestic animal laws and programs assisted by the NSW Companion Animals Taskforce. See *Taskforce Report to the Minister for Local Government and the Minister for Primary Industries*, October 2012.

[http://www.dlg.nsw.gov.au/dlg/dlghome/dlg\\_generalindex.asp?sectionid=1&areaindex=CATASK&documenttype=8&mi=9&ml=10](http://www.dlg.nsw.gov.au/dlg/dlghome/dlg_generalindex.asp?sectionid=1&areaindex=CATASK&documenttype=8&mi=9&ml=10)

#### 4.1 Community Education Programs

The importance of community education to encourage responsible pet ownership and to underpin regulatory compliance is recognised by most states and territories (see Table 1). South Australia's responsible pet ownership website 'Good Cat SA' was developed by the SA Dog and Cat Board in conjunction with local councils responsible for administering cat management laws.<sup>4</sup>

Victoria has a long running pet ownership education program for school children and a website for schools and the general community.<sup>5</sup> In 2011, the NSW Government funded a three year Schools Education Program for five to seven year olds to communicate responsible pet ownership at an early age and, by extension, to families. The NSW Program draws on the Victorian model and has an established curriculum and resource package. A team of pet educators visits schools and uses multimedia, role play, songs and stories to support the curriculum (NSW Companion Animal Taskforce 2012).

Victoria and South Australia have also developed education campaigns in collaboration with a broad coalition of stakeholders. In particular, these campaigns target households that feed un-owned cats, encouraging households to take full ownership of the cat(s), or to take them to council pounds or the local vet.<sup>6</sup>

#### 4.2 Managing stray cats

While some states have initiated research into stray cats and community education programs to encourage people to take responsibility for stray cats, most day-to-day management of strays occurs at the municipal level, in partnership with animal welfare organisations.

A number of municipalities in Victoria and elsewhere have successfully established community trapping programs to deal with the nuisance of stray cats, while supporting curfew rules in a humane way cognisant of cat welfare (Baker 2001). Using council supplied cage traps at a small scale in urban neighbourhoods, where residents affected by cat nuisance do the trapping, is a cost effective way to manage stray cats (DEWHA 2008). The City of Casey, in outer Melbourne, provides an example. Casey is the fastest growing municipality in Victoria with over 100 people or about fifteen new families settling in the city every week. The council has local by-laws requiring residents to register, de-sex, microchip and contain cats for 24 hours per day. There is also a significant stray cat population in the area and the council offers a 'cat trap hire program' for residents. When a cat is trapped, the resident contacts the council and an Animal Management Officer (AMO) collects and transports the animal to a holding/pound facility. There are 30 traps cycling through the community with a fourteen day waiting time. Residents can hire traps for one to two weeks. Humane trapping practices are ensured by having residents sign an indemnity form and demonstrate that they fully comprehend trapping instructions and their legal responsibilities. Council AMOs have observed that residents who hire traps are informed and responsible and there have been no reported cruelty incidents. AMOs will not lend traps if they have concerns about the intentions of the hirer. AMOs are on call (24/7) to collect trapped animals and can assist residents with trapping where needed.<sup>7</sup>

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<sup>4</sup> <http://www.goodcatsa.com/>

<sup>5</sup> <http://www.depi.vic.gov.au/pets/community-and-education/responsible-pet-ownership-for-children>

<sup>6</sup> <http://homeless.goodcatsa.com/home> <http://www.whosforcats.com.au/>

<sup>7</sup> Email communication with Local Laws Team, City of Casey 2011 and follow up phone interviews with Team Leader Local Laws, May and July 2012.

Cats trapped by the community comprise approximately 95% of all cats admitted into Casey's pound facility. The remaining 5% are handed in as strays by Casey residents who have not used a trap. As the program puts the onus on residents to collect, set and capture the cats, it results in significant cost savings to Council. The City of Casey has a lower ratio of local laws staff to residents, with approximately 30% less than most other outer metropolitan councils. While the actual dollar savings from community trapping are difficult to quantify, the number of cats trapped by the residents is significant. From 1 January 2011 to 26 September 2011, council AMOs collected 567 cats that were trapped using a council trap.<sup>8</sup>

Local trapping campaigns can however lead to more cats being sent to pounds and fewer being re-housed (Vogler 2011). Of 13 300 cats admitted to South Australian shelters in 2009–10, over 9000 (70%) were euthanased. The South Australian Dog and Cat Board believes this reflects the high number of feral cats being caught. The high euthanasia rate may however, reflect multiple reasons such as old age, ill health, injury, severe aggression or fear. This equates to an average of 25 cats being destroyed each day (Hegarty 2011). In NSW in 2009–2010, 67% of cats arriving at pounds were euthanased, 8% sold, 15% released to an organisation for re-homing, and only 3% were returned to their owners (Department of Local Government 2011).

A study of cat admissions to the three largest animal welfare shelters in Victoria over a 13 month period found that almost 80% of cats admitted to shelters (around 20 000 cats) were not-owned. Of the 20%, or 5000 owned cats that were surrendered, few (1.2%) were registered, and only 7.6% de-sexed. Half of these owned cats came from unwanted pregnancies. Of all cats admitted to the shelters, 63% were euthanased, 28% sold, 4% fostered and less than 4% reclaimed (Marston *et al.* 2006). A bench-marking survey across all Victorian local authorities found that only 11% of impounded cats are claimed (McMurray 2004). Recent work for the RSPCA found that about 60% of cats presented to shelters were un-owned.

In an effort to address high euthanasia and low re-homing rates, animal welfare organisations are increasingly assuming provider roles for the shelter functions of municipal authorities. Australia's largest council, Brisbane City Council, has out-sourced its shelter operations to contain costs, reduce the number of animals euthanased and to increase adoption rates (Vogler 2011). The Western Australian Government considers animal welfare organisations to be key providers of the required pounds/shelters that will be needed to support the new cat legislation (Loney 2012).

### 4.3 Use of planning and development controls

Few states appear to have any direct links between cat regulations and protection of particular native wildlife species. In some states, environmental planning laws are used to impose controls and prohibitions on the ownership of domestic cats, using planning agreements,<sup>9</sup> and/or conditions attached to development consents. In New South Wales, examples are the construction of a domestic cat and dog proof fence along the edge of an urban estate to protect fauna in an adjoining nature reserve (Ballina Shire 2010), and registering an instrument on title to prohibit cats in a residential estate (ERM 2008).

These types of controls are generally proposed as part of a mitigation strategy during environmental assessment of development proposals in areas containing or adjoining

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<sup>8</sup> Ibid

<sup>9</sup> S.173 *Planning and Environment Act 1987* (Vic)



important wildlife habitat. They are often given effect through by-laws set out in a management statement in community or unit title development schemes. Enforcement of by-laws is the responsibility of the community association in such cases.<sup>10</sup>

Applying cat controls on an 'ad-hoc' development site basis means there is less likely to be an explicit link with other landscape conservation measures to protect native wildlife and makes it more difficult to achieve coordinated approaches to manage cat predation.

## 5. How cats are currently managed in the ACT, including stray and domestic cats

### 5.1 Domestic cats

New legislation covering domestic animals was introduced in the ACT in 2000 and amended in 2005 (refer Appendix 1). This provides for compulsory de-sexing of cats, micro-chip identification (from 2005 for residents of Forde and Bonner and from May 2011 for the rest of Canberra), and declared containment of cats where there is a significant threat of predation on native wildlife. To date, 24 hour cat containment has been applied only to new Canberra suburbs adjoining nature reserves. The first areas (declared in 2004) are the suburbs of Forde and Bonner adjoining the nationally significant Mulligans Flat and Goorooyarroo grassy box-gum woodlands in Gungahlin (Stanhope 2005). In 2011, cat containment was declared over six more new suburbs in Gungahlin, north Canberra and the first suburbs in the Molonglo Valley (Corbell 2011), (see Figure 1).

In 2005, the ACT Legislative Assembly Standing Committee on Planning and the Environment recommended that 24 hour cat containment should also be mandatory in the proposed new suburbs of Kenny and Throsby,<sup>11</sup> and in 2008, recommended this be applied to any new residential development bordering the Canberra Nature Park.<sup>12</sup>

A range of anticipated education and enforcement measures to support implementation cat containment in the ACT (Baird *et al.* 2005) have yet to eventuate. The explanatory statement accompanying the 2005 Amendment Bill cited the need for specialist training for rangers and the outfitting of a suitable vehicle for one additional half-time ranger to enforce cat containment (Hargreaves 2005). However, at the time of writing this paper, implementation of cat containment is reliant almost entirely on the voluntary compliance of residents within the declared containment suburbs.

