

Evidence-based strategies for saving cats: an Australian perspective

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How big is the problem in Australia?

Approximately 7 cats /1000 human residents enter shelters and pounds around Australia annually based on 2012-13 data, and the death rate varies between states from 3 to 7 cats/1000 residents (Chua and Rand, unpublished data). This compares with a dog intake of 10 dogs/1000 residents and deaths of 2 dogs/1000 residents. Approximately 170,000 cats enter shelters and pounds annually in Australia, with 27% found new homes (compared with 19% of dogs), 6% transferred (compared with 7% of dogs), but only 4.5% are reclaimed by the owner, compared to 48% of dogs, resulting in an average euthanasia rate across Australian shelters and pounds of 56% for cats compared to 21% for dogs. It is estimated that the cost to the community is approximately \$250 million a year to manage unwanted cats and dogs in shelters and council pounds (Albertson *et al*, 2013).

There is also a human cost, with 50% of workers directly involved with euthanasia developing post-traumatic stress, which is associated with depression, substance abuse, high blood pressure, sleeplessness and suicide (Reeve *et al*, 2005, Baran *et al*, 2009, Frommer *et al*, 1999, Rohlf *et al*, 2005). Staff turnover rate is proportional to euthanasia rate in shelters. (Rogelberg *et al.*, 2007)

Being unwanted kills pets more than disease. As a community, how can we best respond to a situation that is responsible for the death of so many cats annually? Reducing shelter intake is the most effective way of reducing euthanasia, and 9 strategies are proposed that would save cat lives in shelters and pounds.

Strategy 1: Transparency of shelter and pound performance

Facts supporting the strategy

The RSPCA has state and national data available on their website, the Lost Dogs Home has data available in their annual report (on website), and the Animal Welfare League (Qld) has data on website, but many other welfare agencies do not have data readily available to the public. Publically available data for individual council pound performance is only available in Victoria, and are listed on each council website under their Dog and Cat Management Plan. NSW has combined data for the whole state available through the Department of Premier and Cabinet, but individual council data are not available. The SA Dog and Cat Management Board publishes on their website combined data for councils in their annual report, but this does not include numbers euthanased. They also have combined data for councils and animal welfare agencies, but this is not on the website, and confidentiality agreements prevent release of individual agency data. There is no other states currently with data available publically. Double counting of intake occurs in most states, and occurs when councils have contracts with animal welfare agencies and both report the same animals as intake (Chua and Rand, *unpublished data*).

Why would transparency make a difference?

Transparency is important for two reasons. Firstly, how do you know where you want to be, if you do not know where you currently are, or where you were? And how do you estimate resources needed, and where they need to be directed, if, as a community, you do not know where performance is optimal, and where it is suboptimal and costing lives?

Secondly, there are numerous examples where public knowledge of the poor outcome for

impounded animals has resulted in public pressure and involvement in the community, resulting in the shelter or pound embracing practices which save lives. The power of people to initiate change is well recognised, and transparency together with community education has the potential to save more lives than most other strategies.

Recommendation:

1. In all states and territories, a government-mandated cat (and dog) management plan is publically available on every council website which includes key data such as intake, reclaim, re-home, transfers, euthanased, and foster/in care. This is similar to the Victorian model, but includes more reporting categories for outcome. It should also indicate what pound functions are outsourced and to whom.
2. There is also mandated transparency for animal welfare agencies with reporting of the same categories of outcome data as required for councils and this is made available annually on their website or other publically available documents.
3. There is also centralized data collection at the State level that is readily accessible to the public, and facilitates identification of where best practice is occurring, and where more resources are required. This data should include data for each council and animal welfare agency, as well as combined statistics for the state which do not include any double counting of animals.

Strategy 2: Mandated anti-discrimination laws against owned pets in rental or owned accommodation.

Facts supporting the strategy

Surrender reasons provided to the RSPCA for owner-surrendered cats indicated that 87% of adult cats and 95% of kittens were surrendered for owner-related reasons, rather than cat-related reasons. Behavioural reasons accounted for 7% of adult cat surrenders and 1% of kittens (Albertson *et al*, 2013, 2014). Failure to find cat-friendly accommodation was stated as the primary reason for 36% of adult cat surrenders, although only one reason was allowed.

