

Excess barking: a more complex problem than it would appear

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ABSTRACT

There is a range of things that can be done to help resolve barking problems. Most cases can be resolved by competent council officers with sound advice, negotiation and mediation. In difficult cases however, where these things have already been tried and have failed, poor dispute resolution often results. This causes dissatisfaction for all parties involved (including especially, the Council). This paper suggests that more satisfactory dispute resolution in those difficult cases might be achieved through the use of purpose designed bark monitors. The council officers, who have to deal with these stressful cases, would appreciate the mechanically objective noise assessment methodology that this would allow.

INTRODUCTION

Responses from 2332 people to a national noise survey indicated that the public considered noise was one of the most serious forms of community pollution. This survey also showed that the worst noise problems were traffic and dogs. Of these two, dogs were the most annoying.

The seriousness of this issue is also apparent from several other surveys. Barking was the most commonly mentioned neighbourhood dog problem in a survey of approximately 400 householders in Townsville. Similar evidence comes from one of Australia's leading animal behavioural scientists who runs a behaviour consultancy practice at the University of Queensland. She reported that barking was one of the most common behavioural problems on which she was asked to advise. Figures provided by the Bendigo Neighbourhood Mediation Centre, ranked and weighted 52 animal-related disputes recorded in the month of October, 1988. Of these, barking on its own accounted for 50% of all complaints.

The Environmental Protection Agency (EPA) finalized new nuisance laws that took effect from 1 December 1999. A two-month moratorium on fines applied, giving the community sufficient time to learn about the new laws and make any necessary modifications before they were subject to penalties. On-the-spot fines could be issued since 1 February 2000 for causing unlawful environmental nuisance. The following text is taken from the Qld EPA Fact Sheet on Barking dogs:

'The new environmental nuisance laws comprise a set of amendments to the Environmental Protection Regulation 1998. They introduce a number of offences for noise, dust, odour, fumes, ash, light and smoke nuisances.

In response to community demand, the new nuisance laws will cover a number of environmental nuisance matters including excessive noise from barking dogs and other domestic animals. Thousands of complaints are received every year by local governments and the EPA from residents affected

by noise from barking dogs and other domestic animals. More complaints are received about barking dogs than any other residential nuisance. Under the new laws, residents will no longer have to put up with the nuisance and disturbance caused by barking dogs.

Local government will be responsible for administering complaints about noise from animals on residential property. Administration of complaints about noise from animals on commercial premises will be the responsibility of the EPA.

7am to 10pm:

No more than six minutes of noise in any hour.

10pm to 7am:

No more than three minutes of noise in any thirty minute period.

If, after receiving a complaint and issuing a warning notice, an investigating officer finds that a breach has occurred, the officer will have the power to issue an abatement notice. If the animal's owner does not comply with the abatement notice, the investigating authority may issue a penalty infringement notice (minimum penalty \$300).'

This legislative approach is a big step in the right direction. It conveys a clear conceptual impression of what is considered an acceptable amount of barking noise. While this legislation draws the line on when barking sound becomes barking noise (excessive and unacceptable), it still fails to provide *measurable* tolerance levels. This is because there is no way yet for Councils to accurately measure and record bark duration. In order that those intractable/difficult cases can be locked up and shut down properly, Local Government needs to cover this technical/procedural 'gap' by developing and then using an effective bark monitoring device.

BEHAVIOURAL ASPECTS OF BARKING

Humans (particularly in industrialized societies) have modified their living environment to be unnaturally noisy. Not only have we surrounded ourselves with noisy devices, we have also modified our pet dogs so that they make more noise. Hart and Hart argued that the barking of dogs is a genetically acquired behaviour that serves to warn pack associates (including people) about intruders.¹ The inference of this opinion is that barking in dogs is a natural characteristic.

Blackshaw, however, pointed out that high levels of barking developed only in the domestic context.² Wolves and other wild dogs (including the dingo) bark rarely according to Blackshaw, which suggests that barking is *not* in fact a behaviour which affords great survival value in the wild. In other words, domestic dogs have evolved to be different from their ancestors in this respect.

1. Hart BL, Hart LA. 1985. Activity, barking and destructiveness problems in dogs. In *Canine and Feline Behavioral Therapy*. Philadelphia: Lea and Febiger: 70-81
2. Blackshaw. 'Tis a dog's delight to bark and bite.

