

Cat management for Magnetic Island - a controlled trial

Shane Scriggins and Dick Murray

ABSTRACT

Cats are in many ways an attractive type of pet animal both from the point of view of their owners and from the point of view of city councils. However, to maximise their benefit as pets and to minimise their potential for community nuisance, some form of municipal cat management is necessary. Urban Animal Management in general has a well earned reputation for being a difficult issue and cat management is shaping up similarly. The Townsville suburb of Magnetic Island has a number of unique attributes which qualify it as a particularly good place to undertake an organised community cat management fact finding operation. The rationale for the recently launched Magnetic Island cat management strategy is explained. Difficulties experienced in this process (both expected and unexpected) are detailed.

INTRODUCTION

In addressing the socio-environmental effects of cat ownership, in the context of municipal management we are dealing with a complex issue. At the heart of this complexity is the fact that while access to the companionship of pet cats may be held dear by a great many people, there is another end of the public spectrum which includes people who hold equally strongly to the perception that cats are nothing more nor less than a pest species. The arguments for and against cats are sometimes more emotional than factual and more extreme than reasonable.

This, in principle, is the same scenario that Allen and Westbrook wrote about in 1979 in their book *The Handbook of Animal Welfare*. When Allen and Westbrook first used the term 'pet paradox' in 1970 they referred mainly to the situation pertaining to dogs in North America. While dog ownership at that time in the USA was seen by a big section of the general population as a normal part of American family culture, poorly controlled dogs were causing all sorts of community problems right across the land. It was no different here in Australia and it is still no different except that cats as well as dogs are now in the spotlight.

Pro-cat

In Australia over 30% of households have one or more cats. Part of the reason for the popularity of cats is thought to be related to the fact that human lifestyle aspirations and types of community and social relationships have changed dramatically over the recent decades. The rate of urban sprawl is being reined as a matter of necessity and, increasingly, people are having to cope with higher density living. Pet access is an important quality of life issue for a lot of people today and cats under these circumstances have a great deal to offer.

If desexed, not kept in excessive numbers and otherwise provided for sensibly, cats are unobtrusive animals. In many ways, cats are in fact a particularly attractive type of pet animal both from the point of view of their owners and from the point of view of city councils. As personal pets cats are remarkably well suited to modern urban lifestyle:

- they do not bark,
- they do not attack people,
- cats are content to spend most of the 24 hours in their days asleep,
- cats are happily contained in small dwellings,
- they require much less exercise than most dogs, and
- they are naturally clean and easily litter trained.

Anti-cat

There are, however, a number of reasons for the pressing demands for community cat control in Australia. These problem perceptions, if they are to be overcome, need to be addressed as rationally and sensibly as possible. They include specifically:

- the public nuisance caused by roaming, intrusion and sexual behaviour of entire males and females;
- animal welfare anxiety over the plight of unwanted cats;
- public concern about the ecological impact on wildlife;
- problems associated with species vilification and cruelty to cats; and
- human health matters including cat related diseases.

RESOLVING THE PARADOX - A TEST OF GOVERNANCE

Over recent decades tangible benefits of better dog management, with respect to both animal welfare and general community quality of life, have been conclusively demonstrated. If we use the term 'community environment' to include both ecological as well as social components, dog management is now accepted to be a very significant community environment issue. There is little doubt that municipalities with good dog control are better places in which to live. Both the people and the pets are better off. Cats are now also on the agenda and the same rationale applies.

Like all aspects of municipal pet management, cat management is also a community issue. Councils can only ever do what the communities they represent want them to do - that's the reality. Councils who are interested in cat management therefore need to ensure community consultation before developing their strategy of cat management.

- They need to think about the resources that will be necessary to implement the kinds of cat control measures they would like to see.
- They need to settle on the approach that would seem most likely to be successful in their region.

