

PUBLIC OPEN SPACE AND DOGS



**A DESIGN AND MANAGEMENT GUIDE
FOR SPACE PROFESSIONALS
AND LOCAL GOVERNMENT**

PUBLIC OPEN SPACE AND DOGS

Prepared for the Petcare Information & Advisory Service

HARLOCK JACKSON PTY LTD
PLANNING & DEVELOPMENT CONSULTANTS
Level 1/160 Johnston Street, Fitzroy, Victoria 3065, Australia
Tel: (03) 9419 7477
Fax: (03) 9419 7577

In Association With

ASSOCIATE PROFESSOR JUDITH K. BLACKSHAW,
Animal Behaviour and Welfare
The University of Queensland
And
JANE MARRIOT
Landscape Architect

August 1995

ISBN 0 949492 15 9

EXECUTIVE SUMMARY

Background to the Study

- The public open space management environment has changed dramatically in the last twenty years. The range of activities in which people are engaged has expanded while budgets and resources have contracted. There is now much more emphasis on efficiency and improved management. At the same time, conflict in public parks appears to have increased although not necessarily because of a higher incidence of problems. Dog owners have not been immune from these changes. Increased restrictions are being placed on their use of public open space either by requiring dogs to remain leashed or by outright banning.
- Many Councils are grappling with these difficult questions regarding dogs' access to public open space but their responses are often based on unproven assumptions and principles. Part of the problem is that the whole area of urban animal management is so new. The time has come to re-assess established practices. This Study aims to fill that gap.

Study objectives

The aims of this report are as follows:

1. To clarify the needs of dogs and their owners for access to public open space.
2. To improve understanding of the benefits of access to public open space by dogs and their owners.
3. To develop principles for accommodating dogs and their owners in public open space.
4. To recommend improved techniques of planning and design to improve the quality of the experience for dogs and their owners and to minimise potential conflicts.
5. To present the findings in a format that will assist local government and other park management authorities to assess their own requirements for accommodating the needs of both dog owners and non-dog owners using public open space.

Study approach

- The Guide's principal concern is with planning at the area or municipal wide level although we provide guidance and suggestions for design and management of individual parks. It stresses the importance of taking a comprehensive approach that is forward planning in outlook as opposed to reacting to issues on a case-by-case basis as they arise.
- The Guidelines are not prescriptive because there is no single right way to address these issues. The most important contribution this Guide can make is to set out the strategic framework to assist local authorities to assess their own requirements and choose the right combination of options in a balanced and informed manner. It provides the background and supporting information required and a framework for Councils to initiate a process in their own communities - the more detailed planning can then be done at the local level.

Section 2: The role and place of domestic pets

- This section discusses the popularity and benefits of pet ownership and concludes with a brief examination of the developing field of urban animal management.
- Owning pets has always been popular in Australia and it has become more popular over time. In 1994, 57% of households owned either a dog or a cat (42% of households owned one or more dogs and 31% owned one or more cats).
- Owning pets is part of the Australian way of life. Eighty-nine percent of present pet owners and 83% of non-pet owners had pets in the family during their childhood. Fifty-three percent of non-dog owners surveyed would, in the future, like one.
- The benefits of pet ownership are becoming clearer as more studies and case histories become available. Pets are now being recognised for their physical and mental health benefits, for their role as companions and social lubricants and in helping children learn responsibility and how to share.
- The field of urban animal management has emerged to ensure pets are appropriately managed in the urban environment. The number and range of programs being trialed and implemented both here and overseas reflects in-

creased community, professional and academic interest in urban animal management. We now have a broader and more soundly based body of knowledge on which to make judgements about managing domestic pets as well as more effective ways of disseminating new ideas and knowledge.

Section 3: Open space planning and management in Australia: How dogs and their owners have been affected

- This section looks at how dogs and their owners have been affected first by planning for public open space and then by its management. It establishes the context within which access by dogs to public open space may be considered.
- Dogs have not been considered separately by open space planners - their needs have been assumed to be part of the overall need for passive open space. This is probably as it should be and worked well in the past. The difficulty has emerged with the changing management environment where park managers have been forced to deal with more intense user conflicts. For dogs, this has meant greater restrictions on access.
- It is because of this gap between the planning and management levels that we now need to plan for dogs and their access to public open space.
- Local authorities have responded in an infinite variety of ways and with varying levels of success. Part of the problem has been a lack of correct information about both the conflicts and the reasons why dogs need continued access to public parks.

Section 4: Domestic dogs in the public realm: the case for continued access

- That dogs should be allowed access to public open space is a basic premise of this study. As a principle we believe it should be incorporated into both urban animal management strategies and open space/recreation plans. That is not to say that problems don't exist, only that the benefits should outweigh the disadvantages and that there is considerable scope for the problems to be better managed.
- Unduly restrictive access policies are inequitable and likely to be counter-

productive in managing conflicts and varying demands.

Conflicts

- Conflict is inevitable in urban areas, it is not confined to park management nor indeed to dogs' use of public parks. Conflict is a matter of degree with its impacts ranging from threats to safety, to detracting from the quality of the recreation experience, to more simple annoyance. Whether a perceived conflict warrants attention is problematic. It is not an either/or situation, i.e. that there is or isn't a conflict, but is one of degree. It requires judicious assessment of circumstances and recognition of the inevitability of conflict in urban society.
- The problems generally attributed to dogs and their owners in the public realm include defecation, aggression to humans and other animals, barking and other nuisance behaviour. A related issue for park managers is non-compliance with leash laws.
- It would seem that the problems are, on the whole, being kept at a manageable level. There are incidences where the level of conflict is high but we need to remember that these are issues that are easily inflamed by community, media and political interest - they require impartial assessment. We need to be wary of accepting uncritically many assertions made against dogs' use of public open space.
- Having said that we don't want to underestimate or trivialise the seriousness of some problems nor do we want to diminish the constructive efforts being made to resolve the numerous practical issues that dogs use of parks entails. However we do urge park authorities to critically appraise reported problems and keep them in perspective: they represent a challenge but they are not insurmountable.