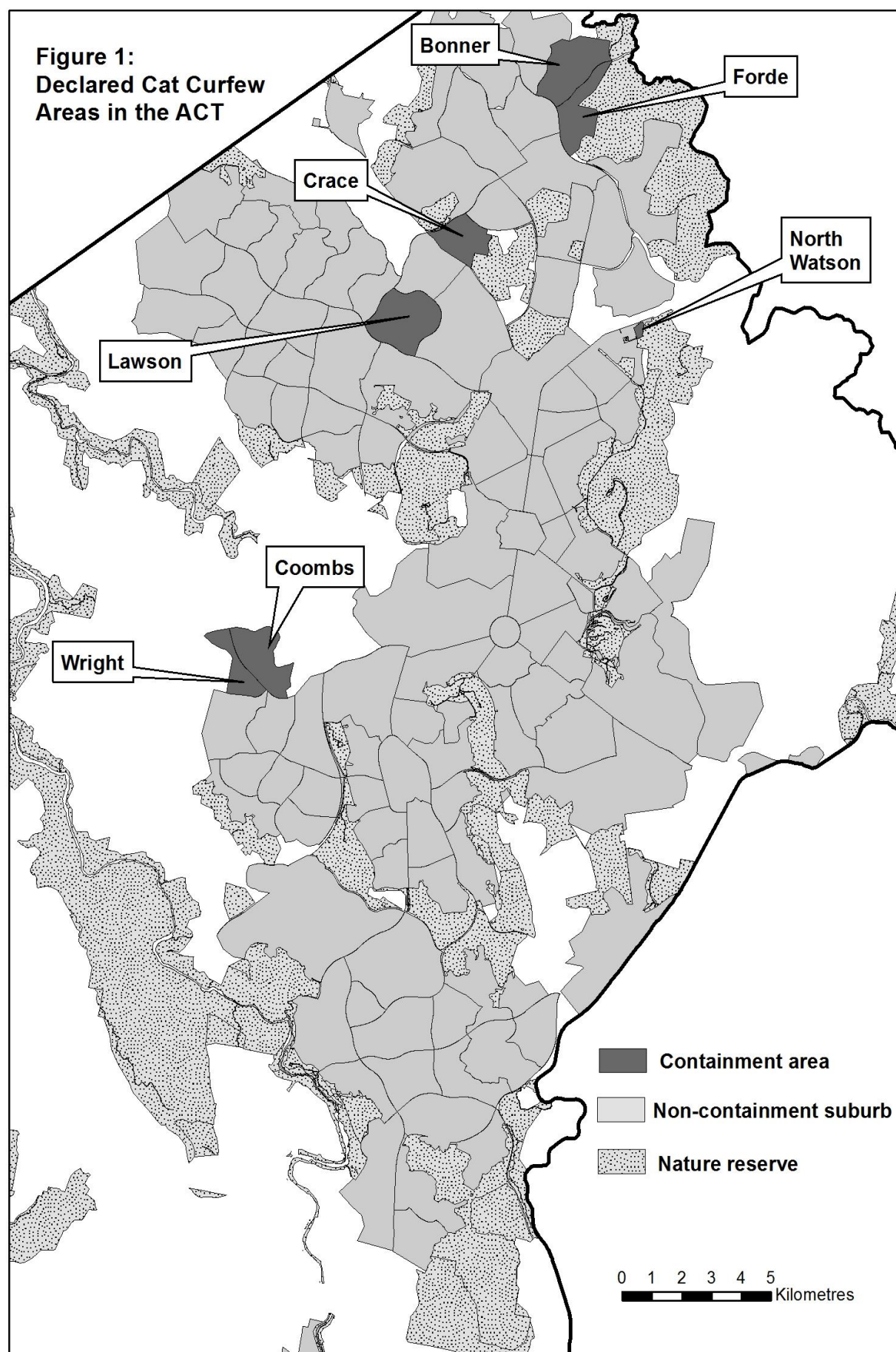
The ACT RSPCA has a program of lending cat traps on request from Canberra householders, who agree to certain conditions about the use of the trap. Traps can also be acquired from hardware stores or the internet and this unsupervised trapping may present risks for cat welfare. RSPCA data indicates that from July 2008 until February 2013, 44 cats or kittens caught within Forde and Bonner have been brought to the RSPCA ACT Shelter. Of these, 15 were owned or lost cats. Eight cats were reclaimed, six from people living in Forde or Bonner, one from Amaroo and another from Franklin. The owners were not fined for breaching the containment laws.<sup>13</sup>

<sup>10</sup> Schedule 3. *Community Land Development Act 1989* (NSW)

<sup>11</sup> Standing Committee on Planning and Environment (2005) Wildlife Corridors and DV231 – East Gungahlin Suburbs of Kenny and Throsby and Goorooyarroo Nature Reserve (recommendation 6).

<sup>12</sup> Standing Committee on Planning and Environment (2008) Variation to the Territory Plan No. 261 – Parts Blocks 2 and 3 and Block 5, Section 75 Watson (recommendation 7).

<sup>13</sup> Statistics on feline intake from Forde and Bonner provided by the ACT RSPCA, June 2013.





## 5.2 Stray and feral cats

The ACT has no formal programs to manage stray cats. A proportion of the uncontained cats in the ACT may become un-owned or stray cats, which rely on humans for food. Stray cats can also establish urban colonies. As breeding occurs and numbers increase, cats may disperse and contribute to the feral cat population.

The stray cat population in the ACT is difficult to estimate. A 2007 survey of 1000 ACT households found that 7% of households fed cats that did not belong to them (Winton Sustainable Research Strategies 2007). The 2011 survey of 1277 ACT households found that 3% of households fed, on average, 1.58 cats that did not belong to them. Assuming that households are feeding separate cats, and that fed cats are not owned cats allowed to roam, the survey response suggests a stray population of about 6000 cats. Each year, RSPCA ACT euthanases around 600 kittens from the stray cat population because health or behavioural issues mean they are not suitable for re-homing. The RSPCA considers that the ACT stray cat population is likely to exceed 25 000.<sup>14</sup> If this is correct, the number of stray cats is roughly equal to that of the roaming domestic cat population.

In 2012, 2261 cats and kittens were taken to the ACT RSPCA shelter. Of these 408 (18%) were feral, 1154 (51%) were strays and 610 (27%) were owned cats. On average it took five days for owned cats and nine days for owned kittens to be reclaimed. Reclaimed felines comprised only 11% of the surrendered animals. On average, cats spent 19 days in the ACT RSPCA shelter and kittens 23 days before an outcome was achieved (reclaimed, adopted, transferred, euthanased, died). On average stray cats and kittens were housed in the shelter for about 35 days. Also, of the cats taken to the RSPCA in 2012, only 23% were de-sexed.<sup>15</sup>

Where feral cats rely on hunting, their population density may be quite low e.g. in the Brindabella Ranges (mountainous western part of the ACT), and a density of 0.2 cats per km<sup>2</sup> has been recorded. However, where food supply is augmented by humans, such as around tip sites, schools or shopping centres, densities can rise dramatically. A density of 19 to 90 feral/stray cats per km<sup>2</sup> was recorded around Canberra tips in the 1990s (Denny and Dickman 2010). In urban Canberra, the feral cat population is likely to be generally at least an order of magnitude less than that of the roaming and stray cat population.

## 5.3 Community education in the ACT

There is no ACT-wide program to educate new cat owners about responsible ownership and management regulations. The RSPCA ACT runs annual education campaigns particularly around kitten season. Information is provided to new owners when they adopt cats from the RSPCA, and the RSPCA also offers free de-sexing of the mother cat when kittens are surrendered (RSPCA 2011). The 2011 ACT community survey revealed a high level of awareness about the risks cats pose to wildlife. Survey results also suggested the need for education about the benefits for the health and life span of cats when they are appropriately contained, as there are some perceptions that containment may be harmful for cats.

There is also a need to provide information about cat containment for the second generation of residents in the containment suburbs once development is complete and there is a turnover of properties. A feature of the marketing of both Forde and Bonner

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<sup>14</sup> Advice from Michael Linke, former CEO, ACT RSPCA.

<sup>15</sup> Statistics on feline intake and outcomes provided by the ACT RSPCA, June 2013.

has been the provision of information for home buyers about the responsibilities of living near nature reserves and about cat containment (ACT Land Development Agency 2010, 2011; Forde Developments 2006, 2007). Cat containment is also notified by way of special conditions in the Contract for Sale of Land in the Molonglo Valley (ACT Land Development Agency 2012). The value of this early education is demonstrated by the ACT community survey results for Forde and Bonner, with surveyed cat owners complying with cat containment, and most surveyed residents displaying high levels of awareness about the laws and the value of containment near nature reserves (ACT Government 2011a). With development at Forde nearing completion and builder sales and property turnover in both Forde and Bonner, there is anecdotal evidence of an increase in the number of pet cats roaming in these suburbs. Lack of notification of home renters may also be an issue. Residents are frustrated that containment is not enforced and this undermines the efforts of existing residents to contain their cats.

The number of ACT households feeding stray cats appears to have dropped (from 7% to 3%) in recent years (Winton Sustainable Research Strategies 2007 and ACT Government 2011a) and is well below the 22% reported in Melbourne (Toukhsati *et al.* 2005). The 2011 ACT survey also found that existing cat owners were much more likely to feed strays than non-owners. This suggests that an education campaign encouraging cat owners to either take full ownership of the stray cat (de-sex, micro-chip, and provide care as required) or take the cat to a shelter for re-homing, is likely to be effective. The campaign could focus on the low life expectancy and poor welfare of stray cats and reinforce that owned, de-sexed and safely contained cats have longer and better lives.

## **6. ACT community attitudes and expectations regarding cat management**

In 2011, the ACT Government commissioned a community attitudes survey about cat ownership and management to assist the development and implementation of policies related to domestic and stray cats (ACT Government 2011a). The Responsible Cat Ownership Steering Committee was formed to design the survey questionnaire. The committee comprised the RSPCA (the peak ACT animal welfare organisation), a doctoral scholar from the Australian National University and officers from ACT domestic animal control, land development and conservation planning agencies. The questionnaire was piloted and refined in conjunction with Micromex Research, which was commissioned by the ACT Government to undertake the survey (see Appendix 2).

During May 2011, 1085 ACT residents were surveyed (including 506 cat owners). In addition, 192 residents of Forde and Bonner were surveyed. These suburbs have been declared cat containment areas since August 2004, but were not actually populated until after 2007, when the first residents moved into Forde. Women made up a larger percentage of overall survey respondents (58% to 42% males). An equal percentage of males and females were surveyed in Forde and Bonner.

Community views about a range of cat management regulations and programs were sought as part of the survey, including options for expanding cat containment, cat registration and management of stray cats, as well as specific questions about ownership and care of domestic cats (ACT Government 2011a).

The survey included:

- a) questions for all respondents relating to:
  - feeding of stray cats;

- impacts of cats not owned by the household; and
- benefits of cat containment.

b) questions specifically for cat owners relating to:

- household ownership of cats;
- containment of cats in the household;
- methods of containment; and
- frequency of injuries to cats.

A number of questions asked the respondents to offer a response to a statement according to their level of agreement or support. This allowed for measurement of either positive or negative responses to statements about possible new measures like:

- introduction of cat registration in the ACT;
- programs to control stray cats;
- extending cat containment in the ACT; and
- management of feral cats.

Residents in Forde and Bonner were also asked about their views and direct experience of the new cat containment regulations.

## 6.1 ACT Community Survey results

The survey suggests that most ACT cat owners are generally responsible. Around 75% of cat owners contain their cat, but half of these only contain their cat at night; 77% of owners stated that their cats were micro-chipped; and 98% of surveyed cat owners said that their cats were de-sexed.

Overall the survey results reveal solid community support for improving the way domestic cats are managed in the ACT, particularly applying 24 hour containment to all new suburbs (65%); support for cat registration (78%) and control of stray cats (84%). A significant number of residents (69%) indicated their willingness to take strays to a shelter as part of a program to manage stray cats.