Most councils are familiar with the way in which any different or new suggestion about animal management is bound to create a storm of polarised community reaction. Most councils are also familiar with the way in which a very few people can (for all sorts of personal reasons that may even be unrelated to this particular issue) create a degree of public turmoil that is completely out of step with majority wishes and expectations.

Good governance in this particular community issue needs confidence and a steady hand. It is a situation where councillors cannot afford to be rattled by the first couple of angry dissenting voices.

- It is wise to approach the task of municipal cat management with due circumspection.
- It is wise to be prepared for some turmoil during the settling in period.

At the end of the day a local electorate will only support a cat management strategy if the goals and methods of that strategy meet with majority community expectations. In consequence the first need, as cat management is approached in earnest by local government, is for thorough investigation of public expectations by a process of community consultation.

- Is it wanted by the majority?
- What degree of regulation will be accepted?

MAGNETIC ISLAND

The Townsville suburb of Magnetic Island has a number of unique attributes which qualify it as a particularly good place to undertake an organised community cat management fact finding operation. By 1994 a prima facie case for cat management on Magnetic Island existed for 3 main reasons:

1. An ecologically important program of mandatory cat minimisation within the confines of the Magnetic Island National Park depended absolutely on cat control in adjoining residential areas.
2. Widespread public concern had arisen on the island about the unlawful, unsanctioned and indiscriminate killing of cats in places other than the National Park.
3. The idea of cat management for the Island, and even some serious suggestion of cat eradication, had been put forward strongly by some (number uncertain) of island residents.

Magnetic Island has a human population of approximately 2,655¹. It is an attractive study area because of the moderate community size, its National Park, its proximity to the rest of Townsville City, its physical separation from the mainland part of the city and its otherwise normal suburban status.

There are 780 private households (400 in owned property and 380 rented) on Magnetic Island. The census lists another 100 households living on boats or other similarly less fixed addresses. At the present time an unknown number of stray/feral cats also live on the island.

Approximately 54% of the island is currently reserved and managed as a National Park by the Queensland Government Department of Environment and Heritage. Residential and other forms of freehold property almost surround the Magnetic Island National Park.

After discussing cat issues in the forum of the Council's Environment Consultative Committee on 10/12/93, the following pathway for approaching cat management on Magnetic Island was initiated:

1. Review the available literature on the subject of cat management and community cat problems.
2. Prepare an appropriate management strategy rationale that is effective and affordable for the council.
3. Undertake a community survey to gather cat population details, gauge the opinions of residents about cat issues and gauge acceptance of the key elements of a suite of tentative cat management suggestions (from 2).
4. Implement a 12 month management trial on the basis of techniques approved by community feedback from the survey.
5. Resurvey after approximately 12 months to compare cat population details and assess community impressions of the success or otherwise of the trial strategy.
6. Reflect on the success (or otherwise) of the whole Magnetic Island cat management exercise with a view to introducing an effective cat management policy for the entire City.

1. Review and prepare

The work and the recommendations of the authors, Veitch (1991), Upton (1992), Wilson et al (1992), Wood (1992), Duncan (1993), Natrass (1993), Pergl (1994), Kelly (1995), Penson (1995) and Webb (1995), was helpful in developing the cat management strategy that is now in place on Magnetic Island. Particular attention was paid to the Sherbrooke experience (Pergl 1994). Every effort was made to make best use of this specific reference because of its local government ambience and its environmental background.

2. Strategy rationale

i. Recording pets and removing strays - the only place to start

The question of ownership and owner responsibility is central to any attempt at urban cat management. While other issues may apply by way of system refinements, the first and most important step is the identification of ownership. Once the owner of an animal has been formally identified, community expectations relating to reasonable restraint and care can be encouraged and if necessary enforced.

Once an effective system of pet cat registration/recording has been put in place, steps can then be taken to systematically gather up and remove all the rest - the strays.

By being able to remove strays from municipal environs the total cat population can be reduced without treading on anyone's toes. Strays are a common source of municipal nuisance. They enjoy poor quality of life. They are a source of environmental and welfare anxiety.

