# Mandatory Desexing in the ACT: Has it worked?

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## Introduction

The Australian Capital Territory (ACT) is unique in that its residents live under only two tiers of Government – Federal, and Territory. The Territory Government fulfils the functions of both State and Local Government in all other parts of Australia. This simpler form of administration also enables legislators to introduce legislative change for which there might be more resistance in other jurisdictions. An obvious example is that the ACT became in 2000, the first jurisdiction in Australia to ban the tail docking of dogs. This has subsequently been adopted in every other State and Territory.

In 2001, ACT became the first jurisdiction to make the desexing of dogs and cats compulsory by six months of age. Part 74 of the *Domestic Animals Act 2000* had an implementation date of 1 June 2001, i.e. all dogs and cats born after that date are required to be desexed by 6 months of age, unless a permit is obtained to keep them intact. The permit is deliberately priced higher than the likely costs of desexing.

## 74 Dogs and cats to be de-sexed

(1) A person must not, without reasonable excuse, keep a cat that has not been de-sexed unless the person is the holder of a permit for the cat.

Maximum penalty: 50 penalty units.

(2) A person must not, without reasonable excuse, keep a dog that has not been de-sexed unless the person is the holder of a permit for the dog.

Maximum penalty: 50 penalty units.

- (3) Subsections (1) and (2) do not apply to a dog or cat— (a) under 6 months old; or (b) bought by, or in the possession of, its owner for less than 28 days; or
- (c) born before the commencement of this section.

## 75 Permits for dogs and cats not de-sexed

An individual may apply to the registrar for a permit to keep a dog or cat that is not de-sexed.

### 76 Approval or refusal of applications

- (1) If an application for a permit has been made under section 75, the registrar must, by written notice to the applicant—
- (a) issue a permit; or
- (b) refuse to issue a permit.
- (2) The registrar must issue a permit for an animal if satisfied that—
- (a) it is kept for breeding or used, bred or bought for show; or
- (b) it would be detrimental to the health of the animal if it were to be de-sexed; or
- (c) it is a racing greyhound.

(Domestic Animals Act 2000)

The ACT has a population of about 334,000 living in an area of 2,358  $\rm km^2$  landlocked within South-Eastern NSW; the majority live in the city of Canberra. Residents of the ACT have a higher level of tertiary education and a higher per capita income than other Australians (Anon 2007a)(ABS 2007), and enjoy a similar level of pet ownership to the rest of Australia.

There are just two shelters for stray and unwanted dogs and cats in the ACT – the ACT Government dog pound (run by Domestic Animal Services) (dogs only) and the RSPCA (dogs, cats , wildlife and other species). Small numbers of animals may be rehomed through veterinarians, pet shops and other rescue organisations, but the vast majority of dogs and cats which are stray or unwanted pass through these two institutions. It is, therefore, relatively easy to assess the impact of change in circumstances for animals and animal owners by collecting data from these two institutions.

The RSPCA and ACT Pound were asked to provide data for the five years preceding the introduction of mandatory desexing (1996-2001), and the 6 years since its introduction (2001 -2007). At the time of writing, comprehensive data was available from the RSPCA, but data from the Pound, while promised, was not yet available.

The RSPCA collects data, using an electronic database (Shelter Buddy), for all animals entering its shelter in Weston, ACT. The disposition of the animal (returned to original owners, rehomed to new owners, euthanased) is then recorded. Breakdown of puppies and kittens vs. adult dogs and cats, and reason for euthanasia, have only been available in more recent years. However, a sufficient data set is available to compare major parameters before and after the introduction of mandatory desexing.

Further data was collected from the website of RSPCA Australia, which publishes annual statistics including shelter admission and euthanasia data for each State. Data is available from 1997-1998. (RSPCA 2007)

The hypothesis is that if mandatory desexing is a useful strategy to reduce pet overpopulation, then the number of animals entering pounds and shelters, and the number of animals being euthanased (other than for health or behaviour) should have significantly reduced in the years since the introduction of mandatory desexing. This paper will examine the situation for cats only, and a complementary paper will examine dogs.