Why dogs need access to public open space

- The benefits of allowing dogs access to public open space are not immediately clear and warrant closer examination. It is important to understand that they apply not only to dogs and their owners but also to the wider community as well as those responsible for urban animal management.

- The most obvious reason why dogs need access to public open space is because of their popularity. Dog owners are a substantial group of park users.
- The second reason has to do with its links with promoting acceptable behaviour from dogs. Dogs need to be properly socialised in appropriate behaviour. They also need regular outings to reduce boredom and pent-up energy at home. Access to a park close to home is the safest and most effective way to ensure owners socialise their dogs and provide them with on-going experiences in the outside world. This not only benefits the dog and its owner but also neighbours who are affected by unacceptable behaviour at home, other park and street users and authorities responsible for urban animal management.
- The third reason why dogs need access to public open space is for the positive effects it can have on their owners. Owning a dog encourages people to exercise and visit their local park. Taking a dog out has also been found to stimulate social interaction with other humans.

“Dog owners are a substantial group of park users.”

- All of these reasons are likely to be magnified in the future as a consequence of the government's urban consolidation policies (i.e. a higher incidence of smaller homes and back gardens). As more people live in compact types of housing it will place greater demands on public open space both for humans and as an outlet for dogs; a fourth reason to provide for dogs' access to public open space.
- The final reason is that a balanced approach to accommodating dogs' owners in public open space may achieve higher levels of compliance by dog owners with relevant by-laws. If dog owners perceive by-laws to be unfair it may elicit a defiant rather than a compliant response from dog owners - they may ignore the by-laws in protest. If on the other hand, the by-laws are perceived to be fair they will be more likely to voluntarily comply. The disillusionment with enforcement has led to many worthwhile education programs being introduced. However the impact

of these programs can only be limited without an access policy that is perceived to be fair by dog owners.

Section 5: Towards a model for access to public open space by dogs: establishing the principles

- With the changing management environment new ideas are being tried but often on the basis of old assumptions. What is needed is a new set of principles that challenge, or at least clarify, these old assumptions.
- The first principle is formal recognition of the legitimacy of dog owners as being as deserving a group of clients as any others. It affirms their legitimacy where disagreement exists and frees decision-makers from a limiting mindset that emphasises problems over the need to accommodate the needs of all park users.
- The second principle is to understand more clearly the needs of both dogs and their owners. Management practice to date has been hampered by a lack of information - inaccurate in the case of dogs' needs and simplistic in the case of dog owners needs.
- The most fundamental need for dogs is that they be taken out with their owner as much as possible. This enables them to experience the full range of benefits from the public realm (benefit to everyone, not just dogs). They don't need to run freely off the leash as much as they need interaction with their owner and diversity of experience.
- For dog owners we need to recognise that their needs are likely to be very different depending on stage in the life cycle, housing type, inclination, etc. We need to avoid defining dog owners needs in terms of one universal set of prescriptions.
- The third principle is that we should aim for integration of dogs with other park users. While separation is warranted in some instances, it should not be a philosophy upon which to base an area-wide strategy for dogs.
- The final principle is that Councils should apply a strategic approach that considers access on a comprehensive municipal wide basis rather than on a piecemeal park by park basis. The latter is reactive and problem-oriented. It fails to adequately address needs.

- The strategic approach aims for a hierarchy of opportunities that provides for daily, regular and occasional use.
- These principles should form the basis for planning and managing dogs' access to public open space.

Section 6: Assessing the options and establishing the framework

Assessing the options

- The principles outlined in Section 5 provide a sound basis for assessing the options for dogs' access to public open space. The main options are:
 1. On-leash areas
 2. Free running areas (access allowed off-leash)
 3. Banning
 4. Different zones in one park
 5. Time share arrangements
- Section 6 assesses each of the options and makes appropriate design and management recommendations for each.
- It would seem that the benefits of on-leash areas are misunderstood in Australia. In fact they provide an appropriate context for socialisation and some forms of training.
- There is an infinite variety of ways in which free running areas can be provided. We present three approaches in this section but the distinctions are actually blurred.
- Banning may be appropriate in certain contexts but should be used as a last resort measure, and only after a careful and impartial assessment of the conflicts and any alternatives.
- Different zones in one park raise additional difficulties associated with the effect of different zones on each other. It is this option that has the most scope for improved design and management.
- Time share arrangements allow dogs' access at certain times of the day, week or year. It is a workable option but has a number of inherent disadvantages.
- These options have been used in many different ways throughout Australia. It is important to understand the strengths and weaknesses of each and ensure that they are used appropriately. However it is the combination of options overall that is most important not the policy affecting a particular park. Hence the need to establish a municipal wide framework

Establishing the framework

- The starting point for any dog access policy should be to allow dogs in all parks in a municipality. In many cases this will mean access on a leash, although we found many successful examples where unleashed dogs were allowed in nearly all parks in a municipality. Areas where they are banned and/or allowed off leash can then be designated after a thorough and impartial assessment. This provides for a package of opportunities while accounting for any incompatibilities.
- The question is where do you draw the line. We cannot answer that question - it can only be decided at the local level taking into account levels and distribution of dog ownership, housing type, existing opportunities, local opinion and so on.
- The most effective way to accommodate dog owners' needs, taking into account these existing constraints and incompatibilities, is to aim for a hierarchy of opportunities throughout the municipality that provide dogs and their owners with daily, regular and occasional opportunities. The higher up the hierarchy the greater the priority given to dogs in planning, design and management. In practice the location and spacing of opportunities will vary widely according to local circumstances. Defining opportunities on the hierarchy should be an objective to work towards and a tool for assessing needs. In practice the process will be fluid.
- Section 6 also provides suggestions for implementation and develops an example of how the principles and recommendations might work in a hypothetical municipality we call "Anytown".