A stray eradication program, by itself, in one single step goes a long, long way towards the goal of overall effective cat management. By this device both public nuisance and total municipal cat population can be reduced without compromising pet security or public pet access at all.

However you look at it strays are better off out of it altogether and, without wanting to put too fine a point on it, the quicker the better

ii. Strays and desexing - the next logical step

The community nuisance caused by entire cats, with their propensity for wide ranging offensive aggression, predatory aggression, intrusive territorial behaviour (including urine marking) and their noisy sex oriented nocturnal behaviour, is universally recognised. As well as this, you don't have to be a rocket scientist to understand that entire roaming cats are a reliable source of unwanted kittens that are also heading straight for Straysville.

Mature 'sexually intact' pet cats, though not exactly strays in the original sense, are to all intents and purposes birds of the same feather if they are allowed to roam. While reasonable pet cat owners accept this and do something about either desexing or confinement before the nonsense starts, others simply don't bother. If kept permanently confined by their owners, sexually capable cats are not a community problem. However if they are allowed to roam they most certainly are.

iii. 'Gettable' goals - no point in anything else

The main goals in the quest for effective municipal cat management are to eliminate strays and to desex or confine pet cats to prevent them from being a public nuisance and a source of more strays. Practical ways have to be found to make these goals 'gettable'. The chance of a conventional 'dog type' registration system, with a differential desexing incentive, proving successful for cats is none. It doesn't even work properly for dogs - and that's when compliance can be checked, if necessary by door to door inquiry. The old dog control levers will not link through to give a result with cats.

What's needed is entirely new methodology which ideally focuses not so much on regulation by inspection and prosecution but on the principle of community self regulation.

Cats behave differently to dogs and the problems they cause are different.
It stands to reason that techniques for management will also have to be different.

iv. Self regulation - self management - the final key

The quality of local laws used in a self regulation framework needs to be good. It is the same for any law, but more so for local laws designed for self regulation. They need to be:

- Definitive - no grey areas, minimum ifs and buts and maybes, clearly defined obligations and expectations for cat owners;
- Meaningful - makes sense, easily understood why;
- Reasonable - seen to give everybody, including pets, pet owners and others, a fair go;
- Validatable - compliance (or noncompliance) able to be checked if the need should arise; and
- Enforceable - effective penalties for noncompliance.

example, while farm livestock may not be allowed to wander onto roadways where they can cause traffic hazards and property damage, council officers do not go out inspecting farm fence lines and checking the adequacy of individual brand identification on cattle, sheep and horses. It is left to the farmers to ensure these things are done properly or suffer the consequences if they are not. This is self regulation.

- A recording system for pet cat identification with associated owner linking does in fact lend itself to the concept of community self regulation. With a community self regulation approach in this situation council staff do not have to check cat registrations as they do for dogs. In other words, cats can be *recorded* by their owners rather than *registered*.
- The onus of identification is entirely on the owners, not only to do it but to do it right as well. It can quite simply be made clear in the relevant local law that any impounded cat showing no formal (approved) registration/identification will officially be classified as a stray and that will be that.
- A requirement for the desexing of pet cats is another option that lends itself to a self regulatory approach. The best pathway is to utilise the power of neighbourhood peer group pressure backed up in the local law by a requirement that entire cats over the age of 5 months can only be kept by people who hold a breeder's permit and must under no circumstances be allowed by the permit holder to be at large at any time.

v. Linking the keys - the microchip 'key ring'

Microchip technology offers the obvious solution to this problem. Provided an 'Australian reader base' standard is used microchips offer a reliable, affordable, available and nationally uniform method of identification for cats.

'Australian reader base' standard must be used.