There was also considerable community support for, and a good understanding of, the benefits of containment for both the community and native wildlife (including among cat owners). In particular, residents of Forde and Bonner (who were at that time, the only households subject to cat containment rules) think cat containment is working well. The success of containment is also evident from the survey data about nuisance cats. Residents outside of Forde and Bonner are five times more likely to have experienced a cat-related nuisance problem. In addition, 76% of Forde and Bonner residents never see a cat not owned by them on their property compared to 18% for residents living elsewhere (ACT Government 2011a).

Of the ACT residents surveyed, 84% believe that measures should be undertaken to control Canberra's stray cat population. While the majority of residents are willing to take stray cats to a shelter, only a small number of respondents said they would be willing to adopt a stray cat. There is moderate support for the ACT Government to operate a cat shelter, similar to the current dog pound.

Residents indicated that the following criteria are of high to very high importance when considering feral cat control methods. The control method should:

- not pose a risk to public safety;

- be effective in reducing the impacts of feral cats;
- not pose a risk to animals other than feral cats; and
- not cause suffering to feral cats.

A link to the survey results on the ACT Government website is provided in Appendix 2.

Support for regulating cats in the urban area of the ACT is consistent with findings from urban communities elsewhere including Victoria (Toukhsati *et al.* 2005) and Western Australia (Lilith *et al.* 2006; Grayson *et al.* 2002). In Western Australia, 84% of public submissions about the proposed cat legislation supported micro-chipping identification; cat registration; and compulsory sterilisation (Department of Local Government 2011).

## 7. The threats to native wildlife from cats in the ACT

Data from local studies and research elsewhere has been reviewed to assess the potential threats of cat predation for Canberra's wildlife, particularly small birds and reptiles.

Canberra is the location of one of the few comprehensive Australian (and international) studies of predation by domestic cats (Barratt 1997a, b). This study found that over 67 species of prey were caught by domestic cats, with small introduced mammals caught most often, followed by birds (27%, of which 14 % were native), native reptiles 7%, native frogs 1%, and native mammals 1%.

Barratt's Canberra study found that seasonal spikes in hunting and variation in cat diet is significant for small native bird species, juvenile birds and reptiles. Mice and rat take was highest in winter and in suburban environments, whereas predation on juvenile birds and reptiles increased from late spring to summer when these species were more abundant and active.

Barratt's study also teases out the spatial effect and interactions of habitat and urban edge for reptiles and birds. Reptiles, while a minor proportion of prey overall, were the most preyed species within 50 m of grassland habitat and accounted for 23% of prey within 50 m of woodland or open forest. Native birds, as prey, increased closer to woodland source habitats. Restriction of movement of cats is likely to diminish predation, particularly in these areas. Domestic cats are generally more active for longer periods in spring and summer which corresponds with the breeding cycle of many prey species (Barratt 1997a; Robertson 1998).

The level of predation on birds and reptiles also confirms that cats were actively hunting during the day, and cats favoured ground-foraging and dwelling species (Barratt 1997b). Birds were caught in the early morning and reptiles in the afternoon. Significantly, reptiles and frogs were the third and fourth most important prey types in all months. The catch of these small prey types may be much higher than that reported by cat owners as smaller animals are more likely to be consumed at place of capture and not brought home (Robertson 1998).

Studies also show that cats are opportunistic hunters which often consume small prey when encountered, taking species in proportion to availability (Turner and Meister 1988; Morgan *et al.* 2009, Van Heezik *et al.* 2010). A New Zealand study notes that invertebrates are frequently hunted but under-reported, as cats ingest on encounter

(Van Heezik *et al.* 2010). The study cautions that the impact on invertebrates may be significant and requires investigation. The same study found that small skinks were taken by 17% of cats and were among the prey most commonly caught by the active hunters. This heightens the risk that occasional captures can scale up to significant proportions of the populations of a species struggling to survive in highly modified urban habitats (Van Heezik *et al.* 2010). Invertebrates have also been included in an owner's record of prey taken by a domestic cat living adjacent to Ku-ring-gai Chase National Park in Sydney. This included winged termites, king crickets and longicorn beetles (Rose 1976). In the ACT, Kunihiro (1995) studied the diet of stray cats in the vicinity of the Australian National University and Old Parliament House, and feral cats at Mugga Tip and the Murrumbidgee River Corridor. This work also found cats to be opportunistic feeders, with common food items including insects (gryllids, mantids, moths, grasshoppers, beetles, cicadas, dragonflies, flies, cockroaches and butterflies), mice and rats, rabbits, ringtail possums, brushtail possums and food scraps.

Another risk that has emerged from the prey studies is the existence of a small proportion of domestic cats that are active and efficient hunters and show a preference to hunt specific prey (Barratt 1998; Meek 2003; Morgan *et al.* 2009; Van Heezik *et al.* 2010). Barratt states that this type of preferential predation in less disturbed environments (or possibly where urban reserves provide habitat for isolated populations) has potential to significantly impact on local abundance. Morgan *et al.* (2009) label these domestic cats 'super-predators' due to their high prey retrieval and predilection to favour one species of prey. The potential risk of depletion or total eradication of local skinks is particularly noted. There is a documented case of the devastating localised impact of one domestic cat on reptile species in the ACT. A North Lyneham (ACT) cat owner retained and froze about 20 prey specimens brought in by her cat from nearby grasslands. The cat's favoured prey species was the olive legless lizard (*Delma inornata*) positively identified from the frozen specimens by Dr Will Osborne, a respected local frog and reptile expert (see Figure 2). Given the numbers of lizards involved, Dr Osborne estimates the hunting forays of this one cat would have reduced the local population of this olive legless lizard to a non-detectable level.<sup>16</sup>

Morgan *et al.* (2009) also identify the heightened predation risk in re-naturalised or restored habitats where one cat could have a dramatic impact on founder populations of native wildlife species. While populations of common species may not be affected, rarer, more vulnerable species require additional protection. This means current efforts to restore habitat and connectivity between woodland habitat patches and thereby increase the native animal diversity in Canberra's urban reserves, could be undermined by cats from neighbouring properties and suburbs.

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<sup>16</sup> Interview with Dr Will Osborne, 2 June 2011 recorded by Kathy Eyles, ANU Fenner School.



**Figure 2. Olive legless lizard** *Delma inornata*

Image courtesy of Museum of Victoria

Recent trapping has found the threatened striped legless lizard to be common across Gungahlin. However, the National Recovery Plan for the striped legless lizard notes that the effect of introduced predators is not well understood, and may be highly detrimental in grasslands adjacent to urban areas (Smith and Robertson 1999). This is particularly relevant in the ACT where important habitat for the legless lizard, within the Gungahlin grassland reserves, adjoin residential suburbs that are not subject to cat containment.

Cat tracking studies provide useful data about the home ranges and movements of cats, which can guide the spatial extent of containment that would be required to prevent forays into nature reserves. Incursions of domestic cats, ranging from 80 to 1000 metres, have been recorded into adjoining reserves, when home ranges include these reserves. Hunting activity may occur both day and night (Barratt 1997a; Meek 2003; Lilith *et al.* 2008; Morgan *et al.* 2009; Van Heezik *et al.* 2010). In Barratt's Canberra study, six of ten house cats went beyond the suburban edge and four moved between 390 m and 900 m into habitat adjoining the suburb. Where this habitat was not frequented by other cats (domestic or feral), the more dominant cats roamed up to 1 km into the reserve (Barratt 1997a). A NSW study of house cats in Booderee National Park settlements showed that cats used roadside tracks and vegetation as routes to hunting grounds and kept close to fence lines for cover (Meek 2003). Buffer zones of up to 500 metres around nature reserves have been recommended to exclude roaming cats in urban – bush interface settings (Lilith *et al.* 2008). A New Zealand study acknowledges that buffers to protect vulnerable species may need to differ between regions. It recommends buffers be more than one kilometre wide at the urban edge to allow for variation in cat movement behaviour, landscape conditions, and proximity to urban development (Metsers *et al.* 2010). The tendency for cats to roam increased distances if they don't encroach on another cat's territory also complicates the consideration and effectiveness of buffers.

Another New Zealand tracking and prey study provides evidence about predation in an urban wetland reserve including a significant record of invertebrates as prey species. Young cats were responsible for 95% of invertebrate prey and this was the second most common prey type by number. Invertebrates accounted for 216 prey items of which 72% were native porina moths with one cat retrieving 92% of those moths. Water was no barrier to predation, with cats observed swimming across defensive swales to islands where native birds nested, and jumping across ditches and drains to enter the internal parts of the wetland. While all cats on the urban periphery (within 40 m of the wetland) entered the wetland reserve and posed greatest predation impact, the authors note that if only these cats were contained, other suburban cats may expand their home range into this area (Morgan *et.al* 2009). This is particularly relevant for Canberra given the current policy to apply cat containment only in new suburbs.

### 7.1 Mapping the spatial extent of threats of cat predation – ‘Hotspots’

Canberra woodland and grassland reserves support a number of ground-dwelling and/or foraging threatened species. These comprise small woodland birds, reptiles (<25 cm long), and invertebrates commonly found on the ground or in the lower understorey. These species are highly vulnerable to cat predation because of their small size (Dickman 1996; Stafford 2008) and also seasonal abundance (Barratt 1998). ACT Threatened Species Action Plans 27, 28 and 29 give guidance as to the protection and recovery of ACT woodland, grassland and riparian communities. All action plans identify stray and domestic cat predation as a significant threat to component species. Action Plan 28 also recognises that cat predation of grassland invertebrates can be significant. Much of the vegetation on the Canberra urban fringe is habitat for such species. In order to identify areas where stray and domestic cats may have the greatest impact on wildlife, the known ACT habitat of all threatened and some of the declining woodland birds that fall within the categories of ‘fauna of concern’ was mapped (see Figure 3). Threatened and declining species were selected as these have already been recognised as being under stress and most at risk of local extinction. The mapping encompassed the following:

- known habitat of threatened ground reptiles (striped legless lizard, grassland earless dragon and pink-tailed worm lizard) (ACT and Cwlth listing);
- known habitat of threatened perunga grasshopper (ACT listing). Note that habitat of the threatened golden sun moth was not included in the mapping as the moth is only above ground for a few days of its two–three year life cycle;
- known habitat, which has been utilized in the last 10 years, of lower storey sedentary threatened woodland species (brown tree creeper and hooded robin (ACT and NSW listing) and speckled warbler (NSW listing);
- breeding habitat, utilized in the last ten years, of more nomadic threatened woodland species that breed in the lower storey (varied sittella, white-winged triller) (ACT and NSW listing);
- nesting and main foraging areas of the threatened superb parrot. Baker-Gabb (2011) cautions that ground foraging by this parrot makes it particularly vulnerable to introduced predators including cats. Since the summer of 2005–2006, there has been a dramatic rise in the number of this species breeding in the ACT (from a few birds to at least 20 -30 pairs), largely in the Throsby and Central Molonglo areas. Records from the Canberra Ornithologists Group Garden Bird Survey indicate that the birds and their young are largely foraging in Belconnen suburbs (Aranda, Cook, Fraser, Hawker, Macquarie, Page, Weetangera and

Scullin) and the Gungahlin suburb of Harrison (Butterfield 2011; Davey 2012) (ACT and Cwlth listing);

- breeding habitat, utilised in the last 10 years, of lower storey more nomadic declining woodland species in the ACT that are listed as threatened in NSW (scarlet robin, flame robin, pink robin, white-fronted chat, diamond firetail); and
- wetland habitat relatively regularly utilized by threatened wetland birds (Australian painted snipe, Latham's snipe, black-tailed godwit, curlew sandpiper) (ACT, Cwlth, NSW listing).