### Cats - ACT data

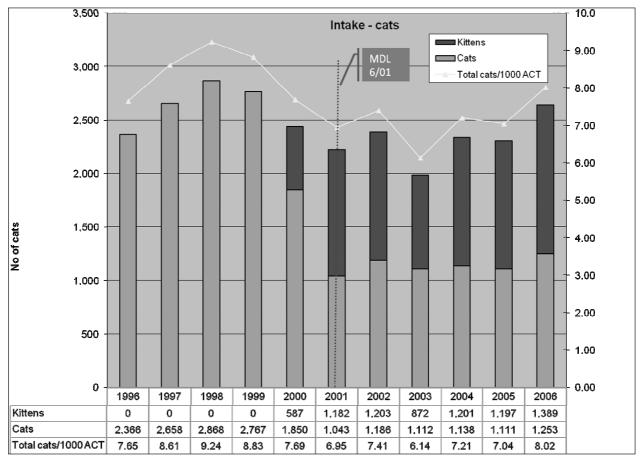
(Please refer to Chart 1 on the following page). The box and dotted purple line on this and subsequent charts indicate the introduction of Mandatory Desexing Legislation in the ACT in June 2001. The yellow line indicates the total intake of cats by RSPCA ACT divided by the population of the ACT in that year, x 103.

This chart shows that the intake of cats fell from 1998 to 2003, and is now rising again. The six year average intake preceding the introduction of Mandatory Desexing was 2553.5 per annum (1996-2001), ad this fell to a five year average of 2332.4 (2002-2006) – a difference of 221.1 or 8.6%. The graph clearly shows that the intake is rising from a low of 1984 in 2003 to 2642 in 2006.

The beginning of the fall in intake of cats preceded (by two years) the introduction of mandatory desexing legislation, and the intake of cats now exceeds the level of the years immediately following its introduction.

It can be concluded that mandatory desexing legislation has not reduced the intake of cats into RSPCA ACT.

Chart 1 - Intake of cats 1996-2006 - RSPCA ACT



(Link M et al 2007)

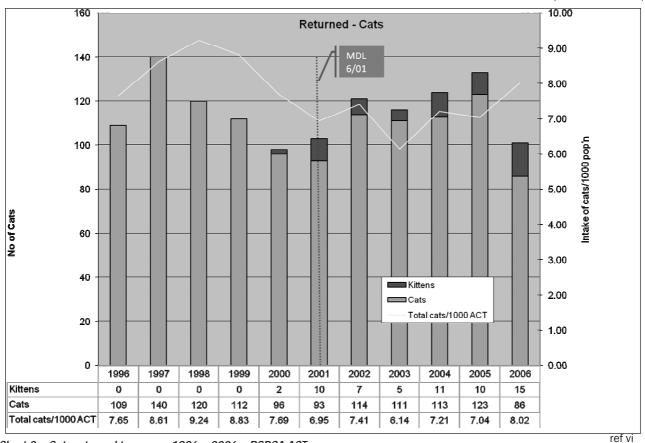


Chart 2 – Cats returned to owners 1996 – 2006 – RSPCA ACT

This chart shows that the number and proportion of cats returned to their original owners has risen since 2000, (except in 2006), and this is likely due to improvements in cat identification and owner attitude.

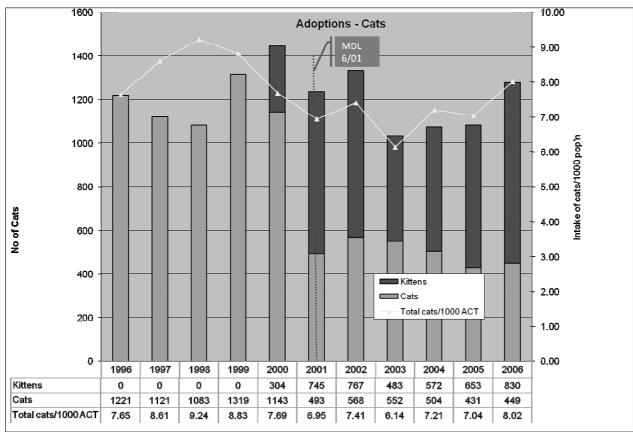


Chart 3 - Adoptions of cats 1996 - 2006 - RSPCA ACT

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This chart shows that the number and proportion of cats finding new homes peaked in the years 2000-2002, fell in 2003-2005, and rose again in 2006. This does not appear to be associated with the introduction of mandatory desexing legislation.