Provided the microchips can be obtained by local veterinarians with a standard collar, bell and appropriate educational material, the advantages for local government are as follows:

- council does not have to be mixed up in owner record database management - it is up to the microchip supplier to log the details - it is up to the pet owner to ensure the records are current and accurate;
- council animal control officers can access the database any time via a 008 phone number if the need to contact an owner should arise;
- council does not have to be involved in the distribution and implantation of the ID device/s - it is up to veterinary practices to supply and implant the microchips;
- council does not have to bill anybody - the ID, implanting and registration database services are all supplied on a competitive fee for service basis direct to the pet owning clients; and
- the council takes advantage of a pet owner education service that accesses all the recorded pet cat owners at the time the microchip is implanted without any input at all from the public sector.

vi. Public notice summary

The following guidelines for cat owners can be clear and simple and published regularly:

- pet cats must be identified by microchip and both their own and their owner's details recorded accurately in the microchip supplier's national pet records database;
- standard residential property allows the keeping of up to 2 cats per residence with permit constraints applying to flats, units and situations exceeding the standard 2 cat limit;
- pet cat owners are encouraged to provide their cats with conventional collars, ID discs and bells;
- pet cats must, by the time their permanent canine teeth have erupted, be either desexed or be registered as breeders and kept according to the council's cat breeder permit requirements;
- the owners of pet cats should minimise and may, if required, have to prevent their cats trespassing onto adjoining property;
- the feeding of stray cats is discouraged absolutely.

It is important that the management strategy should be (and should be seen to be) a fair and reasonable way of balancing the interests of everybody. While the plan is intended to actively control stray and feral cat numbers it is also intended to equally actively protect the interests of people who wish to keep pet cats in a responsible way.

While members of the general community are encouraged to assist the council in trapping strays this is only permitted under conditions which keep the procedures for impounding and handling stray cats firmly in the hands of individual property occupiers and the Council:

- only council's traps may be used with traps being checked out only to bonafide (identified) property occupiers - and only used for trapping on that occupier's own property;
- trapping of stray cats in public open space in residential areas (parks, reserves, foreshore, crown land etc) only to be undertaken by council staff - coordinated where necessary with other relevant authorities (eg Lands Department).

3. Survey Mandate And Other Community Consultation

In 1995 a comprehensive community survey (Catscan Magnetic) designed to gauge the public position on cat management for Magnetic Island was undertaken. Complete details of the methodology, the questionnaire and the results (Catscan Magnetic - final report: a survey of attitudes to cats and their management) have been published in the text book, *Dogs and Cats in the Urban Environment*². The survey was arranged professionally, the response was 71% and the results were conclusive.

- Eighty three percent of respondents were in favour of a cat management, 11% were undecided and only 6% of respondents were against the idea of cat management on the Island. As a result of this response alone it was determined by the council that a cat management plan could be formulated for the residential areas on Magnetic Island. Further more, if the anticipated expenses were reasonable, a 'fair dinkum' strategy could be implemented at least for a trial period of 12 months.
- There was 92.3% community support for the trapping and humane disposal of stray and feral cats and 90% support for identification and recording of pet cats. There was no doubt that the strategy for the island could afford the luxury of starting right from the beginning with these two essential strategy components.
- There was 91.5% support for the idea of keeping breeding cats confined at all times and 93.2% support for the desexing of non-breeding pet cats. There was no doubt that the majority of the island community wished to ensure that pet cats on the island were desexed cats.

In summary, the council's preliminary survey of island residents in every respect fulfilled the following requirements:

- a community mandate for municipal cat management on the Island was evident;
- a range of strategy options were approved by the community;
- baseline zoographics and demographics were established.

The Catscan Magnetic final report (50 pages) was made available by the council from June 1995 to anyone who expressed interest in the results of the survey.

4. Implement the strategy

The interval between the completion of the community survey and the introduction of the management trial itself was about two years. In this time, while the relevant local laws were being drawn up, the council itself was kept informed on progress. Two public meetings were also convened on the island itself (Dec 96 and Feb 97). All residents were advised by letter drop and invited to attend these meetings which were arranged to ensure that, as far as was reasonably possible, the new policies and procedures relevant to cat management were well understood by all members of the community (including both 'pro' and 'anti' cat factions).