The fact that different breeds/types of dogs differ in their tendency to bark excessively is consistent with the theme of divergent selection. Blackshaw felt that domestic dogs have not been intentionally selected by mankind to be such bark-prone animals.³ She argued that barking in the domestic dog is a type of persistent juvenile behaviour. This fits with Coppinger and Feinstein's view that adult domestic dogs never grow out of their puppy behaviour.⁴ This being because they have been selected over the centuries for the permanent puppy behaviour genetics that went along with the genetics of tameness and domestication. Barking was a part of the persistent juvenile behaviour package, though probably an unintended part.

It is a fact that irritating, intrusive and unnecessary noise created by excessive barking can cause a lot of community stress.

Even though the vocalisation of today's pet dogs may be expressed differently from their wild ancestors, barking is a normal and reasonable behaviour in pet dogs.^{5,6} Neither dog owners nor their neighbours are ever likely to mind a dog that barks occasionally when genuinely alarmed. What is considered unreasonable and universally unacceptable is the problem of excessive barking. In the absence of competent general management, domestic dogs have a tendency to become prodigious barkers.

MILLER ON SOUND, HEARING AND NOISE

"...the role of sound and hearing in man's life can be best understood in evolutionary terms. The ear, the auditory nervous system, and their relations with the remainder of man's bodily and behavioral functions developed to meet the demands of adaptation to the environment. But the pace of genetic change is slow compared to the rapid environmental change brought on by technology. Our genes prepare us for the environment of the past...."

"...Irrelevant or excessive sound is undesirable. Such sound is noise. The definition of noise includes a value of judgement, and for a society to brand some sounds as noises requires an agreement among members of that society. Sometimes such agreements can be achieved readily. Other times considerable analysis and debate is required before agreement can be reached...."

These two relatively short extracts that have been taken from Miller's lengthy paper, highlight three important points:

1. The physiology of human hearing was designed for much quieter times in the process of human evolution.
2. In general biological terms, sounds are all important and welcome environmental signals, while noise is associated with alarm and avoidance.
3. Defining at what point sound becomes noise is difficult.

MEASUREMENT OF NOISE

Human sensitivity to sound is usually a function of three measurable qualities:⁷

1. *Sound level* in decibels; measures loudness.
2. *Frequency* in cycles per second; measures pitch.
3. *Duration* in seconds or may be expressed as a percentage of time; measures how long the sound persists.

The human ear is more sensitive to higher pitched sounds than lower pitched sounds of the same loudness. For this reason sound (or noise) levels are commonly measured in pitchweighted scales that measure a combination of loudness and pitch. The common scale used for measuring barking noise is the dBA scale which gives less weight to lower pitched sounds in the same way the ear does. These measures are called *A weighted sound levels*. However there is sometimes a lot more to noise nuisance than just levels of sound and barking noise is a classic case of this.

With respect to the abatement of barking noise, Senn and Lewin made the following important observations:⁸

- An acceptable indoor sound level is around 35–40 dBA.
- The noise of barking dogs may reach well over 100dBA.
- The intensity of sound varies inversely with the distance from its source and as a result, moving the source away is beneficial.
- Confining the noise source behind non-transmitting barriers is effective in reducing noise provided the barrier has no sound-carrying spaces eg. open spaces.
- Good sound absorbing building materials generally have poor hygiene qualities.
- More annoying high frequency sounds are less likely to bend around solid sound barriers.

PSYCHOLOGICAL STRESS OF NOISE

Sound measurements alone can *not* give an accurate measure of the nuisance level of a barking dog. A number of psychological (not sound) factors which dramatically increase levels of annoyance have been well understood for at least three decades. Bell and his colleagues looked at psychologically stressful noise characteristics in their research into the effects of noise on the behaviour of people. They concluded:⁹

- Noise can lead to increased arousal, stress, narrowing of attention and constraints on behaviour.
- The unpleasantness of the noise depends on volume, predictability and perceived control.
- In combination with other stressors, noise may have adverse effects on physical and mental health.
- Whether noise affects performance depends on the type of noise, the complexity of the task, and individual factors such as personality and adaptation level.

³ Ibid.

⁴ Coppinger R, Feinstein M. 1991. Hark! Hark! The dogs do bark.... and bark and bark. *Smithsonian* 21:119–129.

⁵ Hart. Activity, barking and destructiveness problems in dogs.