Lack of pet friendly accommodation results in approximately 9000 adult cats and 2200 kittens, becoming homeless and surrendered to the RSPCA annually. If this is extrapolated to other animal welfare agencies and council pounds, the number is approximately 30,000-40,000 a year, and half the cats die as a result of their owner being unable to find pet-friendly accommodation.

Recommendation:

Government-mandated legislation against discrimination of pets in rental or owned accommodation should be implemented because it would save cat (and dog) lives.

Strategy 3: Desexing

Facts supporting a desexing strategy for owned cats

More than half the cats entering shelters are kittens. Of cats entering RSPCA shelters nationally between 2006-2010, 47% were adult and 53% were kittens (Alberthson *et al*, 2013, and Alberthson, 2014). Of adults, 47% were owned, and 53% stray. In contrast for kittens, 38% were from owned queens, and 62% were stray. Importantly, strategies targeting owned cats are ineffective for stray cats.

In USA, approximately 68% of litters are unplanned (New *et al.*, 2000), and reasons given included prohibitive cost of desexing or the inconvenience, cat had undetected heat, owner thought kitten was too young, or the owner believed a litter was good for the cat or kids. When owners were asked

the question, was a cat better off if she has one litter before being 'fixed', 57% did not know the correct answer (Scarlett, 2008).

Although a high percentage of owned cats are desexed in Australia (> 90%), 30-70% are not sterilized before 6 to 12 months, and 12-20% in Australia and USA have a litter before being desexed (Toukhsati, Bennett et al. 2007, Marsh 2010). For example, in a Western Australian study of cats presented for discounted microchipping in 2012 and 2013, only 49% and 28% of cats respectively, under 2 years old were desexed, whereas 93% and 97% of cats aged at least 2 years were desexed (Johnson *et al*, 2014). This consistent with the finding that while most owned cats in Australia are eventually desexed, for many cats, it is performed too late to prevent at least one litter of kittens being produced.

Strategies are needed to reduce this 'spey delay' in owned queens, with the message that having a litter is not good for the cat, not good for the kids, the kitten is not too young by 8 weeks of age, and that desexing cats at < 5 months results in better health and behaviour compared to > 5 months (Spain *et al*, 2004).

What is more effective - government-mandated desexing, or targeted desexing to areas of high intake and euthanasia?

Facts supported mandated desexing

ACT has mandated desexing of all dogs and cats by 6 months of age. However, when national RSPCA data were analysed, ACT had the lowest prevalence of desexing of kittens (< 6 months of age) admitted to shelters of all states (3%), but had the second highest percentage of desexed adult cat admissions, although this represented only 61% of all adult admissions (stray and owned), and 81% owned-surrendered adults. This suggests owners eventually comply, but it is too late to prevent a litter. If desexing is mandated, for two reasons, it would likely be most effective if it was by 4 months of age. Firstly, kittens can reach puberty by 16 weeks of age, and secondly, it encourages veterinarians to include desexing in the initial health program for cats - vaccinate, vaccinate and "book in for spey 2 weeks later", rather than "call us in 2 months", which may result in cat owners not getting around to desexing before the cat is pregnant.

However, there are several challenges. Currently, most veterinarians are not trained in early-aged desexing (8-16 weeks of age), only a small minority of veterinary staff in universities teaching desexing advocate it for client-owned cats (Jupe *et al*, unpublished data), and it typically requires an additional week of student training in surgery to gain skills in early-age desexing, which is very costly, at a time most veterinary schools in Australia have budget deficits. Animal welfare agencies need to partner with veterinary schools to provide training in early-age desexing to undergraduate veterinary students so they graduate with competency in early-age desexing.

Mandated licensing of cat breeders and mandated desexing of cats from breeders is unlikely to be cost-effective in reducing shelter intake and euthanasia, given that pure-bred cats represent only minority of owned cats (Headey, 2006), and only 5% of cat admissions and 3% of cats euthanased in RSPCA shelters nationally are purebred (Alberthson *et al*, 2013, and Alberthson, 2014),

Importantly, mandated desexing is ineffective for reducing the 60% of kittens that come from unowned queens.