At each of these meetings, while the interactions were sometimes 'lively', a strong degree of consensus emerged. By going over the options and pathways available for cat management and by listening to what were generally sensible comments and criticisms, council representatives were able to 'fine tune' the policy position, on this and some other pet management issues as well.

At these meetings the council's intent to do its best to try to balance the interests of all seemed to be appreciated, though standing ovations and abandoned applause did not actually have the effect of drowning out the speakers on any occasion. There was more a cautious attitude of critical mistrust than anything else (eg 'alright then, we'll see if it works' ... 'but it better not cost us anything'... 'I still hate cats'... 'I think we are giving up more than we are getting').

It was clear that cat management was needed to overcome factional antipathies. The community as a whole had unambiguously asked for cat management. But when it came down to it nobody was coming up to shake hands and thank the council for having gone to so much trouble on their behalf to arrange:

- the protection and safety of pet cats for those who value the companionship they provide;
- the elimination of stray/feral cats and the minimisation of irresponsible ownership.

In July '97 a final explanatory mailout to island residents was undertaken together with a summary of the overall process of community consultation that had been undertaken by the council. Over the weekend of 26/27 July, after last minute TV and press releases, some 150 cats were microchipped to get the management trial process officially under way.

To facilitate as smooth an introduction as possible the cats were microchipped for no charge. Each person attending was also given a free cat collar with bell, cat food sample packs and a range of pet health care pamphlets. The services of a veterinarian, veterinary nurses and an attending council officer were made available at four different locations around the island (bay by bay) for public convenience, at no cost to the council or the community.

Just as the task of going door to door to deliver, and then later on collect, survey forms right at the beginning of this project was organised and carried out entirely by volunteers, so the microchipping was done in the same spirit. It was seen by the participants as an opportunity to promote the principles of community pet harmony, responsible pet ownership and progressive municipal pet management.

The Council and the microchip supplier³ also cooperated with each other to make this introductory cat/owner recording offer free of charge to those cat owners who wished to cooperate.

While this starting point provided the whole package (microchip, life-registration, collar, bell and cat care reading material) free of charge it was made clear, in the final explanatory mailout, that this was an introductory offer only. Having made every reasonable concession in launching the cat ownership identification part of the cat management strategy, a line could be drawn (date set) after which the owner obligation would be to comply (from that point on) at their own motivation and expense.

Townsville City Council is presently preparing for a pet management officer to take over responsibility for general pet management specifically on Magnetic Island. The council is looking forward to a positive period of community interaction with a progressive transition towards high levels of pet owner compliance with its codes of responsible pet management.

An undertaking has been made by the council to formally review in about 12 months time (once again by survey) community opinion about pet management generally and this cat management trial specifically.

LOOKING BACK - THE BENEFIT OF HINDSIGHT

Bearing in mind the benefit for Townsville City Council in being able to build on the experience of others such as Veitch (1991), Upton (1992), Wilson et al (1992), Wood (1992), Duncan (1993), Natrass (1993), Pergl (1994), Kelly (1995), Penson (1995) and Webb (1995), this paper is in the same way intended to be of assistance to other municipalities that might undertake similar projects. There are a number of issues that stand out from our experience.

While most people seem quite able to agree on what constitutes reasonable degrees of pet owner freedoms and constraints with regard to cats there are those, in our experience, who find making *any* concessions towards the 'middle ground' very difficult, if not completely impossible. Any council intending to undertake a cat management strategy should not be mistaken about this and should be prepared to deal with it.

We believe that while the framework of local laws should be intended as a 'code' of reasonable and responsible conduct it must also be enforceable in every respect. People who harbour obsessive attitudes about cats can make things very difficult for all the others who are prepared to sensibly agree to disagree and get on.