It would appear from recent surveys and lack of any recent records in the ACT Wildlife Atlas that all small native ground mammals have already become extinct within the Canberra urban area or only survive at a very low population level. This loss of small mammals is likely to be the result of many compounding reasons such as fuel reduction removing key habitat elements such as a thick grass cover (habitat simplification) and fox and cat predation. In 1974–1975, Kukolic surveyed the vertebrate fauna of Mt Ainslie, Mt Majura and Black Mountain. Small mammals were trapped at each site using medium sized Elliot traps. Twenty one lines of traps, each line consisting of 20 traps set 10 m apart, were established. Trapping usually occurred over four consecutive nights. From a total of about 3000 mammal trap nights (number of traps by number of nights), 98 animals from five species were caught, giving a capture rate of approximately 3 %. The captures included 63 house mice and nine black rats (both exotic species), 23 yellow-footed marsupial mice (*Antechinus flavipes*), two brown antechinus (*A. stuartii*) and one common dunnart (*Sminthopsis murina*). Paull (unpublished data) 1993–1994 and Devlin (1999) re-trapped the Kukolic lines, using the same method. Neither the brown antechinus nor common dunnart were trapped again. Paull trapped yellow-footed antechinus at six sites (eight animals in total). Devlin, in 1999, from 1010 trap nights did not trap a single small mammal, either native or exotic, at the same trapping locations.

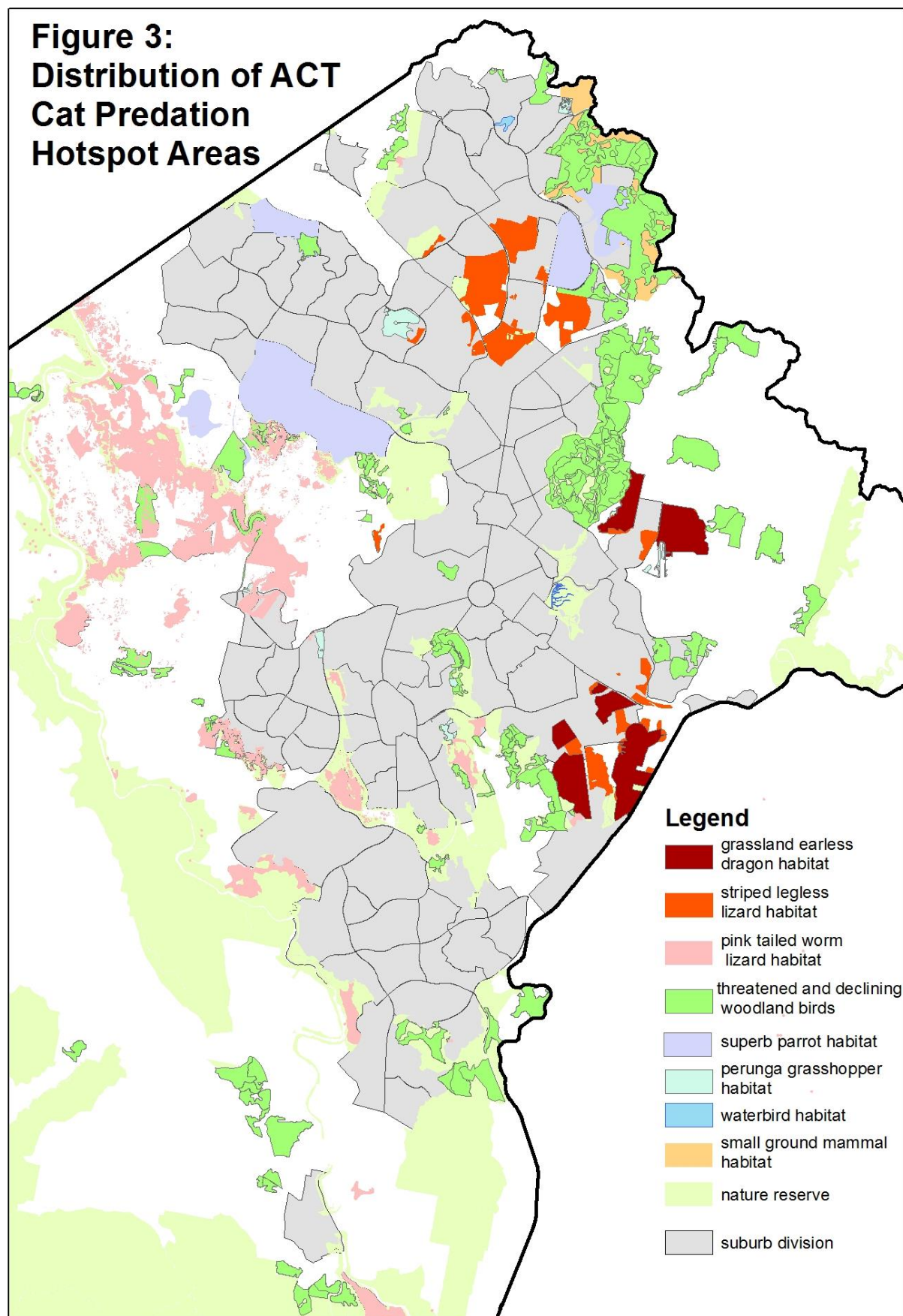
Mulligans Flat Nature Reserve is the only area close to urban Canberra where any native small ground dwelling mammal has been recently recorded. The closest records to southern Canberra are of an agile antechinus (*Antechinus agilis*) and bush rat (*Rattus fuscipes*) within Rob Roy Nature Reserve, 5 km south-east of Tuggeranong. Given this loss or decline of the small mammals from ACT near-urban reserves, the Mulligans Flat Woodland Sanctuary restoration project seeks to create conditions favourable to the survival and population growth of small native ground mammals. These mammals may have important ecological roles in grassy woodland areas. It is hoped that the improved conditions (including fencing excluding cats and foxes) will increase the population sizes of species that still may be present, such as the yellow-footed antechinus and dunnart. Locally extinct mammal species, such as the Tasmanian bettong (*Bettongia gaimardi*), have also been successfully re-introduced. It is hoped that once populations of such species build up, the sanctuary will be a focus for release of these animals into neighbouring and/or other areas. Funds have also been acquired to fox bait surrounding areas. Reducing cat predation is also critical and thus anywhere within 1 km of the Mulligans Flat – Goorooyarroo woodland nature reserves should be a priority for cat containment.<sup>17</sup>

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<sup>17</sup> <http://www.mfgowoodlandexperiment.org.au/index.html>



**Figure 3:  
Distribution of ACT  
Cat Predation  
Hotspot Areas**



The predation risk mapping (Figure 3) indicates that half (57) of Canberra's 114 suburbs contain, border or are mostly within 500 m of, important habitat for threatened or species of concern that are vulnerable to cat predation. A further 31 suburbs (27%) are predominantly within 1000 m of such habitat. Only 26 suburbs (23%) are further away from significant habitat than the distance that a domestic cat may travel in a single night. Based on this predation risk, a map of priority suburbs for cat containment has been prepared (Figure 4). The implications of the mapping (Figures 3 and 4) is discussed alongside cat containment options in Section 9.

## **8. How well does current management address cat welfare and wildlife predation concerns**

While the ACT has regulations to manage cats under the *Domestic Animals Act 2000*, there are a number of gaps when compared to other jurisdictions including the lack of a registration system for domestic cats, stray cat control and community education programs about responsible pet ownership and stray cats. There is also currently no dedicated revenue stream (from cat registration fees or similar) to fund these activities.