Facts supporting a targeted desexing strategy for stray kittens and cats (and owned queens)

Stray kittens comprise approximately 60% of kitten intake and 90% display some socialization to humans, with only 10% classed as feral. These kittens are likely coming from semi-owned cats which are provided some care, usually food, by people who do not perceive they own them. This

public behaviour is common – for example, in a phone survey in Victoria, 33% of phone respondents said they owned a cat, but 22% fed a cat that was not their own (Toukhsati, Bennett & Coleman, 2007). Similar statistics were found in South Australia and USA where 27% and 25% of households respectively, feed a cat they do not perceive they own. In Ireland, the practice was equally as common as owning a cat (11% of population). The population of ‘semi-owned’ cats is estimated to be equal to 2/3rds of the owned cat population. However, in contrast to owned cats, only 20% of these semi-owned cats were desexed (Toukhsati, Bennett & Coleman, 2007). Therefore, cats fed by people who do not perceive they own them are a very significant source of kittens and cats.

Strategies to prevent unwanted kittens from *unowned* queens require addressing the behaviours of people who feed cats but do not take ownership. Approximately 59% of people surrendering a stray cat have been providing care for more than 1 month, so have some relationship with the cat (Zito *et al*, 2015). Social marketing messages targeted to change attitudes and behavior are required, with a clear message that desexing is important to prevent kittens been born to die. Opportunities for desired behavior need to be provided, and evidence from USA suggests that people who do not perceive ownership will pay a maximum of \$20 for desexing.

Shelters and pounds generally collect data on the postcodes where cats and kittens entering the shelter originated. These can be used to focus the desexing programs where they would be most effective, that is, in areas contributing to high intake and euthanasia. To reduce the “kitten tsunami”, and stop last summer’s kittens producing next summer’s kittens, desexing programs should begin from April and continue through winter and spring.

What is the evidence that targeted desexing works?

San Jose reported a 50% drop in cat shelter admissions using spay/neuter voucher program and calculated that the net savings to the county was \$1.5 million over 4 years. (Kass PH, *et al* 2013).

Recommendation

Based on the data from ACT, mandated desexing does not appear to be very effective (Alberthson 2014), and given that any legislative change is costly (it may exceed \$1million), this may not be the most cost-effective strategy. Responsible owners have their cats desexed without legislation, *laisse faire* owners do not, however, they also may not comply with legislation, and mandatory desexing legislation is not effective for people who do not perceive themselves as cat owners, although they are providing some care for a cat. Targeted desexing for cats has been shown to be effective, and without more evidence, the recommendation is to put resources into targeted desexing. Any combination of low-cost desexing clinics run by animal welfare agencies, desexing through participating veterinary clinics (subsidized by government and animal welfare agencies), and mobile vans run by animal welfare agencies are likely to be effective. If existing surgery facilities do not exist in the animal welfare agency, coopting existing veterinary clinics may be the most cost-effective, because the building and surgery suites already exist, and cat owners develop a relationship with the veterinarian for ongoing health issues. Blacktown council’s experience was that \$100 spent in the community subsidizing desexing for dogs, saved the council \$200 from reducing dog entry into the pound (per comm Norm Blackman).

Ideally, mandated and targeted desexing could be trialed and compared in comparable councils and against a control council, to better evaluate the cost-effectiveness of the two strategies in Australian conditions.

Strategy 4: Confinement to property

Facts supporting the strategy

Because 35% of adult strays, and 42% of adult council admissions are desexed, it is likely that

likely many of these are owned-cats are wanderers. Owners delay longer looking for their lost cat compared to dog owners. In USA, the average time to call or visit an animal control agency was 1 day for dogs, compared to 3 days cats (Lord *et al.*, 2007). However, the minimum holding period for cats is 3 days in many Australian states. Strategies which keep cats on their owner's property will help to keep cats safe. What if every owned cat was confined on the owner's property – would there be as many stray cats euthanased in shelters and pounds? Various options exist including relatively inexpensive cat-proof fencing and invisible electronic fencing. These methods of containment maintain environmental enrichment and physical activity, which 24 hour confinement in the home does not, and home confinement predisposes to obesity and diabetes (Sloth, 1994; Robertson, 1999; Scarlett *et al.*, 1994; 1998). Keeping Cats Safe and Good Cats Play at Home booklets are a good source of information (Council of the City of Gold Coast), and the Victorian Department of Environment and Primary Industries cat confinement link (<http://www.depi.vic.gov.au/pets/cats/cat-confinement-enclosures-and-fencing>).