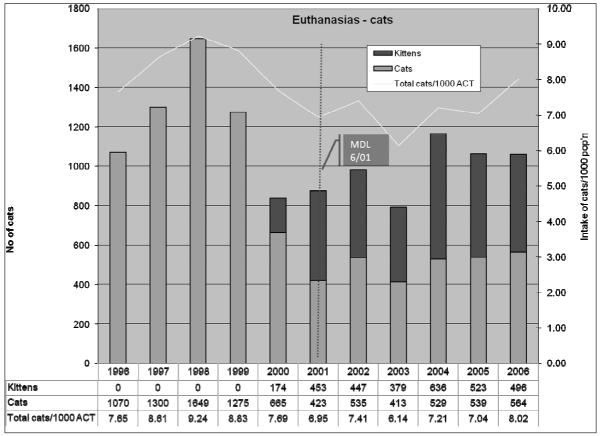


Chart 4 - Euthanasia of cats 1996-2006 - RSPCA ACT

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This chart shows that the number and proportion of cats being euthanased fell from a four year average (1996-1999) of 1323.5 to a seven year average (2000-2006) of 848.15, a difference of 475.35 or nearly 36%. The greatest fall was from 1998 to 2000, and the number of cats euthanased has been, in general, rising since then.

Given that the greatest fall preceded the introduction of mandatory desexing legislation, and that the number of cats euthanased has been rising since 2001, it can be concluded that mandatory desexing has not reduced the number of cats euthanased at RSPCA ACT.

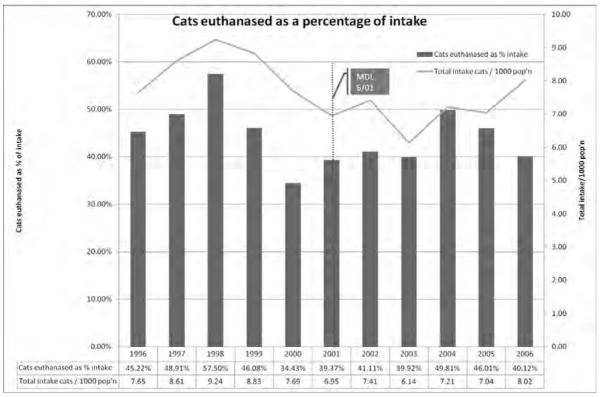


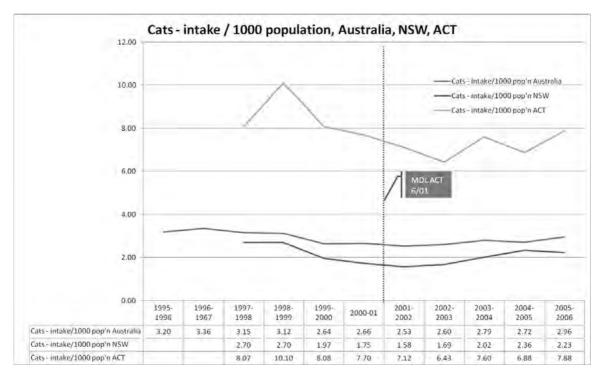
Chart 5 - Cats euthanased as a percentage of intake 1996-2006 - RSPCA ACT

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This chart shows that the proportion of cats euthanased fell from 1998 to 2000, and has risen since then, including since the introduction of mandatory desexing legislation in 2001. This shows that mandatory desexing legislation has not reduced the proportion of cats euthanased at RSPCA ACT.

## ACT vs. NSW and Australia

It is appropriate to compare the changes in the ACT since the introduction of mandatory desexing with the situation in NSW (which surrounds the ACT) and Australia.