### **8.1 Stray cats**

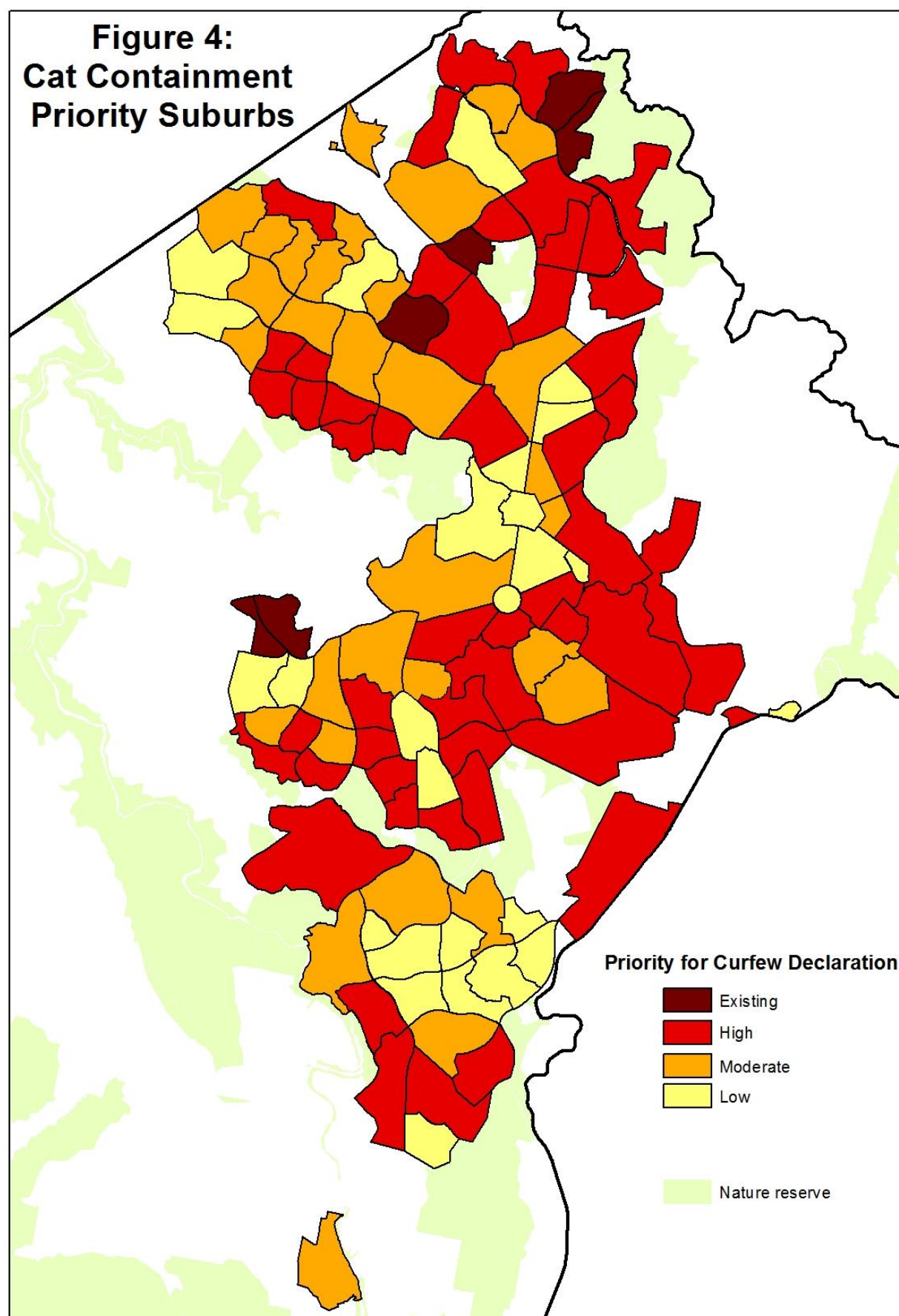
The effectiveness of compulsory de-sexing and cat containment laws is limited by the absence of an active program in the ACT to manage the stray cat population. There is no conclusive evidence that compulsory de-sexing of pet cats alone will control stray cat populations. Nevertheless, the number of cats euthanased in 2012 is below that of 2001, when the compulsory de-sexing laws were first introduced in the ACT. There is also uncertainty about the extent to which domestic cats add to and sustain the stray and feral cat population (Marston *et al.* 2008).

There are significant animal welfare concerns in relation to stray cats. Un-owned cats do not live well, are often in poor health, underweight, have poor life expectancy, are sick with cat flu, and/or have heavy flea and worm infestations. They may also experience starvation, suffer from skin cancers, injuries from fights or cars and carry diseases like feline AIDS (Marston *et al.* 2006). The average life expectancy of stray cats is about half that of a contained domestic cat, while life expectancy of a feral cat in the wild is thought to be about two to three years (Stewart 1997).

The capacity to undertake stray cat control in the ACT is constrained by both practical and financial considerations. The ACT Government does not have pound facilities for cats and relies on the ACT RSPCA to receive, re-house and euthanase unwanted cats. The Government contributes about 14% of the cost of the operation of the RSPCA in the ACT. This is predominately for inspectorate work, wildlife care and dog control. The ACT RSPCA currently has limited capacity and resources in relation to the sheltering of suitable cats prior to re-homing but would be prepared to expand its work with cats, should additional funding be provided.<sup>18</sup> It is likely that an active campaign to control stray cats would result in the trapping and impounding of cats that have medical or behavioural issues that make them unsuitable for re-homing by the RSPCA.

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<sup>18</sup> Advice provided by Michael Linke, former CEO, RSPCA ACT.





## 8.2 Threats to Wildlife

The ACT has the capacity to use cat containment regulations in a 'precautionary' way to protect vulnerable wildlife species from domestic cats. This approach has been supported by various authors as a way forward in the absence of definitive studies about predation risks (Lilith *et al.* 2006; Calver *et al.* 2011). The ACT legislation requires the decision maker to consider the level of threat to wildlife prior to declaration of cat containment areas.<sup>19</sup> The public notices declaring cat containment areas have to date identified the native species most at risk from predation (Stanhope 2005; Corbell 2011).

When the legislation was first proposed, cat containment, rather than prohibition from owning a cat, was seen as a way to allow people to enjoy their pets while addressing cat welfare and impacts on native fauna in nature reserves (Baird 2005).

Existing policy in the ACT has been to apply cat containment only to new suburbs adjoining nature reserves. Seven new suburbs in five different locations (see Figure 1) have been declared under the containment laws (Stanhope 2005; Corbell 2011). This has created an isolated mosaic of declarations that does not reflect the potential predation threat that domestic cats pose to vulnerable native wildlife across the ACT (see Figure 3). It also means that most cat containment suburbs adjoin older suburbs that have no containment rules even though they may border the same nature reserves.

There is also a weak link between the application of cat containment and other conservation initiatives underway to protect wildlife across the ACT. A strategic approach should be taken to cat containment, based on the potential predation risks and threats and to underpin recovery conservation strategies. Containing cats near important wildlife habitat should be an explicit management action in ACT Threatened Species Action Plans for recovery of species vulnerable to cat predation.

## 8.3 Health and welfare of domestic cats

The 2011 community survey reveals that 91% of ACT residents, 74% of cat owners and 96% of Bonner and Forde residents think that there are benefits to the community if cats are contained. Respondents indicated three main benefits of cat containment:

1. Lower risk to wildlife.
2. Less nuisance to the community (nuisance behaviour was identified as defecation, attacks on domestic pets, noise at night and fighting).
3. Less cat injuries, resulting in reduced vet bills.

The survey identified some concerns about extending containment across the ACT because of the anticipated costs to cat owners of retro-fitting their homes to contain their cats and perceptions that containment may be harmful to cat welfare (ACT Government 2011a). Both these misconceptions could be addressed by targeted community information and education. Appendix 4 illustrates the personal cost and suffering that can result when cats are not contained.

Appendices 3 and 5 provide examples and information of how cats can be happily contained indoors with slight modifications to existing homes. Stewart (1997) argues strongly that contained cats are more likely to have a healthier and longer life than cats that are allowed to roam, and that 'it will be just as satisfying for them to "kill" an old

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<sup>19</sup> s.81 *Domestic Animals Act 2000 (ACT)*

sock inside, as it would be to pounce on and tear apart a blue wren'. A cat can be happily kept indoors provided adequate exercise and environmental enrichment are available. Access to an outdoor escape-proof enclosure (non-electric) is highly recommended to increase the opportunity for activity and stimulation for contained cats. Owner supervised trips outdoors on a harness and lead also provides exercise and stimulation for contained cats. A window for looking through, places where the cat can bask in sunshine, a scratching post, and a vertical climbing space are also recommended (Stewart 1997).

Having two cats that get along well is also recommended for contained cats as they can provide company and stimulation for each other. Specialised fences that rotate inwardly can keep a cat confined to a backyard.<sup>20</sup> Homes can become a feline-friendly, stimulating environment with the provision of vertical climbing space, horizontal space and hiding spots. Cat ladders/trees, window hammocks, cat condos and cat castles are just some of the products that can enrich a cat's environment.

The costs of cat roaming for owners can be considerable when cats have accidents or are involved in fights. In the ACT community survey, 27% of cat owners reported that their cat had come home injured at least once each year and on two-thirds of these occasions had needed vet care as a result of these injuries. Uncontained cats were four times more likely to have suffered significant injury at least once in the past year, than those cats contained on the owner's property. Responsible owners who contain their cats also report that they often suffer the most nuisance from cats belonging to neighbours (see Appendix 5). Increasingly, Canberra cat owners are the strongest public advocates of containment and recognise the health and life span benefits for cats (Peterson 2011; Osborne 2011).

On average, confined domestic cats have a life expectancy of 12 to 15 years (Stewart 1997). A study of cats in South Australia indicated that average life expectancy of an uncontained roaming domestic cat was around seven years. Just removing the possibility of outside accidental deaths (such as car accidents or snake bites) adds 2.9 years to the average life expectancy of a roaming domestic cat (Paton 1994).

Confined cats also have a reduced incidence of abscesses from cat fights, fewer injuries from cars and dogs and have less opportunity to pick up diseases from stray and feral cats. Confined cats can generally cost a significant amount less in veterinary expenses as they are protected from a large number of external threats to their health (See also Appendix 4). The RSPCA ACT records the medical reason why cats and kittens need to be euthanased rather than re-homed. Of the 2099 cats and kittens euthanased in 2007–2008, the reasons for euthanasia were:

- cat flu 51 (2.5%);
- feline calicivirus 238 (11%);
- feline AIDS 66 (3%); and
- ringworm 36 (1.5%).

In 2012, of the 2261 cats and kittens surrendered to the RSPCA, 128 had contagious diseases and a further 180 medical or physical conditions or injuries that warranted their euthanasia.<sup>21</sup>

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<sup>20</sup> <http://oscillot.com.au/what-is-oscillot.html>

<sup>21</sup> Statistics on feline outcomes provided by the ACT RSPCA, June 2013.

Jongman (2007) reviewed the welfare implications of cat containment. She concluded that 'confinement does provide certain welfare advantages and most cats adapt very well to confinement'. About 30% of cat owners in the ACT contain their cats at all times, this compares with a reported rate of 41% in Melbourne (Toukhsati *et al.* 2012) and 60% in the USA (Lange 2011).

## 9. The available options for future cat management in the ACT

The following options are discussed by drawing on the results of predation risk mapping and cat containment priorities (Figures 3 and 4), cat welfare concerns and public responses to various management measures in the ACT community survey.

### 9.1 Cat containment

#### a. *No further extension of 24 hour cat containment (beyond commitments for new suburbs in the Molonglo Valley and in Kenny and Throsby in Gungahlin)*

This option limits cat containment to those new suburbs already declared or proposed to be declared. It has no impact on cat owners in existing suburbs and does not address potential wildlife threats and the welfare and nuisance issues caused by roaming domestic cats across most of the ACT. It also does not reflect that a large number (58%) of ACT residents (including cat owners) support adoption of 24 hour cat containment across the whole of the ACT, with only 21% opposed (ACT Government 2011a).