Our experience is that the media has to be managed carefully when changes in either policy or practice of any pet management issue are in the wind. The media criticism in this case came at the point of launch when things were most sensitive. The criticism was of an inflammatory nature and centred mainly around the allegation that the council had incompetently handled the process of community consultation. This was a bitter pill to swallow for those who had been involved since it was hard to see how the community consultation process could have been handled better (especially when the lion's share of the whole effort had in fact been carried out by voluntary workers).

It would undoubtedly have been illuminating if the last comment could have been made by the Bush Stone Curlews of Magnetic Island. Curlews are something of a 'flag carrier' native wildlife species on the Island. The most common reason for support of a cat management plan was concern for the well being of this species (and other wildlife with less prominent profiles). At about the same time this plan was being put into effect, a mortality report for Curlews was published in the local press⁴. Of the most recent 91 recorded Curlew deaths 63 (70%) were road kills. It is intriguing to wonder what the Curlews themselves would want to see happen in the interests of wildlife security. It seems reasonable to assume that they might actually prefer, more than anything else, to see people give up their cars.

REFERENCES AND OTHER READING

- Allen, R.D. and Westbrook, W.H. 1979. *The Pet Paradox* in The Handbook of Animal Welfare - Biomedical, Psychological, and Ecological aspects of Pet Problems and Control, pp.3-13 (eds R.D. Allen and W.H. Westbrook), Garland STPM Press, New York and London.
- Barratt, D. 1994. *Using Theory and Scientific Experience to Assess the Impact of House-Based Domestic Cats Felis catus (L.) on Prey Populations and Prey Community Structure* in the Proceedings of the Third National Conference on Urban Animal Management in Australia, pp. 148-156 (Ed. Paxton, D.W.), The Australian Veterinary Association, PO Box 371 ARTARMON 2064, The Australian Veterinary Association, PO Box 371 ARTARMON 2064.
- Carr, G.M. and Macdonald, D.W. 1986. *The Sociality of Solitary foragers: A Model Based on Resource Dispersion*, Anim. Behav. 34: 1540.
- Duncan, M. 1993. *The interaction of Domestic and Feral Cats with Native Wildlife and The Warringah Council 'Role of Pets in the Community' - A Pilot Survey*.
- Kelly, D. 1995. *Cat Legislation in South Australia* in the Proceedings of the Fourth National Conference on Urban Animal Management in Australia, pp. 133-139 (Ed. Paxton, D.W. and Boland, P), The Australian Veterinary Association, PO Box 371 ARTARMON 2064, The Australian Veterinary Association, PO Box 371 ARTARMON 2064.
- Liberg, O. 1984. *Home Range and Territoriality in Free Ranging House Cats* Acta Zool. Fennica 17: 283.

Nattrass, R. 1993. *A Model for Cat Control* in the Proceedings of the Second National Conference on Urban Animal Management in Australia, pp. 30-37 (Ed. Paxton, D.W.), The Australian Veterinary Association, PO Box 371 ARTARMON 2064.

Paton, D.C. 1990. *Domestic Cats and Wildlife* Bird Observer, 696: 34.

Penson, P. 1995. *Victorian Cat Legislation* in the Proceedings of the Fourth National Conference on Urban Animal Management in Australia, pp. 129-132 (Ed. Paxton, D.W. and Boland, P), The Australian Veterinary Association, PO Box 371 ARTARMON 2064,

pergl, G. 1994. *The Sherbrooke Cat Law - Does it work?* in the Proceedings of the Third National Conference on Urban Animal Management in Australia, pp. 183-187 (Ed. Paxton, D.W.), The Australian Veterinary Association, PO Box 371 ARTARMON 2064.

Petcare Information and Advisory Service 1983. *Cat Ownership in Australia: An Attitude and Opinion Study*, Petcare Information and Advisory Service, 117 Collins Street, Mellbourne, Victoria 3000.

Serpell, J.A. 1988. *The Domestication and History of the Cat* in *The Domestic Cat - The Biology of its Behaviour*, pp. 151-158 (Eds. Turner, D.C and Bateson, P.), Cambridge University Press, Cambridge CB2 1RP, England.