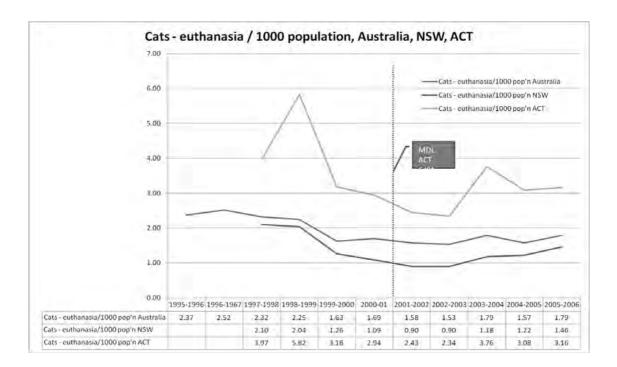


(Linke M et al 2007)

#### Chart 6: Intake of cats / 1000 population

This chart shows that the intake of cats in the ACT is much higher than in the rest of Australia or NSW. The most likely reason for this is that the ACT has only one refuge for cats, whereas in other jurisdictions other cat charity groups (such as the Cat Protection League) and/or Local Government Pounds accept cats. Thus the burden on RSPCAs in other jurisdictions is likely to be less than that on RSPCA ACT.

The chart also shows that the intake of cats/1000 population has roughly paralleled the situation in NSW and the rest of Australia, with a fall from 1998-99 to 2002-03, and a rise since then. There has been no obvious beneficial impact of compulsory desexing in the ACT.



## Chart 7: Euthanasia of cats/1000 population

This chart shows that the euthanasia rate per 1000 population is higher in the ACT than in other States, for reasons mentioned above. The rate of euthanasia of cats / 1000 population in the ACT roughly parallels that in NSW and the rest of Australia, with a fall from 1998-99 to 20002-03, and a rise since then. There has been no obvious beneficial impact of mandatory desexing in the ACT.

It is apparent that Mandatory Desexing Legislation has not reduced the euthanasia rate in the ACT.

## Animals euthanased in Pounds and Shelters

If we accept that a proportion of animals entering pounds and shelters will have to be euthanased, the reasons for euthanasia become critical in assessing the nature of the perceived pet overpopulation problem.

In 2006, CEO of RSPCA ACT, Michael Linke, reported:

"In 2006 no cat or dog was euthanased as a result of over population in the shelter. The main reasons for cat euthanasia were:

Feral 39%

Health related issues 33%

Health 37% (Linke M 2007)

With regard to dogs, the main reasons were: Temperament 57%

In other words, the RSPCA ACT found homes for all the dogs and cats which were suited by health and temperament to live as companion animals.

Indeed, Mr Linke makes a point of the RSPCA's service to the community of screening pets for health and temperament (Link M 2007 pers comm.). Rather than having an oversupply of cats, such was the demand for kittens that in 2006 19 kittens were imported from the RSPCA in Townsville and adopted in the ACT (Linke M 2007).

A more detailed analysis of RSPCA data for 2006 is in the table below:

| RSPCA ACT 2006                   | Cat    | Kitten | Feline |
|----------------------------------|--------|--------|--------|
| Reason for Euthanasia            |        |        |        |
| Behaviour                        | 202    | 19     | 221    |
| Health                           | 149    | 260    | 409    |
| Feral                            | 188    | 216    | 404    |
| Total animals euthanased         | 539    | 495    | 1034   |
| Percentage of animals euthanased |        |        |        |
| Behaviour                        | 37.48% | 3.84%  | 21.37% |
| Health                           | 27.64% | 52.53% | 39.56% |
| Feral                            | 34.88% | 43.64% | 39.07% |
| Behaviour + Feral                | 72.36% | 47.48% | 60.44% |
| Total Intake                     | 1119   | 1385   | 2504   |
| Percentage of total intake       |        |        |        |
| Behaviour                        | 18.05% | 1.37%  | 8.83%  |
| Health                           | 13.32% | 18.77% | 16.33% |
| Feral                            | 16.80% | 15.60% | 16.13% |
| Behaviour + Feral                | 34.85% | 16.97% | 24.96% |

Table 1 – Reasons for Euthanasia by Category (from Linke M et al 2007)

Nearly40% of cats (<30% of adult cats and > 50% of kittens) were euthanased for health reasons. More than 60% of cats were euthanased for behavioural reasons, or because they were deemed to be feral.