Section 7: Guidelines for the selection, design and management of individual parks

- This section provides advice and assistance on a range of common issues including:
 - location and accessibility
 - form and layout
 - surrounding land use
 - designing parks with dogs in mind
 - fencing
 - paving and surfaces
 - removing faeces
 - support facilities
 - signage

ABOUT THE PETCARE INFORMATION AND ADVISORY SERVICE

The Petcare information and Advisory Service (PIAS) was established in 1966 as an autonomous, non-commercial organisation committed to promoting socially responsible pet ownership.

Funding is provided by Uncle Ben's of Australia as a community service and the PIAS has as its charter:

- To educate owners on the responsibilities of pet ownership.
- To undertake original research on the relationship between humans and companion animals.
- To ensure accurate and reliable information is available to all interested parties on pet related issues.
- To encourage pet ownership in balance with society's needs, and help owners enjoy their pets.
- To provide information on and encourage the correct care of pets.

PIAS is pleased to make this study available as part of our commitment to ensuring that all interested parties have accurate and reliable access to information on urban policy issues.

For further information please contact:

Petcare Information and

Advisory Service

404/685 Burke Road

Camberwell

Victoria 3124

Australia

Telephone: (03) 9827 5344

Facsimile: (03) 9827 5090

CONTENTS

EXECUTIVE SUMMARY	4
ABOUT THE PETCARE INFORMATION AND ADVISORY SERVICE	6
1.0 INTRODUCTION	8
1.1 Background	8
1.2 Objectives and scope of the study	8
1.3 Key definitions	8
1.4 Methodology	8
1.5 Contents of the guide	8
1.6 Who should use the guide	9
1.7 How to use the guide	9
2.0 THE ROLE AND PLACE OF DOMESTIC PETS IN THE COMMUNITY	9
2.1 The popularity of pet ownership in Australia	9
2.2 Benefits of owning pets	10
2.3 Responsible pet ownership	11
3.0 OPEN SPACE PLANNING AND MANAGEMENT IN AUSTRALIA	11
3.1 Planning for public open space	11
3.2 Management of public open space	12
3.3 Summary	12
4.0 DOMESTIC DOGS IN THE PUBLIC REALM: THE CASE FOR CONTINUED ACCESS	13
4.1 Potential conflicts	13
4.1.1 Defecation	14
4.1.2 Aggression towards humans and other animals	14
4.1.3 Barking and other nuisance behaviour	15
4.1.4 Compliance with leash laws	15
4.1.5 Current situation	15
4.2 Why dogs need access to public open space	16
4.2.1 The popularity of dog ownership	16
4.2.2 Acceptable behaviour at home and in the public realm	16
4.2.3 Benefits for humans	16
4.2.4 Urban consolidation means greater demand for public open space	17
4.2.5 Compliance with by-laws	17
4.3 Summary	17
5.0 TOWARDS A MODEL FOR ACCESS TO PUBLIC OPEN SPACE BY DOGS: ESTABLISHING THE PRINCIPLES	18
5.1 Recognition of the legitimacy of dogs and their owners	18
5.2 Evaluation of needs	18
5.2.1 Needs of dogs	18
5.2.2 Needs of dog owners	18
5.3 Integration not separation	19
5.4 Adopt a Strategic needs based approach	19
5.5 Summary	19
6.0 ASSESSING THE OPTIONS AND ESTABLISHING THE FRAMEWORK	20
6.1 Assessing the options	20
6.1.1 On-leash areas	20
6.1.2 Free running areas	21
6.1.3 Banning dogs from parks	22
6.1.4 Different zones in one park	23
6.1.5 Time-share arrangements	24
6.2 Establishing a municipal-wide framework	25
6.3 A hypothetical example; “Anytown”	25
6.4 Implementation	26
6.5 Summary	27
7.0 SPECIFIC GUIDELINES FOR THE SELECTION, DESIGN AND MANAGEMENT OF INDIVIDUAL PARKS	28
Location and accessibility	28
Form and layout	28
Surrounding land use	29
Designing parks with dogs in mind	30
Fencing	31
Paving and surfaces	31
Removing faeces	31
Other support facilities	32
Signage	33
8.0 CONCLUSION	33
REFERENCES	34

1.0 INTRODUCTION

1.1 BACKGROUND

Public open space management in Australia has changed dramatically in the last twenty years. The range of recreation activities pursued has expanded while budgets and resources have contracted, particularly in the last decade. There is now much more emphasis on efficiency and improved management. At the same time, conflict in public parks appears to have increased although not necessarily because of a higher incidence of problems. Dog owners have not been immune from these changes. Increasing restrictions have been imposed on their use of public open space either by requiring dogs to remain leashed or by outright banning. The restrictions have been imposed because of the seemingly intractable nature of the problems posed by dogs using public parks and reserves.

Many local authorities are acting positively to address these dilemmas. However in most cases they are reacting to political demands rather than addressing needs and problems in a systematic way. A lot of good design and management ideas were uncovered during the course of this Study but they are often based on unproven assumptions and principles. Part of the problem is that the whole area of urban animal management is so new. Councils are grappling with very difficult questions but lack important information and an overall framework to address them in an effective way. The time has come to re-assess established practices. This study aims to fill that gap.