Recommendation

To prevent adult cats straying and keep them safe, it is recommended that cats be confined to the owner's property. Mandated containment should be trialed and evaluated in selected areas, and the cost-effectiveness compared with a voluntary system of incentives or subsidies, combined with appropriate social marketing messages to increase uptake.

Strategy 5: Identification

Facts supporting the strategy

Approximately 14% of dog and 15% of cat owners in USA lose their pet at least once in a 5 year period (Weiss, 2012), and 41% of lost cats were “indoor only” (Lord *et al.*, 2007). Although 76% of owned dogs and 64% owned cats in Australia are microchipped (Animal Health Alliance, 2013), only 9% of stray cats and 28% of stray dogs entering RSPCA Qld in 2012-2013 were microchipped (Lancaster *et al.*, 2015). However, 37% of animals entering RSPCA Qld with microchips had data problems with the microchip - 47% were still registered to previous owner or organization, 29% had phone numbers that were incorrect or disconnected, and 14% were not registered to a data base – although it is compulsory for the implanter to register the chip within 7 days (Lancaster *et al.*, 2015). The percentage of animals reclaimed decreased significantly between microchipped animals with no data problems, animals microchipped with problems, and animals with no microchip. Of stray cats, 61% with no problems, 33% with data problems, and 5% with no microchip were reclaimed. Importantly, cats with no data problems had 31 times higher odds of being reclaimed than those with no microchip. However, only 13% of reclaimed cats from RSPCA had a microchip (Alberthson *et al.*, 2013), suggesting that microchipping is not a major factor in the reclaim of stray cats.

Currently, there is no legal requirement for a previous owner or organisation to transfer ownership to the new owner, and 47% of microchips with data problems were still registered to previous owner or organization. Would legislation requiring the previous owner to complete change of microchip details be effective? Could a process similar to car registration transfer, where the seller provides the buyer with the paperwork needed for ownership transfer, and both parties keep a copy increase currency of microchip details?

Recommendations

Mandatory identification does not appear to be very effective because only 28% of stray dogs and 8% of stray cats entering RSPCA Qld were microchipped, despite it being a legal requirement, and 37% of these animals had problems with the data recorded on the data base (Lancaster *et al.*, 2015). It is likely that an annual “Microchip Awareness Month” with provision of low- cost community microchipping locations, which also make it easy to check and update owner details, would be a

more effective strategy for increasing accuracy of microchip data, rather than legislation that requires database information be changed at the point of sale or give-away. However, if the cost of changing the legislation was minimal, implementation of both strategies would likely be better than either one alone. Social marketing messages about how to check for the presence of a microchip and how to update contact details, could also be trialled to determine the cost-effectiveness. Microchip database companies should also be encouraged to send regular reminders to clients to update details, for example using text messages or emails providing a reminder and a link to update details. There are also opportunity for Australia Post and energy companies to provide a community service by asking people when they move and get electricity connected, if they would like their contact details to be updated with their pet's microchip database company.

Strategy 6: Education of pound & shelter managers on best practice

Facts supporting the strategy

Some council pounds in Australia kill 80 to 90% cats, and others 7%. There are many examples from USA and some from Australia (eg RSPCA at Wacol, AWL Gold Coast), where introducing a range of strategies to reduce intake and increase live release has had marked impact in reducing euthanasia. For example, Jacksonville Animal Control received 34,000 animals and killed 23,000, but 10 years later, after a name change to Jacksonville Animal Care and Protection, and introducing a range of strategies aimed at reducing intake and increasing adoptions, only 2,000 animals were euthanased. However, many shelter and pound managers are unaware of strategies that can markedly reduce euthanasia.