It is important to point out that RSPCA ACT employs veterinarians, veterinary nurses and animal behaviourists. Animals euthanased therefore represent those which were unsuitable to be rehabilitated - those whose health or behaviour problems were so significant that return to health or amelioration of behaviour problem was deemed impossible or impractical, despite the intervention of appropriately trained and dedicated health care professionals.

Health problems include genetic problems, lack of preventative health care (vaccination, parasite control, good nutrition, dental care, etc) and misadventure (car accidents, inter and intra species conflicts, human related trauma (accidental and deliberate)). The latter two categories (lack of preventative health care and misadventure) essentially represent a failure of responsible ownership, which cannot be addressed or reduced by mandatory desexing.

Behaviour problems are caused by a combination of genetics and early experience (in combination with the current circumstances). The most critical component of early experience is positive exposure to a variety of circumstances and stimuli (all the components of life as a companion animal) during the sensitive period from 2-9 weeks of age (Karsh and Turner 1988), together with basic training for temperament and obedience. For cats the sensitive period is significantly earlier than for dogs, and cats should receive regular, gentle and preferably prolonged human physical contact (holding, stroking etc) from 2-3 to 6-7 (Overall 1997) weeks to be at ease in human company and make reasonable companions.

Behaviour was the most common reason for the euthanasia of adult cats. Inappropriate toileting and aggression are common reasons for abandonment, and are usually due to anxiety associated with genetic make up and early experience. Mandatory desexing will not directly address these causes of euthanasia in pounds and shelters.

Nearly 40% of the total number of cats (nearly 44% of kittens) euthanased were feral cats. Mandatory desexing will not reduce the number of feral cats because these cats will not be presented by owners for desexing. It is true that increased desexing of owned cats may contribute to a minimal reduction in the number of feral cats through reducing recruitment of owned/stray cats to the feral cat pool.

It is likely that many of the cats euthanased for behavioural reasons had not been raised in the company of caring humans, nor received appropriate early socialisation – this could be because they were only loosely associated with their "owners" or because they had been born to semi-owned or stray cats and adopted by humans after the sensitive period for the development of good relationships with humans (3-6 weeks). Mandatory desexing will not reduce these euthanasias because stray and semi-owned cats will not be presented for desexing.

Available ACT data support the contention that a large percentage of cats currently entering ACT RSPCA are of stray or feral origin (see above euthanasia data). Dealing with the feral and stray cat population in the ACT could prevent between 400 and 600 cats and kittens per annum from being euthanased in the RSPCA, without considering the many additional feral and stray cats and kittens euthanased annually by ACT Veterinarians or which die from disease, injury and accident.

While one can only speculate on the reasons for the failure of mandatory desexing to reduce the intake or euthanasia of cats in the ACT, the following should be considered:

 Existing high desexing rate of owned cats in the ACT. As long ago as 1993, ACT enjoyed a rate of desexing (Paxton 1994) (92%) higher than that determined to result in zero population growth (Nasser and Mosier 1982)(88% of female pet cats). This is an excellent level of compliance, and it seems unlikely that compulsion would dramatically increase this number.

In Australia in 2003, the percentage of pet (i.e. owned) cats desexed was 93.6% of females and 91.1% of males. The percentage of desexed pet cats has been steadily rising (anon 2007b). In Victoria, 85% of registered cats are desexed (McMurray p*ers comm.*). The number of registered cats which are desexed in Victoria may be lower than the national average reported by telephone survey because owners of breeding cats (breeders) are more willing to have them registered than those with pet cats.

- Lack of registration or compulsory microchipping of cats.
  Except for voluntary surveys, we have no data on the number of owned cats, and no method of monitoring trends in ownership or compliance with legislation.
- 3. Lack of enforcement. While the Act is available and the information about the need to desex is promoted in brochures and on the home page of the ACT Domestic Animals Services website (ACT 2007), there is little proactive promotion (except by veterinarians and welfare organisations) and, to the author's knowledge, no prosecutions for breaches of the Act in respect of this clause.
- 4. Unowned cats as the major source of cats entering the RSPCA shelter. The high rate of feral cats and cats with behavioural problems suggests that the majority of these cats have never been owned by someone prepared to take sufficient responsibility for them to comply with legislation and have them desexed. Victorian (McMurray pers comm.) and overseas data (Anon 2007b) also support this contention.