Very little work of a comprehensive nature has been carried out here or overseas. A review of the literature revealed studies into isolated issues such as aggression and defecation in the public realm. There are also a number of studies of individual 'dog parks', which mostly examine the political struggles associated with their establishment (see for example Wolch and Rowe (1992) who detail the background to a 'dog park' in Los Angeles and provide useful suggestions to avoid intense confrontation in similar situations). However there has been virtually no work that addresses the needs of all members of a community, including dog owners, at the municipal or regional wide level. Harlock Jackson Pty Ltd in association with Goad Fink and Holmes (1992) considered these dilemmas in an introductory way and their report serves as the starting point for this study.

1.2 OBJECTIVES AND SCOPE OF THE STUDY

The aims of this study are as follows:

- 1 To clarify the needs of dogs and their owners for access to public open space.
- 2 To improve understanding of the benefits of access to public open space by dogs and their owners taking into account the diverse needs of all members of the community.
- 3 To develop principles for accommodating dogs and their owners in public open space taking into account the diverse needs of all members of the community.
- 4 To recommend improved techniques of planning and design, to improve the quality of the experience for dogs and their owners and to minimise potential conflicts.
- 5 To present the findings in a format that will assist local government and other park management authorities to assess their own requirements for accommodating the needs of both dog owners and non-dog owners using public open space.

Our principal concern is with planning at the area or municipal-wide level, although we provide guidance and suggestions for design and management of individual parks.

The study is confined to an examination of access to public open space by domestic dogs in the company of their owner or other human. While important, the issue of stray and unowned dogs is not addressed. The study only considers public open space in large urban centres although the principles are generally applicable everywhere.

The study emphasises design and management solutions. Other components of urban pet management strategies (e.g. education) are addressed here only where they relate specifically to public open space and then only by reference rather than detailed examination.

1.3 KEY DEFINITIONS

Public open space is taken to mean public parks and reserves. The terms are used interchangeably in this report.

The *public realm* is a broader concept that includes streets, footpaths and other public places as well as public open space.

When we talk of *access* to public open space by dogs we are using the term in a general way to distinguish it from banning.

It includes both on and off leash access unless specifically clarified in the text.

ACOs or *Animal Control Officers* are officers responsible for domestic animal management in a particular area. They are usually employed by the local authority.

1.4 METHODOLOGY

The study was undertaken over an 18 month period in 1994-1995 by Harlock Jackson Pty Ltd, Planning and Development Consultants in association with Associate Professor Judith K. Blackshaw, Animal Behaviour and Welfare of the University of Queensland and Jane Marriott, Landscape Architect.

The study involved the following procedures.

- 1 Review of relevant literature - both urban animal management and recreation/open space planning.
- 2 Discussion with Animal Control Officers (ACO's) in metropolitan councils from all Australian states about prevalent issues, problems and solutions tried.
- 3 Tour of parks in several states.
- 4 Inspections and research into similar issues in Los Angeles, USA.
- 5 Workshop attended by the Study Team and PIAS staff to establish principles.
- 6 Inter-departmental workshop with staff of the Shire of Pine Rivers, Queensland to evaluate ideas and discuss problems of implementation.
- 7 Preparation of the final report.

1.5 CONTENTS OF THE GUIDE

Section 2 addresses the role and place of domestic dogs in the community generally including the many important benefits of domestic pet ownership. The meaning of socially responsible pet ownership is explained as it relates to the owner's responsibilities to his or her pet and to minimising any adverse effects on the wider community.

Section 3 describes how dog owners have been affected by open space planning and management. The main policy responses to the question of dogs' access are identified. Because of the changing management environment we now need to plan more systematically for dogs and their use of public open space.

Section 4 looks first at the problems that tend to be attributed to dogs' use of public open space and then at why we should continue to accommodate their needs in the future.

Section 5 introduces a series of principles which should form the underlying basis for an access strategy for dogs.

Section 6 assesses the access options on the basis of the principles outlined in Section 5. It goes on to conclude that it is the combination of options overall that is important, not the provisions that exist in any one park. It recommends that a hierarchy of opportunities be provided for dog owners' daily, regular and occasional use. We develop a hypothetical example of a municipality to illustrate the principles. Section 6 concludes with implementation suggestions.

Section 7 contains recommendations for the selection, design and management of individual parks.

1.6 WHO SHOULD USE THE GUIDE

The guide has been designed to be used in a range of different circumstances:

- For the local authority looking to better accommodate the needs of dog owning households.
- For the local authority dealing with conflicting demands of dog owners and non-dog owners over access to public open space.
- For local authorities developing comprehensive pet management strategies for their area.
- For interested groups and individuals trying to influence their local authority to improve access to public open space for all members of the community.
- For the recreation professional as a means of incorporating the needs of dogs owners into open space planning and management.
- For the town planner preparing Outline Development Plans for newly developing suburbs on the urban fringe.

Of course it must be remembered that in many parts of Australia, there is no discernible problem associated with dogs' use of parks. In these cases it would be pointless imposing unnecessary restrictions on park users.

1.7 HOW TO USE THE GUIDE

The guidelines provided are not prescriptive. We have not specified amounts of open space that should be available to dogs per household or within a certain distance of each residence, nor have we made definite statements about the types of open space that should be provided, whether on-leash or off-leash.