⁶ Campbell WE. 1992. Vocal behaviour. In: *Behaviour Problems in Dogs*. American Veterinary Publications: 271–275

⁷ Goldsmith JR, Jonsson E. 1973. health effects of community noise. *American Journal of Public Health* 63(9): 782–793

⁸ Senn CL, Lewin JD. 1975. Barking dogs as an environmental problem. *Journal of the American Veterinary Medical Association* 166: 1065–1068.

⁹ Bell PA, Fisher JD, Loomis RJ. 1978. Behavioural effects of noise, temperature, air pollution and wind. In: *Environmental Psychology*. London: Saunders: 93–127.

- Noise interferes with verbal communication and may affect productivity.
- Depending on the situation and the type of noise, noise may increase or decrease attraction, facilitate aggression or interfere with helping behaviour.

There is no doubt that noise, including barking noise, is a significant suburban environmental hazard. In writing on the effects of noise on community behaviour in 1969, Borsky listed some of the psychological perception factors that make a noise *seem* worse. These circumstances included the following:¹⁰

- when the noise is unnecessary,
- when those who generate the noise are unconcerned about the welfare of those who are exposed to it,
- when the noise relates to something that is hazardous to the victim's health.,
- when the noise is associated with fear,
- when there are other concurrent dissatisfying elements of victim's environment.

It is a striking observation that virtually all of the noise nuisance potentiators listed here apply *particularly* to barking noise.

MONITORING BARKING NOISE IN SUBURBIA – A CAN OF WORMS

Excessive barking is a *noise* in that it is an unwelcome environmental sound and while that observation may seem straight forward, it is in fact anything but. The problem with barking is that terms used to determine what may be considered an unreasonable level for this kind of noise are meaningless unless qualified by measurable and precisely defined levels of tolerance – and so far that has not been satisfactorily done.

Key terms such as *unreasonable* or *excessive* when used to quantify nuisance say what they mean; but mean about nothing when it comes to drawing a clear line between what is and what is not acceptable with barking suburbia.

- By its nature, barking is not a steady, easily monitored noise like the hum of an airconditioning plant, or the rumble of a diesel train, or the blast of an airliner taking off.
- Most dogs that bark excessively are not likely to do it 24 hours a day nor are they likely to do it day in day out.
- Dogs that vocalise excessively, mostly do so when aroused or uncontrolled or stressed in some specific way. What this means is that a dog that barks non-stop for two days while its owner is away, may not do it again until the same circumstance is repeated – perhaps next year!
- Most barking dogs move about within their yard so the intensity of received noise varies greatly.
- Barking noise can be persistent enough to be annoying while at the same time being intermittent or episodic. Not only is this particularly annoying for those subjected to it, but also makes the noise particularly difficult for nuisance inspectors to assess.

- Like the ringing of a telephone or the siren of an ambulance, the barking of a dog is a sound that nature has designed to get attention. Barking is an intrusive, irritating and alarming sort of noise that has complex psychological nuisance qualities. Determining the level of nuisance is not simply a matter of measuring decibels.
- A howling noise is very different to a barking noise in terms of sonic and tonal qualities. A whine is equally different to a yap. Barking problems are not really barking problems, they are dog vocalization problems and this difference is a lot more than just a matter of semantics.

Q. When is a nuisance a nuisance?

A. Impossible to say, unless you have something to measure, and a measure that is meaningful in terms of what is and what is not acceptable suburbia.

DIFFERENT PEOPLE PERCEIVE THE NUISANCE DIFFERENTLY-MORE WORMS

Sometimes one neighbour may be driven to distraction by a barking dog while other neighbours in the same immediate vicinity are completely untroubled by it. This does not diminish the experience of the first person, nor does it invalidate their claim to having the right to live in a peaceful neighbourhood.

While the number of complaints received about a particular barking dog is one indicator of the level of nuisance it is causing, it is by no means the beginning or the end of it. Judging the integrity of any barking dog complaint by canvassing the opinion of other neighbours is weak in the sense that it is a subjective (not an objective) measure. Neighbours may actively avoid being drawn into such a dispute, especially if worried that they may have to give evidence. The old system of Councils requiring written complaints from at least three separate neighbours before barking is considered a significant nuisance seems to have little to offer (on its own) as a way of measuring the level of nuisance.



It should also be noted that dog owners are *seldom* bothered by the barking of their own dog. Even in circumstances where the dog's chronic barking is a source of intense annoyance to everyone else, the owners of the dog will most often not be bothered by it at all. The people who own barking dogs are therefore likely to feel harassed or victimized by those who lodge complaints and consider the complainant's action unreasonable and offensive.