South Australian Department of Environment and Planning 1992. *Cat Working Party Report* p1. Department of Environment and Planning, 55 Grenfell Street, Adelaide 5000.

Tideman, C. 1994. *Do Cats Impact on Wildlife?* in the Proceedings of the Third National Conference on Urban Animal Management in Australia, pp. 141-147 (Ed. Paxton, D.W.), The Australian Veterinary Association, PO Box 371 ARTARMON 2064, The Australian Veterinary Association, PO Box 371 ARTARMON 2064.

Turner, D.C. and Meister, O. 1993. *Hunting Behaviour of the Domestic Cat* in *The Domestic Cat - The Biology of its Behaviour*, pp. 151-158 (Eds. Turner, D.C and Bateson, P.), Cambridge University Press, Cambridge CB2 1RP, England.

Upton, B. 1992. *Animal Shelter Management, Animal Control and Animal Welfare* in Proceedings of the First National Conference on Urban Animal Management in Australia, Ed. Murray, R.W. p.138. Chiron Media, PO Box 69 Mooloolah, 4553.

Veitch, C.R. 1985. *Methods of Eradicating Feral Cats from Offshore Islands in New Zealand* ICBP Technical Publication No.3.

Veitch, C.R. 1991. *Cat Eradication: The New Zealand Perspective* in The Proceedings of the Workshop on the Impact of Cats on Native Wildlife, pp. 82-89 (Ed Potter, C.), Endangered Species Unit, Australian National Parks and Wildlife Service, Canberra, December, 1991.

Vines, G. 1993. *Secret Power of Pets* New Scientist #1894, Oct. 1993, pp 30-34.

Webb, C. 1995. *Management of Unowned Cat Colonies* in the Proceedings of the Fourth National Conference on Urban Animal Management in Australia, pp. 37-48 (Ed. Paxton, D.W. and Boland, P), The Australian Veterinary Association, PO Box 371 ARTARMON 2064, The Australian Veterinary Association, PO Box 371 ARTARMON 2064.

Wilson, G., Dexter, N., O'Brien, P. and Bomford, M. 1992. *Feral Cat (Felis catus)* in *Pest Animals in Australia: A Survey of Introduced Wild Mammals*, pp. 55-57, Bureau of Rural Resources, Department of Primary Industries and Energy, Canberra.

Wood, D. 1992. *Domestic and Free Ranging Cats in Ku-ring-gai - Domestic Cat and Wild Life Questionnaire* Ku-ring-gai Municipal Council, 818 Pacific Highway, GORDON, NSW 2072.

Footnotes

¹ The Townsville Region, A Social Atlas, 3rd ed. 1993

² ISBN 0 9586784 1 3, written by RW Murray and HE Penridge and published by Chiron Media (1997)

³ Central Animal Records (suppliers of the TROVAN microchip)

⁴ Magnetic Community News Vol 8, Issue 41, 18th June '97

ABOUT THE AUTHOR

Shane Scriggins

Townsville City Council

PO BOX 1268

TOWNSVILLE QLD 4810

Ph: (077) 220481

Fx: (077) 220464

Shane Scriggins started working in animal control with the Brisbane City Council in 1983. Shane obtained his TAFE Certificate of Animal Control Practices qualification, his TAFE Certificate of Business Management and is currently working on his TAFE Certificate of Local Government majoring in animal management. He is presently employed as Technical Officer (animal management) by the Townsville City Council. The cat management trial explained in this paper was developed by both authors with the assistance of contributing members of the Island community, other Council officers and the deputy mayor, Ann Bunnell. Details relevant to the background of his co-author in this paper (Dick Murray) are included in the paper Best practice in Municipal Pet Management - information access is the key to competitive efficiency in both governance and service delivery elsewhere in this proceedings publication.

[UAM 1997 Index page](#)