The reason for this is that there is no single right way. Every community is different - in its physical development, population characteristics, pet ownership profile, political climate and so on. The opportunities and constraints will vary widely, as will the balance of community opinion. *The most important contribution that this guide can make is to set out a strategic framework to assist local authorities to assess their own requirements and choose the right combination of options in a balanced and informed manner.* It provides the background and supporting information required and a framework for Councils to initiate a process in their own communities - the more detailed planning can then be done at the local level.

“Nearly every Australian household either has a pet, has had a pet, or intends to have a pet in the future.”

2.0 THE ROLE AND PLACE OF DOMESTIC PETS IN THE COMMUNITY

There is no question that domestic pet ownership is popular in Australia; the numbers alone prove that. There are also many social benefits. This section addresses the role and place of domestic pets in the community. It outlines the associated emotional, health and social benefits and suggests that pet ownership is important to all household and family types. The section concludes with a brief outline of the new field of urban animal management as it has developed in Australia.

2.1 THE POPULARITY OF PET OWNERSHIP IN AUSTRALIA

Owning pets has always been popular in Australia and it has become more popular over time. In 1966 when market research figures were first collected, the total number of owned dogs in Australia was estimated to be 1.3 million. By 1988 there were an estimated 3.04 million. From 1978 to 1988, the number of dog owning households increased from 1.74 million to 2.13 million households (Morgan Research 1988).

A recent survey conducted by Reark Research provides the most up-to-date figures. Table 1 presents the results. In 1994, there were 3.8 million dogs and 2.9 million cats in Australia. Fifty-seven per cent of households own dogs or cats. Forty-two per cent of households own a dog and 31% own a cat (Reark Research 1995).

Another recent Australian survey sampled attitudes from both pet owners and non-pet owners. The results revealed that nearly every Australian household either has a pet, has had a pet, or intends to have a pet in the future. Eighty-nine per cent of present pet owners and 83% of non-pet owners had had pets in the family during their childhood. Fifty-three % of non-dog owners surveyed would, in the future, like one (McHarg, Baldock, Heady and Robinson 1995).

McHarg et al. (1995) conclude that 'our involvement with pets, in particular dogs, expands and contracts as we move through phases of the life cycle. This is not just related to

the presence or otherwise of children in a household but also to accommodation type and tenure and the presence of someone at home to care for the pet' (McHarg et al. 1995, 6).

TABLE 1:

PET POPULATION ESTIMATES IN AUSTRALIA (1994)

TOTAL POPULATION

Dogs	3.8	million
Cats	2.9	million
Birds	9.7	million
Fish	11.9	million

AVERAGE NUMBER OF PETS PER HOUSEHOLD OWNING EACH PET

Dogs	1.5
Cats	1.5
Birds	7.0
Fish	11.9

PROPORTION OF HOUSEHOLDS WITH PETS

Dogs	42%
Cats	31%
Dogs or cats	57%
Birds	22%
Fish	16%
Dogs or cats Or birds or fish	66%

ESTIMATED NUMBER OF HOUSEHOLDS WITH PETS

Dogs	2.6	million
Cats	1.9	million
Dogs or cats	3.5	million
Birds	1.4	million
Fish	1.0	million
Dogs or cats Or birds or fish	4.1	million

Source: Rearch Research 1995

The reasons why people own pets relate mostly to companionship and pleasure (see for example, Albert and Bulcroft 1986, McHarg et al. 1995). Security also figures prominently but more often as a secondary reason people give for obtaining pets.

In his commentary on social change and pet ownership, Hugh Mackay notes an

emerging pattern of attitudes in the Australian community which favours increased pet ownership and a stronger commitment to the care of pets. He sees the Australian way of life being re-defined as part of a process of social, cultural, economic, political and technological change that began more than 20 years ago:

"Pet ownership fits in with a strong emerging theme in the socio-cultural evolution of Australia in the nineties. Increasingly, Australians are talking about the need to 'get back to basics'; to get closer to nature, to simplify their lives; to pay more attention to domestic life; to recapture some 'traditional values'

(McCallum Research et al. 1992, p. 30)

2.2 BENEFITS OF OWNING PETS

The human-animal bond literature is extensive. We now know that in addition to the long recognised companionship, caring, sharing and security aspects, pet ownership can have a very positive health effect. The following discussion highlights only some of the studies that have been conducted relying where possible on the most recent Australian work.

Fitness, health and mental health

The health benefits of pet ownership are increasingly being recognised. There is something soothing about stroking and petting an animal. They are uncomplaining, unvengeful and unjudging in their relationship with their owner and are now suggested as a drug free way of coping with stress. Dogs also encourage owners to exercise. McHarg et al. found that dog owners are more physically active than the rest of the population (1995, 19).

Proof of the therapeutic benefit of pets becomes stronger every day as more studies and case histories become available. The seminal work by Dr. Warwick Anderson of the Baker Medical Institute in Melbourne showed that pet owners had significantly lower risk factors for cardiovascular disease than non-owners. Some 5,741 people participated in the study that revealed a beneficial effect of pet ownership on several of the classical factors for coronary heart disease. Heart related diseases are the biggest cause of death among adults in Australia (Anderson with Reid and Jennings 1992). Dog owners in the McHarg et al. survey

also reported better physical and mental health than non dog-owners. They go to the doctor less often. Fewer take medication for high blood pressure, sleeping difficulties, high cholesterol or a heart problem. They also report greater satisfaction with their physical fitness (McHarg et al. 1995, 19).

In Melbourne, the Joint Advisory Committee on Pets in Society (JACOPI) documented the introduction of a 'pet in residence' at Caulfield hospital. A former guide dog named 'Honey' was introduced into two long-term care wards which accommodated 60 frail and elderly patients. The Study showed that Honey's presence in these wards had a positive effect on a large number of patients in terms of their emotional well-being (Salmon and Salmon 1983).