The offspring of semi-owned, stray and feral cats are unlikely to make suitable pets because of health and temperament issues. If a higher proportion of responsible cat owners have their cats desexed, an increasing percentage of cats will have been born of unowned cats and will be less suitable as pets. This is a concern, as Australia's cat population is in decline (Baldock et al 2003). In the case of both cats and dogs, members of the public who have unsatisfactory experiences with unsuitable pets (whether for health of temperament/behaviour reasons) are less likely to be willing to undertake pet ownership again. Of course, a responsible cat breeding industry may arise in response to the demand for suitable pet cats. It is to be hoped that this will include the breeding of "domestic" as well as "pure bred" cats. The loss of well suited domestic cats (and cross bred dogs) from the gene pool is to be regretted.

## Discussion

The dynamics of dogs entering pounds and shelters are different from those of cats. Essentially dogs have been, at one time, owned, and the majority are abandoned by their owners (whether directly or by failure of reclaiming) because of temperament and behaviour problems. The majority of cats entering shelters are either feral (more than 16% of intake, nearly 40% of euthanasias) or are free living or stray – in 2006 only 101 cats from an intake of 2504 (4%) were reclaimed by their owners, compared to 429 of 1301 dogs (34%). While there are many proposed reasons for the low reclamation rate amongst cats entering shelters, a common reason is that they are stray or free living cats.

If the source and reasons for admissions to pounds and shelters differs for cats and dogs, then it makes sense that the solutions to reduce the intake and especially the euthanasia of cats and dogs also differs. For dogs, we need to target the owners, and issues such as identification, registration, education about responsible ownership (including reproductive issues) and most especially about dog temperament and behaviour are important.

Education of owners about normal dog behaviour (what to expect when you obtain a pet dog), the importance of socialisation, temperament and behaviour training, and providing solutions for behaviour problems is pre-eminent.

While many of these issues are also relevant for cat owners, the high proportion of cats entering and being euthanased in shelters which are feral or free living means that there is no owner to educate, encourage to comply with legislation, or penalise for breaches. Mandatory desexing of cats will be "honoured in the breach" because these cats have no owner, and will be ignored by that percentage of the cat owning population who do not take their animal owning responsibilities seriously at the moment. The introduction of mandatory desexing legislation would be ineffective at significantly reducing the intake and euthanasia of cats in shelters, but will impose legislative compulsion on the large percentage of the population who are already responsible. The key to making a significant impact on intake and euthanasia rates for cats in shelters is to manage the feral and stray/free living cat population.

The increase in the number of cats which, having entered the RSPCA ACT shelter, are returned to their owners, is evidence of the success of identification of cats and of improvements in owner attitude. Identification of an animal is a mark of ownership – "I care enough about this animal to claim it as mine" and is the fundamental tool of animal management at a community level. From an owner's point of view, ownership can be claimed by a tag on a collar, a microchip, or registration.

From an animal management point of view, microchipping is the fundamental tool. Of all available forms of identification, only microchips are permanent and unalterable. The cost of microchipping is a sign that an owner claims ownership. The presence of a microchip identifies the cat as "owned", such that appropriate decisions about its future can be made. The owner of a lost cat can be identified through its microchip and contacted so the cat can be reclaimed. The owner of an injured cat can be identified so that decisions can be made about its treatment. The owner of a straying cat can be identified and educated about their responsibilities, warned or penalised. A cat not bearing a microchip can be assumed to be "unowned" and dealt with according to legislation if it is lost, injured, or straying onto an area from which it is prohibited. A microchip enables the differentiation of two scared, perhaps aggressive cats so that a feral cat may be swiftly euthanased and its suffering not prolonged.

Registration also establishes ownership, but its principal advantage over and above identification is the revenue gained. The administrative cost of registration is high, and the advantages of good animal management accrue to the whole community, so there is an argument for requiring identification (microchipping) without registration, and sharing the cost of animal management across the whole community from rates or taxes.