For example, many council pounds have little or no foster programs, which could be organised with the assistance of the community. Similarly, transferring to rescue groups and animal welfare agencies could be better utilized by most councils with poor outcome data. Although council pounds have a requirement to take in animals, they could engage surrendering owners to help find a solution for their pet, such as finding a new home or participating in behavioural training classes for their cat. Similarly, assisting people to find a solution for a semi-owned cat would decrease intake, which has a powerful effect on decreasing euthanasia. At Jacksonville, asking people if they would hold the animal until a place became available, and in the meantime consider keeping it or finding a home for it, resulted in approximately 30% of people taking their animal home again (*per comm* Rick DuCharme, FCNMHP). For animal welfare agencies which are not required to take in all animals, limiting intake to only the number that can be cared for dramatically reduces euthanasia, for example, RSPCA Qld Wacol. Erie SPCA put all people surrendering stray cats on a wait list, which dramatically decreased intake because with counselling, 14% of people decided to keep the cat and 45% found a new home for it, resulting in no treatable stray cats being euthanased. Other strategies aimed at keeping animals in their home can be utilized such as a food bank for those who cannot afford pet food, behavior counseling, general counseling on solutions for their pet, assistance finding affordable pet-friendly housing, and assistance with affordable health care.

Strategies which make it easier to adopt a pet, and increased advertising so the shelter or pound is viewed as the preferred source for a pet, have been used successfully in a number of shelters including Jacksonville. Subsidized spay-neuter programs, targeted for location and time of year, and with cost limited to less than \$20 if the cat is unowned, reduces entry and therefore, euthanasia. Reduced entry, reduces the number of cats in the shelter, which assists in reducing the number of cats getting sick in shelters and pounds, and subsequently being euthanased.

For people wanting to surrender a cat, provide the outcome of a quick adoptability test on entry, and use it to inform the surrenderer of the realistic chance of rehoming of their pet, based on assessment of its behaviour, health, and cuteness. Because more than half the stray cats entering RSPCA shelters are fed for 1 month or more by the surrenderer (Zito *et al.*, unpublished), many of these people have an attachment to the cat, and if informed of the high likelihood of euthanasia, they may

be more engaged to find an alternative solution for the cat.

Fast tracking the most adoptable cats will save lives - as quickly as possible put the most adoptable cats into the adoption pool, because this is proven to increase total number adopted and decrease the number euthanased - even for cats that are difficult to rehome. Increasing rehoming opportunities increases the number of animals adopted, for example, through petshops, and special adoption events, potentially held in conjunction with other community events that attract animal lovers such as agricultural or horse shows, polo events etc. In addition, special promotions of reduced price adoptions are associated with increased adoptions, without increased risk of subsequent surrender (Zito *et al.*, 2015).

There a number of other strategies which decrease intake and increase live release, and these are often more effective when shelters, pounds, rescue groups and communities all work together to save animals (Million Cat Challenge).

Recommendations

Shelter and pound managers should be required to undertake annual continuing education on shelter management practices that improve outcomes for animals, such as national (eg. G2Z) and international conferences and webinars (eg. HSU, ASPCA, Maddies, Best Friends).

Strategy 7: Shelter, Neuter and Return to Field

Facts supporting the strategy

Stray adult cats are a heterogeneous population, and have the worst live release statistics in shelters and pounds. They comprise lost but owned cats, semi-owned cats, and feral cats. The following findings should be considered when considering strategies for lost, owned adult cats. Cats are 3 times more likely to “disappear” from household than dogs, and only approximately 4% of cats are reclaimed from shelters and pounds across Australia (Chua unpublished, Alberthson *et al.*, 2013, 2014). In a US study, 66% of lost cats were found because they returned home and only 7% of lost cats were found via a call or visit to shelter. Cats are at least 13 times more likely to return home by non-shelter means than by shelter means.

Free-living cats are no less healthy than pet cats, and have ideal body condition (not obese) (Scott *et al.*, 2002). Less than 1% of 100,000 free-living stray and feral cats trapped in trap-neuter and return programs were deemed too unhealthy to be returned to the field, and were euthanased as a result of debilitating conditions, trauma or infectious disease (Wallace *et al.*, 2006, Million Cat Challenge).