Pets also help to foster family cohesion. McCallum Research Pty Ltd et al. considered this question in light of the greater complexity of family relationships arising from divorce, the blending of families, the pressures on working mothers or conversely of unemployment. They argue that these pressures add enormously to the difficulties and complexities of modern day life and conclude that *"the undemanding simplicity of the love offered or required by a pet can be a welcome contrast to this."* (McCallum Research et al. 1992, p. 8)

Pets as companions and social lubricants

Pets can act as emotional substitutes for spouses, romantic partners and children. Albert and Bulcroft's 1986 survey of 436 people in the Rhode Island metropolitan area (USA) is just one study that supports this popular view. They found that the people who felt closer to their pets tended to be those without a present spouse or romantic partner, who have no children or have no children present in the home. They found that widows, single people and empty nesters are more likely to emphasise the companionship qualities of pets. In the McHarg et al. survey, 79% of pet owners find it comforting to be with their pet when things go wrong and 91% feel very close to their pet.

The McHarg et al. survey also revealed that 58% of pet owners said they got to know people and made friends through having pets, while 62% said that having a pet around when people visit makes it easier to get into conversation and create a friendly atmosphere.

Pets helping to teach children

Pets are often obtained to help children learn responsibility and how to share. They show that if affection is given it will be returned. McCallum Research Pty Ltd et al. confirmed the significance of the teaching role when they concluded:

"Some parents feel they would be failing in their responsibilities as parents if they 'deprived' their children of pets and that what they learn from pets makes them better human beings."

(McCallum Research et al. 1992, p. 16)

2.3 RESPONSIBLE PET OWNERSHIP

Owning pets implies responsibilities that people are increasingly being called upon to meet, especially in urban areas. These responsibilities include:

- Attending to their pet's emotional and social needs.
- Attending to their pet's health and welfare including exercise, training and environmental enrichment as appropriate to the breed.
- Confining dogs within the perimeter of the home property to prevent wandering.
- Minimising any adverse effects on neighbours, e.g. from excessive barking.
- Complying with relevant by-laws (i.e. leash laws, removal of faecal deposits in the public realm, keeping dogs under effective control etc.).

Collectively, these responsibilities have come to be known as *socially responsible pet ownership* which has two components:

- The knowledge of the owner of his or her responsibilities; and
- His or her efforts to meet these responsibilities.

Both components of responsible pet ownership are promoted through information, education, legislation and enforcement. Those involved include local councils, animal behaviourists, veterinarians, animal welfare organisations, the various interest groups and interested individuals.

Some of the education programs currently available include:

- The Australian Veterinary Association's primary school education program called *Pet Pep*.

- The *Selectapet* program which suggests breeds of dog and cat that might be suitable to prospective pet owners' lifestyles and expectations.
- Many media outlets which present regular information on the care of pets and pet ownership.
- *Canine Good Citizen* - a short obedience course designed to make dogs better members of the community.
- *Puppy pre-school* - an education and socialisation process for puppies and their owners.

These are only some of the initiatives that have been introduced in recent years in Australia. Overseas, an extensive number of programs are being trialed and implemented constantly and the results of these studies will eventually make their way to this country. It all reflects increased community, professional and academic interest in urban animal management. We now have a broader and more soundly based body of knowledge on which to make judgements about managing domestic pets as well as more effective ways of disseminating new ideas and knowledge both to pet owners and those working in the field, e.g. through the work of the Urban Animal Management Group of the Australian Veterinary Association and through various professional and academic journals. A multi-faceted approach such as this has the most promise for achieving worthwhile results.

3.0 OPEN SPACE PLANNING AND MANAGEMENT IN AUSTRALIA

An important initial step is to examine how Australian dogs and their owners have been affected by open space planning and management. This section describes the planning and management environment and concludes by listing the main management responses to the issue of dogs' access to public open space. Each response is later evaluated in more depth in Section 6: Assessing the Options.

3.1 PLANNING FOR PUBLIC OPEN SPACE

Australian cities are reasonably well provided with parks and open space owing to their later development and conscious attempts at town planning. The open space plans were often based on grand visions that did not necessarily cater for people's needs but we are nevertheless fortunate today in the amounts that were provided.

In more recent years, developers of new subdivisions have been required to set aside a specified percentage of land as public open space for future residents (say 5%). This has been criticised as a tool for providing open space for the following reasons:

- The open space that has been provided is not necessarily well distributed or accessible to all members of the community. Much of it is also of poor quality.
- It is a gross standard that doesn't take into account different types of recreation activities undertaken. Today we have a much wider diversity of recreation activities to accommodate than ever before - some interests, such as sporting groups, are better served than others.
- People seem less willing to tolerate conflicts with other users than they were previously and are more concerned about environmental impacts.

Urban planners now prepare Structure Plans for newly developing suburbs in an attempt to achieve a better distribution of land uses. However the level of detail is not sufficient to produce really effective outcomes for public open space provision or indeed for specific user groups. A view has tended to prevail that once the standard

requirement is met, the planner's obligations have been fulfilled.

A needs-based approach to recreation planning is said to counter these deficiencies by looking at the activities in which people participate. Essentially it seeks to ensure the amount and location of open space and recreation facilities is consistent with population trends and changing recreation needs rather than relying on gross standards. It provides the strategic area-wide focus against which detailed planning and management of individual parks can be undertaken. This is usually carried out by recreation planners and open space professionals although few municipalities actually prepare strategic open space plans. As far as we are aware dog owners' needs have not been considered in any needs-based recreation planning exercises.

Some state governments, e.g. Victoria, have prepared metropolitan wide open space plans to identify broad gaps in opportunities, especially of activities with regional catchments, and to better match regional resources to major population growth corridors.