#### b. *Application of 24 hour cat containment to all new suburban areas*

This option would apply 24 hour containment to all new suburbs and proposed urban areas, which are shown together with neighbouring nature reserves in Figure 5. The ACT Government has already committed to cat containment over all of the Molonglo suburbs and the Gungahlin suburbs of Kenny and Throsby. The other proposed new suburbs are the northern Gungahlin suburbs of Moncrieff, Jacka and Taylor. Urban development is also being considered to the west of Belconnen at the Riverview property, while the ACT Planning Strategy designates part of the Murrumbidgee Valley and the Majura and Jerrabomberra valleys as urban expansion study areas.

This option was supported by 65% of respondents and the majority of cat owners in the ACT community survey (ACT Government 2011a).

Cat containment within the ACT has only been applied to new suburbs partly because of an unwillingness to apply containment retrospectively in existing suburbs, but also because habitat that has been previously distant from urban areas is more likely to retain fauna vulnerable to domestic cat predation. While this option avoids retrospective controls on keeping domestic cats, it fails to address potential wildlife threats, welfare and nuisance caused by roaming domestic cats across most of the ACT.

It is also important that any new suburban declarations include all nearby Public Land, particularly nature reserves. While it is an offence under Section 68 of the *Nature Conservation Act 1980*, to take or knowingly permit to enter, a cat to a reserved area, the declaration of reserves as containment areas enables managers of the reserve to trap domestic cats roaming in reserves without the knowledge of their owners. These cats could be scanned for a micro-chip and returned to owners who would be subject to a warning or fine. If no micro-chip can be detected the cat would be taken to a shelter for a holding period and if unclaimed the shelter would assess the suitability of the cat for re-homing and adoption.

*c. Night containment only*

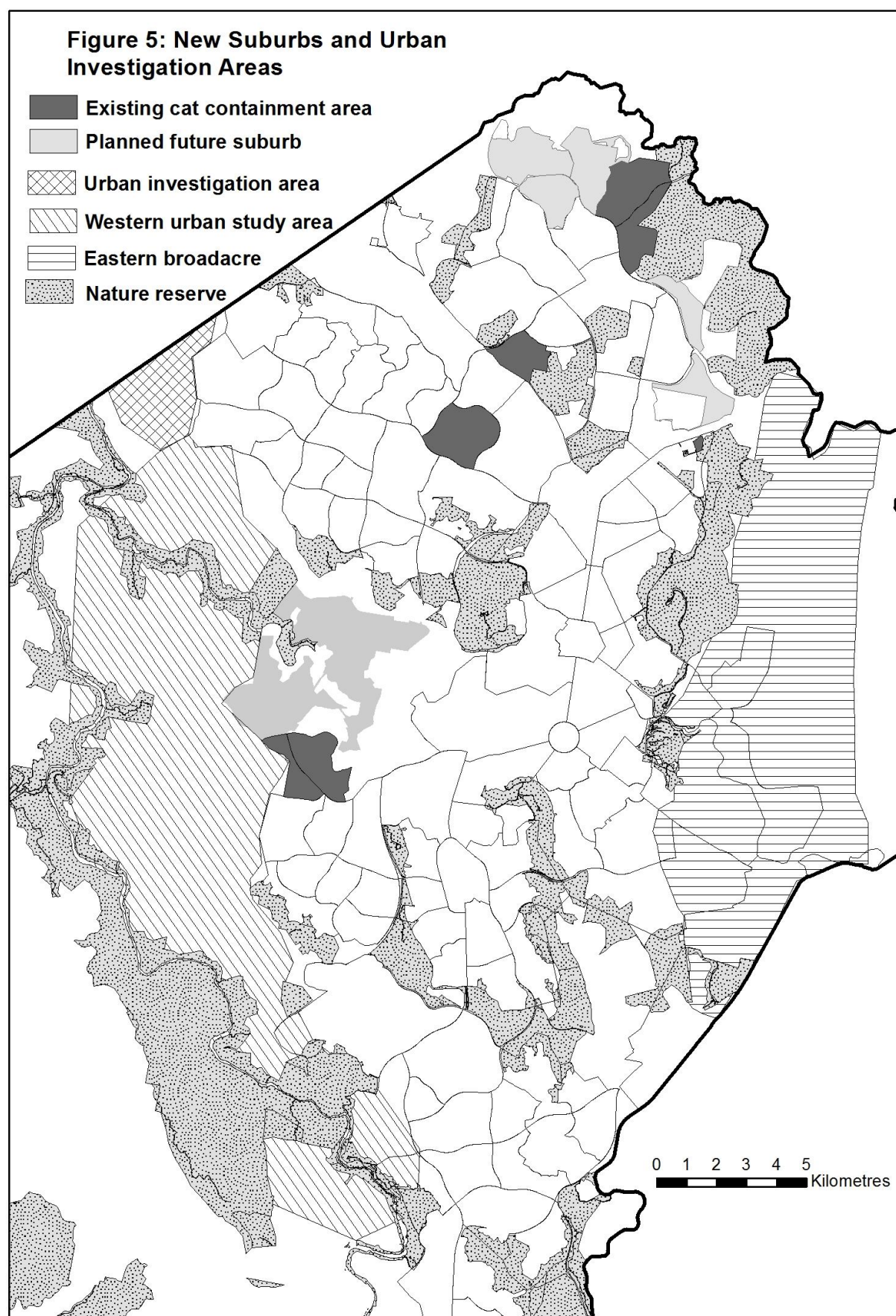
This option would require cat containment from dawn to dusk and attracted the highest level of community support for how cat containment might be applied in the ACT (70%). This response possibly reflects community perceptions that cats tend to roam, fight and are injured at night and wildlife are more vulnerable at night (ACT Government 2011a).

In 1991, the then Sherbrooke Council (Victoria) introduced night time curfews on domestic cats in the vicinity of Sherbrooke Forest, Dandenong National Park. By 1994 there was a significant increase in the local lyrebird population, which had been facing local extinction. Similarly, a much lower number of possums and lyrebirds with cat related injuries were brought to the wildlife refuge for treatment following the curfew. Cat related injuries on nocturnal animals decreased by 60%. However, native bird attacks increased and this was thought to be related to increased day time hunting (Pergl 1994).

Several other local government areas in Australia, such as Magnetic Island (Queensland), Leichhardt (Sydney), and Bendigo, Surf Coast and Nillumbik Shire (Victoria) have night cat curfews. Night curfews have the advantage that cats tend to travel further during the night than the day and are largely designed to reduce predation on nocturnal animals such as the bush stone-curlew, possums, bandicoots, other mammals and amphibians.

In the ACT however, day-active woodland birds and reptiles are the key fauna species threatened by domestic and stray cat predation. Night containment would not protect these species and may actually increase the day-time hunting activity of Canberra's domestic cat population. Of 252 animals injured by cats and taken to the RSPCA shelter during 2008, only 11 (4%) were nocturnal. The vast majority were day-active birds and lizards. However, this predation rate may at least be partially due to the high proportion of domestic cats that are already contained at night by their owners. Bats and sugar gliders are the nocturnal wildlife that would most benefit from mandatory night-time containment. Both species are widespread across Canberra's forests and woodlands.

Night containment does not address the nuisance caused by roaming cats during the day. Enforcement is also more costly and difficult as compliance activity and trapping of roaming cats can only occur during the declared containment hours, when overtime would need to be paid.





*d. Application of 24 hour containment to all nature reserves*

This option would make it an offence for an owned cat to roam within a declared nature reserve (see Figure 5) and would affect all suburbs including the older suburbs adjoining reserves. This option reinforces that nature reserves are set aside for wildlife conservation and roaming cats pose threats to wildlife. It would also give reserve managers enhanced powers to trap cats and fine cat owners. If a cat is micro-chipped, the owner would be located and the cat returned to the owner. A cat without a micro-chip would be taken to a shelter for a holding period and if unclaimed, the shelter would assess the suitability of the cat for re-homing and adoption.

The task of trapping cats in nature reserves would rest with park managers and will require an increased level of enforcement activity. As this option would only apply to nature reserves, it does not address cat predation in important urban open space habitat, such as the ovals in Belconnen that provide feeding grounds for superb parrots.

*e. Application of 24 hour containment to priority habitat areas*

This option would extend 24 hour cat containment to a number of existing suburbs that adjoin important wildlife habitat. The Gungahlin area, south Belconnen and the Majura and Jerrabomberra valleys support the greatest variety of significant wildlife species that could benefit if cat containment areas were expanded and consolidated.

Declaration of new areas around existing declared suburbs would make it less likely that cats would roam from neighbouring non-containment suburbs or that those cats would prey on wildlife within reserves adjoining containment areas. There would be benefits to wildlife in consolidating the existing containment areas of Lawson, Crace, Bonner and Forde, within a wider cat containment area of Gungahlin and part of Belconnen. The declaration could be tied to protection of the striped legless lizard, perunga grasshopper, superb parrot, woodland birds and small mammal conservation. The declared area could include the additional Belconnen suburbs of Kaleen and Giralang and either the whole of Gungahlin or the suburbs of Harrison, Throsby, Kenny, Mitchell, Gungahlin, Palmerston and Franklin.

Recent years have seen a dramatic rise in the numbers of superb parrots visiting and breeding in the ACT. Most of their foraging is focused in the southern Belconnen suburbs and this provides the conservation rationale for cat containment in these suburbs and/or across the whole of Belconnen.

In Weston Creek and Tuggeranong, cat containment could be declared in those suburbs that adjoin the Molonglo and Murrumbidgee river corridors, which are important for both woodland birds and the pink-tailed worm lizard. Within Central Canberra and Woden, cat containment would be most beneficial in those suburbs that either adjoin the Jerrabomberra Wetlands or large woodland reserves, such as those that occur on Mt Majura, Mt Ainslie, Red Hill, Callum Brae, Isaacs Ridge, Farrer Ridge and Mt Taylor.

This option would impact on existing cat owners who would be required to socialise 'outdoor' cats to contained environments. Some owners may not be willing to retrain and contain cats for 24 hours and may simply surrender pet cats to the RSPCA. Others, forced to contain owned cats, may make poor choices in relation to cat welfare.

A transition phase for the introduction of cat containment over existing suburbs would allow cat owners time to comply, while new owners would be made aware at the time of acquisition about the responsibilities of owning a cat within a cat containment area.