For adult feral cats

Trapping to kill is not the solution to decrease numbers of unowned cats and kittens. It is ineffective and costly. The cost of eradicating cats from Australia would exceed \$1.5 trillion and is greater than the Australian GDP, so is clearly unaffordable and impractical. Money spent by councils trapping and killing is largely ineffective, because only a small of the population (typically 2-5%) is killed, whereas for effective population control this would have to increase to 50%. A more effective strategy is to identify areas of high value with endangered wildlife, and fence these off and remove all introduced pest species. Removal of only cats may not be beneficial to the environment if other introduced species are present such as rats, rabbits and foxes. For example on Macquarie Island, where cats initially were removed, it had a worse environmental effect, because of the marked increase of the rabbit population (Bergstrom *et al.*, 2009).

Evidence that shelter, neuter and return works

In shelter-neuter and return programs for stray cats, only medically untreatable cats are euthanased. Cats which are not adopted and would otherwise be euthanased, are neutered, ear-tipped, ideally microchipped, and returned to within 300 meters of capture. Information to advise neighbours on

the release program should be distributed to houses in the vicinity, and contain information on how to contact the shelter if there were concerns about the released cat. In the San Jose animal shelter in USA, over the 4 years after shelter-neuter and release was implemented, kitten and cat intake decreased 29% and euthanasia decreased from 70% to 23%, with 96.6% of healthy stray/feral cats saved (10,080 cats). Euthanasia in the shelter from upper respiratory disease declined 99%, and dead cat pick up off streets declined 20%. During the same period there was no change in dog intake or euthanasia statistics.

However, shelter-neuter and return is illegal in Australia because unowned cats are considered pests, and it is illegal to release a pest species, because they are perceived as having an adverse effect on wildlife. Nevertheless, cats can have negative, neutral or positive effect on native wildlife, depending on location, and the presence of other predators, especially introduced species such as rats and rabbits.

Currently, no study in suburban Australia has demonstrated a negative effect of cats on native wildlife population. A Perth study investigated native mammal diversity across 3 bushland sites, which for >10 years had either banned cats, required cats to be kept inside overnight and to wear a bell, and one site had no regulations regarding cats. Numbers of the most abundant medium-sized mammals (brushtail possums and southern brown bandicoots) were similar across all sites. A smaller mardo *Antechinus flavipes*, which is highly susceptible to cat predation, was most abundant at the unregulated cat site. The conclusions from this study were that owned cats adjacent to bushland were not having a negative effect on native mammals, and that density of vegetation was likely positive factor in determining mammal density (Grayson, Calver & Lymbery, 2007).

In Albany, New York, USA, they compared the density of domestic cats roaming in a suburban nature reserve with small mammal density and biodiversity, and found no link between cat density and local small animal abundance or biodiversity (Kays & DeWan, 2004).

A study of 57 sites across metropolitan Perth investigated factors effecting passerine bird community composition (eg. magpies, blackbirds) and found no link between cat density and passerine bird species richness. Importantly, decreasing bird population was found with increasing housing density, and with increasing distance from bushland, leading the authors to conclude that habitat destruction and degradation were the critical factors in decreasing density and diversity of passerine birds, and not cats (Grayson, 2007).

In a current UQ study, we are asking what owners of dogs and cats observe their pets catch over a 6 month period. Preliminary data suggest that dogs and cats caught more mammals than birds, reptiles, or amphibians, and that cats overwhelmingly catch mice, followed by rats and then rabbits (M. Franklin *et al* unpublished data). The preliminary findings are consistent with Macquarie Island data, where cats had a positive effect on wildlife because of introduced rabbits. More data are required for this survey, so please complete it by clicking on the following link:

https://au1.qualtrics.com/SE/?SID=SV_61BLXsQ8oN1EjGJ

or type into the address bar: <http://tinyurl.com/pgay346>

Two studies from Europe (UK, France) found birds killed by cats were less healthy than birds killed by cars or flying into windows, and both authors concluded that cats are opportunist hunters and tend to remove sick, old, and birds which have fallen out of the nest, rather than healthy birds (Baker *et al.*, 2008 and Møller & Erritzøe, 2000).