Feldmann pointed out that face-to-face confrontations between neighbours over pet problems are usually avoided if possible.

10. Borsky PN. 1969. Effects of noise on community behaviour. In: Ward WD, Frick JE, editors. *Noise as a Public Health Hazard*. Washington DC: American Speech and Hearing Association: 187–192.

This is because the criticism of somebody's pet is instinctively perceived by most people to be an emotionally risky, unpleasant and unrewarding thing to do. As a result, the victims of pet nuisance tend to say and do nothing till the nuisance becomes intolerable; then they ask their local authority to deal with it.¹¹ In this sort of scenario, two things are likely to happen:

- Firstly, the problem drags on longer than it should and becomes more acute and more intractable before it is addressed,
- secondly, someone else (a council officer) has to deal with all the emotional riskiness, the unpleasantness and the confrontation that most likely occurs.

Barking complaints can sometimes be a spinoff from other kind of inter-neighbour stress. When neighbours are in dispute over something and not feeling very tolerant of each other, little niggles become major issues.

REGULATORY MEASURES

Whether justified or not, people with barking complaints always seem to want barking problems abated *immediately*. This is perhaps because they have already put up with the nuisance for as long as they can and have come to the absolute end of their tether. However, the resolution of barking complaints is always going to be a much more difficult and lengthy process than that. If the local law structure available for problem resolution is difficult to interpret and enforce easily, it is even harder. The delays in slow noise dispute resolution, can cause the underlying conflict to escalate, further complicating the scenario and further limiting the chance of satisfactory resolution.

Excess dog noise is perhaps the *most* complex UAM problem that urban Councils have to deal with.

Long gone are the days when Councils could afford to have AMOs or nuisance inspectors out on the streets for days and nights assessing episodes of alleged barking nuisance. The serious barking problems have a tendency to just go on and on until they are genuinely resolved. Council's simply can't afford this to happen, for no other reason than the staff resources simply don't exist any more.

Consider by way of comparison, a Council environment officer investigating a complaint about the noise from an engineering workshop, pool filter pump or an airconditioning unit: Local laws for this kind of noise are delightfully objective. The nuisance tolerance levels are precisely set and easily understood, the abatement notice is a formality and compliance can be assessed. If and when required, an airconditioner can be declared unacceptably noisy and either sound insulated, relocated or even disconnected without too many tears being shed - problem solved! Not so easy with barking dogs.

Most traditional laws and methods for barking control are impossibly subjective. Even the newer ones do not have the necessary qualities to resolve those difficult barking cases simply and efficiently.

Councils are corporate entities whose clients are ratepayers. The job of Councils is to deliver quality community management. In order to provide quality service to customers in the face of increasing workloads, local government must work smarter and find ways to get the same or better results with fewer resources. The procedures adopted by many local authorities in attempting to resolve noisy dog complaints consume too much staff resource, often with little result. When this happens, the result is as follows:

No Council can afford results like those listed here.

- The customer is not satisfied with the service provided by the council staff.
- The ratepayer will feel that he doesn't get value for money as a service customer of the Council.
- The Council ends up looking incompetent and ineffective.
- The Council's UAM service looks poor in the eyes of the people who make the complaints and bad in the eyes of the people who are complained about.

In 1992, the Courier Mail reported that the chairman of Brisbane City Council's Recreation and Health Committee had made a startling admission.¹² He had said that the best use for the 42 pages of Council dog ordinances was to roll them up and whack offending owners across the head with them.

It sounds like a very candid comment from a very frustrated administrator who had to deal day-to-day with the practicalities of barking enforcement and while we have come quite a way with UAM since 1992, bark control policy and practice still has room for improvement.

BUILDING BETTER BARK MANAGEMENT STRATEGIES

Barking nuisance is a multi-factorial type of problem and multi-factorial problems need multi-factorial solutions. The task is to develop such a strategic approach which has to include *all* of the following four components:

1. Regulation and enforcement to set the limits and provide formal response platform.
2. Community education to encourage self regulation in nuisance prevention.
3. Advice/assistance in response to service requests about nuisance situations.
4. Efficient administration for prompt and cost effective service response.

In trying to build a really good dog noise management strategy, it is important to *start* with item 1. above. Unfortunately, it can be very tempting for Councils to skip over item 1. and go instead for items 2.-4. as first priorities. This is because items 2. - 4. look like easier yards with less critical decisions needing to be made. Without firstly getting item 1. really tight, the rest is going nowhere.