*f. ACT wide 24 hour containment*

This option would apply 24 hour cat containment to all suburbs of the ACT. This is the most easily understood and equitable of the containment options as it would apply to all cat owners and mean one set of rules across all suburbs. It removes the need for specific signage and education campaigns targeted to specific areas. It also means that dog and cat owners have similar responsibilities to contain their animals.

This option was supported by 58% of respondents in the ACT community survey. The survey also revealed that 77% of cat owners already contain their cat(s) to some extent, with just under half of those (43%) containing their cats at all times (ACT Government 2011a).

This option would have the greatest environmental benefits, particularly for Canberra's vulnerable woodland and grassland wildlife species. Considerable effort is currently being put into restoring and enhancing ACT lowland grassy woodland areas (ACT Government 2011b). Recent research has confirmed that threatened and declining woodland birds respond well to restored landscapes (Lindenmayer *et al.* 2012; Phillips 2012). ACT wide cat containment is likely to assist this effort to 'bring back the birds'.

It also addresses the nuisance, health and welfare issues associated with roaming cats.

An ACT wide declaration will affect cat owners in existing suburbs, who do not contain their cats. This impact could be minimised by providing a significant lead time (say three to seven years) before cat containment is fully enforced, supported by educational campaigns about the benefits of containment for cat welfare and wildlife. Given that roaming cats have a shortened lifespan, which on average has been reported to be less than seven years (Paton 1994), cat owners may decide not to acquire another cat, or to train a new cat/kitten prior to full enforcement. As some roaming cats may live longer than seven years, containment could be problematic for these cat owners.

There are also concerns that declarations over existing suburbs may result in some owners making poor decisions when containing their cats, such as confining cats to windowless laundries or building containment structures that may injure cats. This can be addressed by education about appropriate ways to safely contain cats to meet their physiological, behavioural and social needs (see Appendix 5).

## 9.2 Stray and roaming cat management

The 2011 ACT survey found that 84% of ACT residents think that measures should be undertaken to control stray cats, and 69% would be willing to take a stray cat to a vet, shelter, or rescue centre. However, only a few indicated that they would be willing to adopt a stray cat (ACT Government 2011a).

Experience elsewhere highlights the importance of community education, encouraging people that feed stray cats, to either take ownership of a stray cat and ensure that it is de-sexed or, take the cat to the RSPCA shelter for re-homing. Canberra has a number of characteristics that suggest a positive community response to education and trapping programs to manage stray and un-wanted cats. For example, the ACT RSPCA has the best re-homing rates of any jurisdiction in Australia with 64% of shelter cats re-homed, compared to 39% nationally. The proportion of received cats euthanased is also lower (36%), compared to 47% nationally (RSPCA 2012).

Residents of the ACT are also the most concerned (in Australia) about the environment (90%); are most likely to say that the natural environment is declining (64%); report the highest level of concern about climate change (81%); and are most likely to donate money to help the environment (18%) (ABS 2009). The ACT also has the highest rate nationally of participation in voluntary work at 38% of the population (ABS 2010).

The level of community support for stray cat control in the 2011 ACT survey suggests that there is an opportunity to engage the community about the welfare of stray cats and to trial a government-supervised cat trapping and adoption program.

The likely success of a program involving the community is high. Canberra is a national leader in a community led program to humanely control an avian pest species in the urban environment, the common or Indian myna (*Acridotheres tristis*). The impact of the Myna on native wildlife in Canberra has been significant through competition for resources, territory and habitat, particularly displacement of hollow-nesters (Pell and Tidemann 1997). The Canberra Indian Myna Action Group (CIMAG) has over 1300 members, 870 of whom have trapped mynas in their gardens for a period of time.<sup>22</sup> The program relies predominately on voluntary resources and operates with the support of the RSPCA, which assisted with an Animal Welfare Protocol for trapping activities and euthanases trapped mynas. The group has been operating for over nine years and assists other local communities to establish programs. With over 42 000 mynas trapped by Canberra residents as of June 2012, CIMAG demonstrates how a concerted, coordinated and sustained effort can significantly reduce the abundance of an urban pest species. In 2005-2006, the myna was the 3<sup>rd</sup> most commonly observed bird species in Canberra gardens, in 2011-2012 it had been reduced to the 13-14<sup>th</sup> most commonly observed bird (Handke 2012, Grarock *et al.* 2012, Canberra Ornithologists Group 2012).

A government-supervised cat trapping program needs to be resourced and monitored by government rangers to prevent incidents of cruelty and to ensure that traps are appropriately monitored and checked. The City of Casey model (see section 4.2) provides an example of how an ACT program could be administered. Cruelty may also occur in the absence of a sanctioned program to manage stray and roaming cats, where people resort to other means to address nuisance cats.

<sup>22</sup> <http://www.indianmynaaction.org.au/>

Using local residents to undertake cat trapping could considerably reduce the cost of such a program (Baker 2001). If cat containment was applied across Canberra, the ACT Government would need at least two rangers to collect trapped cats from residents, transport to the RSPCA shelter or a potential government facility, and ensure that residents are using traps humanely. The program would require the purchase of about 60 traps at a cost of \$150 per trap. If a new shelter was to be built, this may cost in the order of \$750 000 with increased euthanasia costs being around \$40 000.

A government-supervised trapping program overseen by dedicated rangers would also have education and enforcement benefits. Trapped, micro-chipped cats could be quickly returned to owners who would be warned or fined, to discourage repeat offending. A trial trapping program in the first containment suburbs of Forde and Bonner could be used to gauge the likely success of a wider ACT program and to identify any potential issues, including necessary legislative changes. There are some operational issues with trapping of domestic cats. For example, only authorised public officers can trap cats and there may be civil issues where the owner of the cat is known. A trapped cat must also be kept for seven days at the shelter, which adds to the holding costs for the RSPCA.

A further anomaly means that owned but non-micro-chipped and/or entire cats are not required to be micro-chipped and de-sexed before release from the shelter. This could be addressed by legislative amendments to require that cats not be released from a shelter until they are micro-chipped and sterilised.

## **10. Registration as a source of funding for cat management**

The ACT has the opportunity to align its domestic cat regulations with other jurisdictions (particularly neighbouring NSW local councils) by introducing a system of cat registration. A system of cat registration in the ACT was widely supported in the 2011 community survey, with 78% of respondents and the majority of cat owners agreeing that cat owners should pay a registration fee to own a cat in the ACT, as is required for dogs. Almost half (49%) supported one-off lifetime registration for cats. Given that there are around 50 000 owned cats in the ACT, cat registration fees could fund the costs of compliance, enforcement, community education and a stray cat control program.

Where registration has been introduced elsewhere, there has been good compliance by cat owners, often accompanied by a surrender of unwanted and stray cats by residents (Moore 2001). There is potential to discount the registration fee to reward responsible behaviour, such as building cat containment structures (DLG 2011).

Registration and micro-chipping has benefits over just micro-chipping as owners can forget to update contact details on the national microchip pet registries, whereas cat owners are often reminded to refresh their contact details by local governments each year, though this may not be the case with lifetime registrations (Marston *et al.* 2006).

Registration also provides a dedicated revenue source for cat management. For example, operating costs for the Victorian Bureau of Animal Welfare, funding for research projects and funding for community education strategies is provided by domestic animal registration fees in Victoria (DPI 2012).

A considerable proportion of ACT cats (25%) are acquired through informal means such as advertisements on notice boards and through friends and relatives (ACT Government 2011a). Owners acquiring cats through these means are less likely to be informed that cats have to be micro-chipped and de-sexed by 12 weeks of age. Targeting education at the individual owners, not just acquisition sources is needed (Pawsey 2005b). A system of cat registration allows for monitoring of compliance and is also a way of providing information about responsible pet ownership, and any changes to animal management laws, directly to ACT cat owners.

## **11. Conclusion**

Canberra is more than a city within the bush. It is an ecological and social experiment; an urban community attempting to live in harmony with a landscape that supports some of Australia's most endangered ecological communities and the wildlife dependent on these grassland and grassy woodland habitats.

This conservation challenge requires an integrated policy response so that the importance of responsible cat ownership and regulations that affect individual households (like cat containment) are understood in the context of the potential threats to native wildlife in general, and threatened species in particular.

This can be achieved by community education outlining the precautionary approach underlying cat controls and carefully applying containment in a way that consolidates existing declarations and best protects vulnerable native wildlife.

The large distance over which domestic cats can roam means that the wildlife protection objectives of cat containment are unlikely to be met by isolated listings of small areas. These objectives are also not going to be met unless there is active control of stray cats.

The 2011 ACT community survey suggests that expanded cat containment, humane methods of stray and feral cat control and cat registration will be supported by most Canberra residents. This would require targeted education to engage affected cat owners. Education and an emphasis on personal responsibility for the local living environment have resulted in high levels of awareness and compliance with cat containment amongst Forde and Bonner residents. This education needs to be ongoing to ensure the message is reinforced, particularly among second-generation residents.

Drawing on these conclusions, the ACT Responsible Cat Ownership Steering Committee has made a number of recommendations to improve the management of cats in the ACT. These recommendations have the dual aim of promoting responsible pet ownership and ensuring protection of vulnerable wildlife. They are designed to enforce and build on existing legislative provisions, bring the ACT in line with cat management legislation and programs in other jurisdictions, and complement the ACT's wildlife conservation policies. The Committee strongly stresses that the recommendations must be considered as integrated package of reforms. Implementing just one, or a few of the recommendations, is unlikely to be an effective management response.

## Recommendations of the ACT Responsible Cat Ownership Steering Committee

### *Legislative Reform*

1. Amend the *Domestic Animals Act 2000* to establish a system of cat registration in the ACT (as applies for dogs under Part 2) with a similar fee structure to surrounding NSW shires (See section 10). Fees raised should form part of a dedicated funding program for community education and enforcement of cat management provisions of the legislation and other cat related matters undertaken by Domestic Animal Services (DAS), the Registrar, or their representatives (See also Recs. 6-9 below).
2. Make a declaration pursuant to section 81 of the *Domestic Animals Act 2000* to declare all reserved areas (wilderness area, national park or nature reserve) subject to a cat containment, making it an offence for owned cats to roam in reserved areas (See Option d – section 9.1).
3. Amend the *Domestic Animals Act 2000*, to ensure non-micro-chipped and/or unde-sexed cats are not able to be reclaimed from a shelter without the cat being micro-chipped and de-sexed (See section 9.2).