The Royal Society for the Protection of Birds issued a statement that “despite the large numbers of birds killed, there is no scientific evidence that predation by cats in gardens is having any impact on bird populations U.K-wide. It is likely that most of the birds killed by cats would have died anyway

from other causes before the next breeding season, so cats are unlikely to have a major impact on populations.”(Vox Felina, 2012).

Is it justified killing stray cats when this might not have any beneficial effect on native wildlife?

Recommendation

Is there a council interested in a research project to evaluate the effect on native wildlife of a program where stray cats that would have been killed are desexed and released? What if we planted two native plants for each cat released? Please contact Jacquie Rand, j.rand@uq.edu.au if interested in this project.

Strategy 8: Trap, Neuter & Return (TNR)

Facts supporting the strategy

In Montana, TNR resulted in a 36% decline in cat intake, a 87% decline in euthanasia, and a 84% decline in cat-related complaint calls. In Texas, there was a 90% decline in cat-related complaint calls, and in Kentucky, a 51% decline in cat intake in targeted areas compared with only a 20% decline in the entire service area (The HSUS, 2014).

Only 10% of cats entering RSPCA shelters around Australia are recorded as feral based on markedly unsocial behaviour. Of those cats recorded as feral, 92% are euthanased. Of strays surrendered by the general public, 16% of adults were classified as feral and 12% of kittens, whereas 19% adults and 9% kittens from councils were feral (Alberthson *et al*, 2013, Alberthson 2014).

Recommendation

Trap, neuter and return (TNR) is trialled, and its cost effectiveness for reducing shelter entry evaluated when focused on areas contributing to high intake of feral cats and kittens into shelters and pounds.

Strategy 9: Accessible and low-cost assistance with unwanted behaviours

Facts supporting the strategy

Only 7% of owner-surrendered adult cats were relinquished to the RSPCA for behavior reasons (Alberthson *et al*, 2013, Alberthson 2014). However, only one reason was recorded, and it has been found that surrenders usually have more than reason, and may have up to 5 reasons for surrendering their pet. It has also been found that owners may not state behaviour as a reason for surrender, for fear that it will decrease the potential for the pet to be adopted. Keeping animals in their homes, rather than in the shelter or pound, by providing free or low-cost behavior counseling, decreases the number of cats that are euthanased. This behavior counselling service could be provided through council pounds, animal welfare agencies, and veterinarians.

Recommendation

Classes run by trained veterinary technicians or graduates of other behavior courses could be held similar to kitten preschool class or other human self-help classes in the evenings or weekends, to educate owners on potential strategies to overcome unwanted behaviours. These could be provided through veterinarians, councils, and shelters at a small fee to cover costs.

What If.....

1. Every pound and animal welfare was transparent in their performance
2. Landlords and body corporates could not ban pets
3. Shelters and pounds redirected significantly more resources into subsidized spay/neuter programs
 - Targeted to areas generating unwanted kittens and cats

- Targeted for autumn and winter to stop last summer's kittens producing next summer's kittens
 - Supported by effective social marketing messages to overcome behaviour of people feeding cats without neutering, and to overcome the "spey delay" of owned cats
4. Every owned pet was confined to property – supported by legislation or incentives
 5. Owned cats were microchipped and the microchip database had current contact details for nearly all owners, and supported by an annual Microchip Awareness Month.
 6. Pound and shelter management have implemented best practice to save cats
 - People surrendering strays and owned cats are engaged to find solution for their cat
 - Shelters and pounds have prioritized resources to stop cats getting sick
 - Shelter and pound procedures and policies facilitate adoption
 - Cats are fast tracked to increase adoption
 - Shelters do not take in more animals than they can care for
 - Shelters, pounds, rescue groups and communities all worked together to save animals
 7. Healthy cats unable to be rehomed are neutered and returned to the same area.
 8. Free-living healthy cats in suburban areas are trapped, neutered and returned to the same area
 9. Behavior modification was easily accessible and affordable

Would we kill as many cats and kittens?

Further research is urgently required to inform evidence-based best practice in shelters, pounds and the community, with a particular focus on decreasing kitten and cat influx of owned and stray/semi-owned cats, and increasing live release of unowned cats.

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