Overall the input of ACO's in the planning for public open space has been negligible. It would seem that the needs of dog owners aren't perceived to warrant separate consideration - their needs are assumed to be part of broad passive and informal recreation needs. Ideally, this is as it should be, except that in practice dogs are being restricted as part of the park management stage explained below. It is because of this gap that we now need to plan for dogs and their access to public open space.

3.2 MANAGEMENT OF PUBLIC OPEN SPACE

Management of public open space is spread mostly between local government, state government and some statutory authorities. Local government has responsibility for most open space and has a higher profile at the local level. State and national parks tend to fall under the auspices of state governments because of their regional and/or conservation significance.

Fragmentation of responsibility between different levels of government and between different local authorities has led to duplication of resources for some activities and gaps in provision for others. For dogs it may be leading to gaps - state government

officials tend to view dog owners' needs as a local responsibility while some local authorities view it as a regional responsibility that should lie with the state government.

“As far as we are aware, dog owners' needs have not been considered in any needs-based recreation planning exercises.”

Some parks, especially state and national parks, are now managed in accordance with approved management plans that aim to better manage conflicts, particularly environmental ones. Management tools include restrictions on human access or establishing different zones in the one park, e.g. an environmental protection emphasis in some parts of a park and a human recreation emphasis in other parts. Dogs tend to be excluded from parks/zones with an environmental emphasis and as a consequence need to co-exist with other users in the reduced areas set aside for human recreation. This probably aggravates conflicts because of the reduced areas available for human recreation and could be leading to greater exclusion of dogs altogether (on the basis that accommodating dog owners' needs are a local responsibility). This is mostly only a potential threat at this stage and should not be overstated. However it could become a future reality and needs to be clearly understood.

At the local level, the management of parks faces the same issues although usually with less emphasis on conservation concerns. Being closer to the community, park managers (and ACO's) deal with very vocal demands of different groups. In many municipalities dogs' use of parks is not a problem. In others however, attitudes are polarised between pro-dog and anti-dog viewpoints and difficult decisions are being faced regarding dogs' access. Because the process is politicised, reactive solutions at the political level are common and more restrictive access requirements are being imposed on dog owners.

Broadly there are five main policy responses to the issue of dogs using public open space:

1. Access allowed on-leash
2. Free-running areas (i.e. unleashed access providing dogs remain under 'effective control')
3. Banning
4. Different zones in one park
5. Time-share arrangements

Seasonal variations have also been used although mainly on beaches, e.g. dogs banned from November to April.

There are advantages and disadvantages with each response and each has its place in an overall strategy. What is important is not whether dogs are excluded in a particular park but the number and quality of opportunities available within a wider area. In too many municipalities there is an over-reliance on Option 1 (free running) in combination with Option 3 (banning). In part this reflects a dominant cultural belief that because dogs are different and because some people are anti-dog they need to be separated from humans. It also reflects a misunderstanding of the benefits of on-leash areas. In the following sections we show clearly why a separation philosophy is inappropriate for dogs, their owners, other parks users and the authorities trying to manage public parks.

Each of these responses is examined in Section 6 along with suggestions about the circumstances in which they are best used. As we stress repeatedly in this report, more restrictive access policies may be appropriate providing they are based on a balanced and correct assessment of the issues at hand (and not as a hasty political response) and on an area wide approach which recognises the legitimacy of dog owners' to access certain parks. Widespread banning is inequitable and inappropriate.

3.3 SUMMARY

The design and management of parks was much simpler thirty years ago. There was generally less sensitivity to the environment and other contextual issues. Parks were typically one-dimensional focusing around a single activity with little consideration of community issues or specific needs. The public concern for the environment which surfaced in the seventies and eighties and the intense competition for resources served as a wake-up call for Councils to start addressing the needs of different groups in more systematic ways.

Dogs' owners have not been considered separately by open space planners - their needs have been assumed to be part of the

overall need for passive open space. This is probably as it should be and worked well in the past. The difficulty has emerged with the changing management environment where park managers have been forced to deal with more intense user conflicts. For dogs, this has meant greater restrictions on access. The emerging gap between planning and management means that we now need to address dog owners' needs at the planning level.

Local authorities have responded in an infinite variety of ways depending on local circumstances and with varying levels of success. Part of the problem has been a lack of correct information about both the conflicts and the reasons why dogs need continued access to public parks. We now turn to both of these.

4.0 DOMESTIC DOGS IN THE PUBLIC REALM: ESTABLISHING THE CASE FOR CONTINUED ACCESS

That dogs should be allowed access to public open space is a basic premise of this study. As a principle we believe it should be incorporated into both urban animal management strategies and open space/recreation plans. This is not to say that problems don't exist; only that the benefits should outweigh the disadvantages and that there is considerable scope for the problems to be better managed.

This section looks first at the potential conflicts generated by dogs and their use of public open space and then at the reasons why we should continue to accommodate them in public open space.

4.1 POTENTIAL CONFLICTS

Conflict is inevitable in urban areas; it is not confined to park management, nor indeed to dogs' use of public parks. Some of the conflicts found in public open space are set out below.

- Different recreation activities or groups may compete for access to the same space, e.g. a hockey club and a football club.
- Two incompatible activities might share one recreation facility, e.g. fishing and water skiing.
- Conflict may be caused by inappropriate visitor behaviour. Smith (1990) uses the term depreciative behaviour to describe any action that is deemed inappropriate or unacceptable in a given recreation site or facility by the managers of that facility or by a significant number of other users. Such visitor-induced impacts may affect other users or reduce the aesthetic, historic, environmental or scientific qualities in a park.
- Adjacent residents may be adversely affected, e.g. by noise, litter, property damage, car parking and traffic problems.