¹². Johnstone C. 1992. Our worst enemy? *The Courier Mail* August 18, 1992.

You can't have a management plan for any form of community nuisance until this conundrum is resolved.

It is undeniable that items 2.-4. are important in the overall context of nuisance management, but each of these activities hangs for relevance on the definitions and limitations set in place by item 1. (regulation and enforcement policy). The Q&A from above is particularly relevant in this context:

Q. When is a nuisance a nuisance?

A. Impossible to say, unless you have something to measure, and a measure that is meaningful in terms of what is and what is not acceptable.

Contrary to common belief, regulation and enforcement is *not* principally about finding ways to fine (penalise) people. Regulation and enforcement is, before all else, about defining parameters, fixing the tolerable limits and demonstrating an intent to ensure those limits are not ignored. An AMO's job is to advise, explain, educate, and when necessary, gather evidence and enforce. The Council only afford to takes sides when the evidence is sufficient to substantiate a claim of excessive barking. Once a nuisance has been established however, it then *does* become the Council's job to support the complainant and ensure that the barking is abated – and this can not be done without an unequivocal definition of where a barking sound becomes an unacceptable noise. *That's* what laws and regulations are *really* for.

So let's look at the essential qualities of existing local laws for dog noise management. Let's ask the big four questions.... Are these laws / regulations truly:

- definitive,
- meaningful,
- validatable,
- enforceable.

Or, are they still, just a little too vague and uncertain to allow the clean line to be drawn on what exactly *is* and *is not* acceptable in those difficult cases?

In Queensland, the Environmental Protection Agency of the Queensland Government¹ barking noise nuisance has been quantified on the basis of duration of the noise and while this has been a realistic approach to better defining barking noise nuisance, the EPA approach still has shortcomings.

1. The first problem with regulating dog noise on a "barking time elapsed" is that the actual bark sound *itself* may only be transmitted by the dog for less time than might be expected. In some cases a dog that may seem to have been "barking" for the best part of an hour, may have only actually emitted the bark sounds for a cumulative period of a few minutes.
2. The second problem is that sound and sound duration can not be measured objectively and accurately without a "bark" meter. Without the standardized sound recorder necessary, estimating time elapsed is entirely subjective... and that means it is debatable... and that means the law doesn't really cut it when it comes to being meaningful and validable.

SUMMARY

As was pointed out earlier in this paper, neither dog owners nor their neighbours are ever likely to mind a dog that barks occasionally when genuinely alarmed. Both parties are, on the contrary, likely to be grateful to be alerted and grateful for the dog to be acting as an intruder deterrent. A lot of people keep dogs in part for the reason that they actually *want* them to bark when appropriate.

What is considered unreasonable and universally unacceptable is the problem of excessive barking – when the dog becomes a conditioned and persistent barker. This kind of barking is of no benefit to anybody and a thorough nuisance to all within hearing distance.

Dogs can definitely be trained and managed in such a way that they do *not* become chronic barkers but for that you need a competent and considerate owner who is prepared to make the necessary effort... and therein lies the biggest problem.

For a whole lot of good reasons, barking can be a very annoying nuisance noise in residential areas.

Most barking problems can be readily resolved by competent and adequately resourced Council Animal Management service providers but others are like a recurring nightmare for all. In these cases council officers have no option but to demand one of two things of the parties involved. Either; someone has to:

- abate the nuisance or ultimately surrender the right of dog ownership... or someone else has to,
- cease making unsubstantiated (vexatious) complaints.

This ultimate decision stage in the difficult cases can not be managed (resolved) with all fairness and no impartiality, unless the assessment of the nuisance can be made with absolute objectivity. It is the author's opinion that this can't be done without a bark monitoring machine.

For a bark monitor to work as a means to wrap up the difficult cases where fairness, firmness and efficiency are particularly required, the machine would need to have the following capabilities:

- able to be left at the residence of the complainant for perhaps a week.
- able to be calibrated to 'tag' the noise in question.
- able to record *that* noise whenever it occurred.
- able to print out a record of accumulated noise duration by the hour / day / week.
- be sufficiently technologically sound to be considered valid legal evidence.

It is my understanding that such a device does not exist. But it could be engineered... if there was a demand for it. The advantages of such a machine could be considerable. These might include:

- Wrapping up those cases where you unavoidably must have *factual, reliable* and *tangible* evidence to prosecute successfully.