### *Policy*

4. All new ACT suburbs should be declared cat containment areas prior to housing development (See Option b - section 9.1).
5. Cat containment should be expanded to consolidate existing declarations and targeting identified priority areas for conservation of threatened and significant wildlife species (such as North Gungahlin and parts of Belconnen- See Option e - section 9.1 and Figure 4). The intention to apply cat containment should be supported by community education in the affected suburbs (See Rec. 7 below). Transition provisions should be applied to allow existing cat owners a reasonable period of time to comply prior to enforcement of cat containment.

### *Community Education and Enforcement*

6. An ACT wide public education program should be developed to promote responsible cat ownership and underpin the ACT legislation and rolled out on an ongoing basis (See sections 4.1 and 5.3).
7. The public education campaign should highlight cat ownership responsibilities under the *Domestic Animals Act 2000* for compulsory de-sexing and micro-chipping and cat containment in declared areas. The campaign should also target people currently feeding stray cats, encouraging them to either, adopt and care for the cat, or take it to the RSPCA shelter for re-homing (See sections 4.1 and 5.3). Funding implications with regards to potential increase in cats being taken to shelters will need to be considered.

*Community Education and Enforcement (cont.)*

8. A program of compliance and enforcement should be rolled out by DAS in concert with the public education campaign, using a system of (friendly) warnings and information to assist compliance. Offences against the Act to be pursued for repeat offenders (See section 5.1).

9. A government-supervised trapping program (targeting stray and roaming cats) should be implemented in the ACT to underpin cat management and compliance activities. The program must be humane, targeted, and trapping must be carried out by competent people according to best practice to minimise any associated welfare impacts on trapped cats (See sections 4.2 and 9.2).

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## Appendices

### 1. State and territory domestic animal legislation

*Companion Animals Act 1998* (NSW)

[http://www.austlii.edu.au/au/legis/nsw/consol\\_act/caa1998174/](http://www.austlii.edu.au/au/legis/nsw/consol_act/caa1998174/)

*Domestic Animals Act 1994* (Vic.)

[http://www.austlii.edu.au/au/legis/vic/consol\\_act/daa1994163/](http://www.austlii.edu.au/au/legis/vic/consol_act/daa1994163/)

*Animal Management (Dogs and Cats) Act 2008* (Qld)

<https://www.legislation.qld.gov.au/LEGISLTN/ACTS/2008/08AC074.pdf>

*Cat Act 2011* (WA)

[http://www.slp.wa.gov.au/legislation/statutes.nsf/main\\_mrtitle\\_12865\\_homepage.html](http://www.slp.wa.gov.au/legislation/statutes.nsf/main_mrtitle_12865_homepage.html)

<http://dlg.wa.gov.au/Content/Legislation/ProposedCatAct.aspx>

*Dog and Cat Management Act 1995* (SA)

<http://www.legislation.sa.gov.au/LZ/C/A/Dog%20and%20Cat%20Management%20Act%201995.aspx>

*Cat Management Act 2009* (Tas.)

[http://www.thelaw.tas.gov.au/tocview/index.w3p;cond=all;doc\\_id=89%2B%2B2009%2BAT%40EN%2BSESSIONAL;histon=;prompt=;rec=;term=cat](http://www.thelaw.tas.gov.au/tocview/index.w3p;cond=all;doc_id=89%2B%2B2009%2BAT%40EN%2BSESSIONAL;histon=;prompt=;rec=;term=cat)

*Domestic Animals Act 2000* (ACT)

<http://www.legislation.act.gov.au/a/2000-86/current/pdf/2000-86.pdf>

### 2. ACT responsible cat ownership survey, 2011

[http://www.environment.act.gov.au/\\_data/assets/pdf\\_file/0008/576863/Report -  
\\_ACT Community Research - Cat Containment - July 2011 - final.pdf](http://www.environment.act.gov.au/_data/assets/pdf_file/0008/576863/Report_-_ACT_Community_Research_-_Cat_Containment_-_July_2011_-_final.pdf)

All the above links were current and accessed on 31 March 2014.



### 3. Cat containment does not have to be expensive

This Evatt household enclosed the end of their deck and provided a cat door from the study window to provide a safe, contained space for their three 'Korat' cats. The enclosure contains toys and a large hammock to stimulate play and the cats get to feast on a 'cat grass' plant. The enclosure has a screened section to allow in light and sun and so the cats can see out. Inside the house, the cats have their own beds in sunny windows, their own lounge to scratch, and a tall scratch pole. The only drawback to containment is the nuisance caused by the neighbouring cats that have claimed the yard as their territory. A bamboo fence had to be erected to keep male cats away from the containment structure. There are other relatively inexpensive options such as paddle top fencing.<sup>23</sup>



<sup>23</sup> <http://www.oscillot.com.au/>

#### 4. The nine lives of Scully McGuire

Scully McGuire is 12 years old but has given his owner heartache and emptied her wallet plenty of times. Scully has had countless visits to the vet to be treated following abscess infections from cat attacks and a collision with a moving car cost \$2500 for repair and care. Scully was also attacked by a neighbour's cat in his owner's backyard and treatment for his injuries (see below) cost his owner over \$1000.

Scully is contained at night, but his owner is reluctant to contain him during the day. Scully's owner rents her home so building cat containment structures or making small adaptations to the dwelling is problematic. However, Scully, like the majority of domestic cats, would be happy to stay in the house provided he could bask in the sun, had a view out the window and a place to scratch. Access to an outdoor escape-proof enclosure can greatly increase the opportunity for both activity and stimulation for contained cats.

Postscript: Scully was hit by a car in December 2012, not long after his owner had moved into a new rental home. The accident was traumatic for the driver who rushed the cat to the vet, and for the vet who was unable save Scully. A second household cat was killed on the same road a month later.



## **5. RSPCA Australia - Is it okay to keep my cat contained within my property boundary all of the time?**

It is certainly possible for your cat to live happily contained to your property boundaries. Contained cats are less likely to become lost or injured (hit by a car or attacked by a dog). They are also less likely to get into cat fights and therefore less likely to have cat fight-related injuries (abscesses) or catch diseases such as FIV (Feline Immunodeficiency virus). Containment to the owner's property boundaries also increases the opportunity for owner-animal interaction and reduces the impact of hunting by cats and disturbance caused to neighbours.

Where cats are contained, steps must be taken by owners to ensure that adequate exercise and environmental enrichment are available. Cats that are contained to the owner's property do not have to live totally indoors - access to an outdoor escape-proof enclosure is highly recommended as this greatly increases the opportunity for activity and stimulation for contained cats. There are also specialised backyard fences that rotate inwardly thereby keeping cats confined within the owner's property boundaries and these can be a great way to enable contained cats to still have access to the backyard and the outdoors without being able to go beyond the owner's property.

A kitten/cat that has only ever been contained to the owner's property is likely to cope better with living in this way as they have never known any other lifestyle. Start training kittens to be contained to the owner's property early on!

A cat that has experienced living outdoors beyond the owner's property boundary may become distressed if suddenly kept totally indoors. In these cases, cats may begin to display behavioural problems due to the stress of confinement and their health and welfare may be compromised. For these cats, extending their access to the outdoors (via an escape-proof enclosure, specialised backyard fencing) but still within the owner's property boundaries is highly recommended. A gradual reduction in the amount of time that the cat spends beyond the property will also allow them to adjust to containment to the owner's property over time.

### **Cat containment tips**

Here are some measures you can take to ensure that your home is a feline-friendly, stimulating environment where your cat is unlikely to get bored.

- Provide plenty of horizontal and vertical climbing space. Cats generally like to gain vertical height to look view scenes from above, they also tend to feel safer that way. Cat ladders/trees, window hammocks, cat condos and cat castles are just some of the products available to help provide an enriched environment.
- Provide plenty of safe toys to keep your cat amused - it is a good idea to have a variety of toys hidden away so you can give your cat different toys to play with on different days. Ensure all toys are safe for cats for example avoid string toys or smaller objects that may be swallowed as these can become an intestinal obstruction, which can be fatal.
- Provide hiding areas. Cardboard boxes with holes cut into them are great for hide and seek games. Your cat's favourite games will be the ones that involve you as

she will be able to use her instinctive pouncing behaviour and release pent up energy by chasing.

- Provide several scratching post as cats love to scratch to keep their nails in good condition (this also helps to prevent any unwanted scratching of furniture). If you have any plants make sure they are safe for cats (check with your vet first if you're unsure) and be aware that certain common plants, such as lilies, are fatally toxic to cats so make sure these are not present on your property.
- Play with your cat daily and give them plenty of attention and company.
- Cats love to bask in the sun; make sure your cat has a nice sunny spot to lie in and window sills to sit on so she can keep an eye on the outside world and watch scenes outside which provides entertainment for them.
- Access to an outdoor escape-proof enclosure or run (non-electrified) is highly recommended so your cat has safe access to the outdoors but is still contained within your property boundaries. There are also specialised fences that rotate inwardly which can keep your cat contained to the backyard - this is another great way of providing access to the outdoors whilst still contained to the owner's property.
- Cats are often social animals so we recommend considering having two compatible cats that get along well with each other. They keep each other company while their human owners are out and help to prevent loneliness and boredom. The RSPCA recommends considering purchasing two cats together, e.g. a sibling kitten pair, two kittens of similar age, or any two cats that are known to get along well.
- Confined cats can also enjoy regular walks outside on a harness and lead with their owners. This gives them new scenery and scents for mental stimulation and exercise. Train early and use reward-based training. Reward the cat for walking forward with a tasty food treat (positive reinforcement).
- Contained cats should have a few litter trays available for each cat and these should be kept away from eating and sleeping areas. Provide separate food, and water bowls and sleeping areas for each cat. Ensure clean fresh water is available at all times.
- We also advise that you have your cat de-sexed as this will reduce the likelihood of fighting and urine spraying.
- Despite keeping your cat contained to your property boundary you will still need to have her micro-chipped and registered with the council so that if she does accidentally get out and become lost she can be reunited with you.

Source: RSPCA Australia knowledgebase: [http://kb.rspca.org.au/Is-it-okay-to-keep-my-cat-contained-within-my-property-boundary-all-of-the-time\\_70.html](http://kb.rspca.org.au/Is-it-okay-to-keep-my-cat-contained-within-my-property-boundary-all-of-the-time_70.html)



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