#### Recommendations

A far greater impact on intake and especially euthanasia rates of cats in shelters could be accomplished by:

- Mandatory identification of all cats (and dogs) by microchipping, with requirements for rapid and accurate data transfer to accredited databases. Such databases to be willing to share data and analysis with Government,
- Adequate funding of animal management services,
- Standardised and centralised collection of shelter data (intake breakdown by age, gender and desex status, and reason; in shelter data (health, behavioural assessment); disposition (reclaimed, rehomed, euthanased (and reason)),

- Efforts to control the feral cat population, either by destruction or by trap-neuter-release programmes.
- Efforts to manage the colony/stray cat population (those resident in inner city areas, educational institutions, hospital grounds, factories etc) by similar measures,
- Education of the population about their responsibilities.
  Reasons for failure to desex are addressed in a paper by Murray (Murray 1993), and
- Monitoring of advertisements for sale/give away kittens (and puppies), and either prosecution of the breeders (where legislation exists), or assistance to have their breeding stock desexed.

Currently, there are no well accepted, simply effective, and especially inexpensive management tools for unowned cats. There is considerable debate about the ethics and efficacy of trap-neuter-release (TNR) programmes vs. euthanasia of free living cats, with some areas of the welfare sector arguing strongly against euthanasia and for TNR, while the conservation sector tends to argue for euthanasia programmes. There is well justified concern about the welfare outcome for cats who have been trapped, neutered and released (Webb 2006), and in some jurisdictions (for example the ACT), releasing an animal is an offence against relevant legislation (compare Animal Welfare Act 1992 Section 11 and Nature Conservation Act 1980 Section 39 (1A). The development of a cat specific toxin in Victoria, which is understood to be nearing approval for use, will increase options for cat control but will likely reignite the debate about the ethics of cat management.

## Conclusion

The trends in intake, rehoming, adoption and euthanasia of cats in the ACT cannot be clearly concluded to be due to any particular change, because many factors are in play at any one time. Apart from the changes inherent in the *Domestic Animals Act 2000*, there have been changes in:

- Management of RSPCA shelter, veterinary clinic, adoption program,
- Levels of identification of animals,
- · Attitudes toward animal ownership.

However, the data presented show that there is no improvement in measurable parameters associated with the introduction of mandatory desexing legislation in the ACT. It is unclear whether the lack of enforcement of the legislation is responsible for its failure to reduce shelter intake and euthanasia rates for cats, but overseas experience (Allen 2006) and logic suggests that mandatory desexing is an unsuccessful, wasteful and expensive management tool.

A legislative change is an easy thing to call for and to enact, but does not address the real problems. Mandatory desexing will never prevent feral and stray cats from reproducing, and these cats are the main source of cats and kittens entering shelters. Reclamation rates from shelters can be improved by better animal management (compulsory identification using microchips) and possibly registration. Desexing rates for owned cats is already high, and exceeds the rate calculated for zero population growth in the owned cat population; the consequence of which is a declining owned cat population in Australia.

While there is some cross over from the owned to the stray and feral cat populations, the high rate of desexing in the owned cat population means that the stray and feral cat populations, which have low desexing rates, are largely self supporting. It is the "excess" of stray and feral cats which end up in shelters as unwanted, unrehomable cats, and are euthanased.

It is right and appropriate that the numbers of cats entering shelters which can never be rehomed should be reduced, but this will not be achieved by mandatory desexing of owned cats. Instead, authorities must decide and enable measures to manage the stray and feral cat populations – both their absolute numbers and especially their reproductive potential.

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### About the Author

A veterinarian since 1982, Michael Hayward is a director of a small animal hospital in Canberra. As well as some experience in teaching and research, he chaired the ACT's Animal Welfare

Advisory Committee for 7 years, during which time ACT became the first jurisdiction to ban the tail docking of dogs and introduced compulsory desexing of dogs and cats. He sat on various committees for the ACT Government relating to the keeping of companion animals, including defining the keeping conditions for cats in "cat confinement suburbs" in the ACT. Michael was Secretary or President of the Australian Veterinary Association's ACT Division for 6 years, was a member of its Animal Welfare Advisory Committee, and has chaired its Urban Animal Management Advisory (UAM) Committee since 2004. UAM has now been renamed the AVA's Centre for Companion Animal's in the Community, and he represents this Centre on a subcommittee of the Australian Animal Welfare Strategy.