The trouble is that the *dogs* have difficulty in knowing just exactly when enough is enough and it is a bit hard to blame them for that.

- Billing the entire cost of monitoring for dispute resolution directly to either the complainant or the nuisance party on the basis of the results obtained – if no offence can be demonstrated, the complainant would pick up the tab on the grounds that their complaint had been demonstrated to be unreasonable.
- Availability of units by overnight express delivery from central hiring agencies – perhaps from a single national agency.

KEY POINTS

- The physiology of human hearing was designed for much quieter times in the process of human evolution – noise management is a very important environmental quality of life issue.
- The definition of noise includes a *value of judgement*, and for a society to brand some sounds as noises requires an agreement among members of that society – this is a lot easier said than done.
- Excessive barking is a *noise* in that it is an unwelcome environmental sound and that observation seems straight forward - it is in fact anything but.
- With competent dog ownership, nuisance barking does not become a problem – dogs tend to become excessive barkers when they are mismanaged.
- Barking nuisance is a *multi-factorial* type of problem - multi-factorial problems need multi-factorial solutions and some are a lot more difficult to manage than others.
- *Most* barking problems can be resolved by mediation and negotiation – others, however, will only be resolved with a formal regulatory approach.
- This critical stage in the difficult cases can *not be fairly resolved* unless the assessment of the nuisance can be made with absolute objectivity - this can't be done without a bark monitoring machine.
- The recent 'duration' based legislative approach *is* a big step in the right direction with formal regulation - it conveys a clear conceptual impression of what is considered acceptable.
- What the legislation *still* needs to include are the regulatory specifications for what would be acceptable standard bark monitor machines – nearly there – one more step to do the job properly.

ACKNOWLEDGEMENTS

The assistance of Helen and Les Penridge in preparing the material for this paper has been greatly appreciated. Easier said than done to gather such a lot of information and then be able to make it tidy and digestible.

OTHER REFERENCES

1. *Response to Noise in Australia: results of the 1986 noise Survey*. AEC Report No. 21. Canberra: Australian Government Publishing Service.
2. Murray RW. 1991. *An analysis of the characteristics, social impact and management of the Townsville dog population*. MSc Thesis. Townsville: James Cook University.
3. Blackshaw J. 1991. 'Tis a dog's delight to bark and bite. *Australian Biologist* 4: 184–187.
4. Technisearch. 1990. *Approaches to pet management for local government*. Melbourne: Environment and Technology Policy Unit, Royal Melbourne Institute of Technology.
5. Petcare Information and Advisory Service. 1976. *Pets as a Social Phenomenon: a study of man-pet interactions in urban communities*. Melbourne: PIAS.
6. McHarg M, Baldock C, Headey B, Robinson A. 1995. *National people and pets survey*. Urban Animal Management Coalition.
7. Rowett L. 1990. SM sympathises with dog-shooter. *Courier Mail* 11 Jan 1990: 1.
8. Ross D. 1987. Widespread sympathy for mallet attacker. *Courier Mail* 28 May 1987: 3.
9. Petcare Information and Advisory Service. *Pets as a Social Phenomenon*.
10. Miller JD. 1974. Effects of noise on people. *Journal of the Acoustical Society of America* 56: 729–764.
11. Senn. Barking dogs as an environmental problem.
12. Hart BL, Hart LA. 1985. Activity, barking and destructiveness problems in dogs.
13. Shanley K, Overall K. 1995. Rational selection of antidepressants for behavioral conditions. *Veterinary Forum* Nov 1995: 30–34.
14. Scott J P, Fuller JL. 1965. Inheritance of behaviour patterns: single factor explanations. In: *Genetics and the Social Behaviour of the Dog*. University of Chicago Press: 261–294.
15. *Ibid.*

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Dick Murray is a veterinary practitioner who, by way of extra-vocational interest, has tried to do as much as he can to assist those who work in animal management in Australia. His commitment to this interest has always been helped by a wide group of very decent friends, relatives, colleagues and people employed in this occupation. His underlying motivation in supporting UAM is his conviction that "pet benefit" is a valuable quality of life issue for every Australian community.

He strongly believes the best way to protect this benefit is through the maintenance of high standards of municipal animal control and regulation. Better animal management directly means fewer municipal pet problems and fewer municipal pet problems directly means greater community pet benefit. Dick has always been certain that this objective *is* definitely worth striving for.