Conflict is a matter of degree with its impacts ranging from threats to safety, to detracting from the quality of the recreation experience, to more simple annoyance. Even annoyance is a matter of degree - what is intolerable to one person may only annoy another and may not even be noticed by another. Tolerance has been construed as a willingness to accept deviations from preferred or 'ideal' situations (Whittaker and Shelby 1988). Sherif and Sherif (1956) talk of the "range of tolerable behaviour" and this concept has since been evoked in the recreation literature.

So how can we say if a conflict exists and whether it warrants attention by park managers? In some cases it is clear, for example, where one activity poses danger for participants of another. However in most situations the definition of conflict depends on a subjective interpretation by park managers and by different people who may be affected. It is not an either/or situation, i.e. that there is or there isn't a conflict, but is one of degree. Most authorities rely on observation and complaints, taking into account the history of land use and recreation activity in the area.

Whether a perceived conflict warrants attention is accordingly problematic. It requires judicious assessment of circumstances, a recognition of the inevitability of conflict in urban society and, where dogs are concerned, a recognition of the capacity of the issues to be blown out of proportion. We need to carefully weigh up competing priorities of different groups and look first for ways to better manage conflict - trying to eliminate it altogether can be unrealistic and counter-productive.

“That dogs should be allowed access to public open space is a basic premise of this study”

At this point it is necessary to be more specific about the types of conflict generated by dogs when they use public parks. The problems generally attributed to dogs and their owners in the public realm include defecation, aggression to humans and other animals, barking and other nuisance behaviour. A related issue for park managers is non-compliance with access and leash laws. We now deal with each of these in turn.

4.1.1 Defecation

The most common complaint about unremoved faecal deposits is the effect on aesthetics and the unpleasant experience of dodging droppings on footpaths and in parks. The most serious concerns are health related.

Faeces may be infested with microscopic parasitic organisms that can be transmitted to and cause disease in humans. Although the risk to humans is slight, roundworm is the most prominent health concern in relation to dog faeces. Roundworm resides in the small intestine of dogs. Its eggs are passed to the outside environment in the dog's faeces. The eggs take two weeks to a month to become infective, so there is no risk from fresh faeces. However, the eggs may remain infective in the soil for years.

Humans do not develop adult roundworms, however migration of larvae through the tissues and organs can cause disease. The primary transmission pathway to humans is through contamination of the hands by eggs in the soil and accidental ingestion. Direct contact between humans and infected dogs does not play a role in disease transmission. Young children have the greatest risk of exposure. They may inadvertently eat dirt or grass or touch their mouths with hands contaminated with old dog faeces containing infective roundworm eggs. People confined to hand-activated wheel chairs and active sports players (i.e. football, hockey, cricket etc.) may also be at risk.

Preventative measures will reduce the public risks. The roundworm is not present in dogs that are correctly and regularly treated for worms and dog owners should be made fully aware of their responsibilities in this regard. Removal of faeces before the roundworm eggs become infective is also important.

The spread of hydatids is another potential health concern associated with dog faeces. It is a risk in some parts of Australia but only when the dog has eaten uninspected offal from sheep or cattle. This is illegal in Australia and the incidence of hydatids is now extremely low.

Odours are not a persistent or long-standing problem and are usually dissipated by wind currents. They are generally not strongly detectable unless someone is within close vicinity of fresh faeces. To help minimise odour problems, refuse bins should be emptied often. An air freshener

cartridge could also be placed under the bin's lid.

Local authorities require dog owners to properly dispose of faecal deposits. Encouraging people to do this is best achieved through an integrated dog management program comprising education, communication and enforcement. Enforcement is limited by the difficulty of identifying the offending dog (owner). Pressure from other park users has also been reported to raise the level of compliance in some parks, although there is no specific supporting evidence. This last mentioned measure warrants more attention than it has received to date.

In recent years, authorities both here and overseas, have favoured or introduced a range of specific programs to encourage and make it easier for people to be more responsible, e.g. disposable or reusable 'pooper scoopers' that owners either bring with them or use on-site, specially designed dog toilets or 'pooch patches' provided by the municipality and so on. There are advantages and disadvantages with each approach and programs will be copied and improved on in the future as more programs are trialed and we learn from experience. Section 7 makes a preliminary assessment of some of the options.

Unremoved faecal deposits may be more prevalent in off-leash areas. This plausible proposition was borne out from our discussions with ACO's around the country although there is no empirical evidence to support it. Certainly it is harder for owners to retrieve faeces when their dog is not leashed but the correlation may also relate to other factors such as concentration of dogs and reduced levels of maintenance in designated off-leash parks.

4.1.2 Aggression towards humans and other animals

Dog attacks are the most serious potential problem and there is always a great deal of interest in the issue. Attacks can occur against humans, other dogs and other animals. Most dogs don't bite people or other dogs. Those that do are either frightened, dominant, protective or possessive. Attacks against wildlife is part of the predatory instinct natural to all dogs.

Without wanting to underrate the seriousness of dog attacks in either the private home or public open space, they need to be kept in perspective. People are concerned about dog attacks but the extent to which the mass media amplifies isolated problems

out of proportion needs to be questioned. We need to understand how the triggers to aggression vary in different settings and avoid simplistic management mechanisms. For example very few dogs that attack livestock are dangerous to people. The two behaviours, although having a similar expression have different causes (Jennens 1992).

It would seem dog attacks are more likely to occur in the dog owner's home or immediate vicinity than they are in public open space. In one study of aggression in dogs it was found that from 65% to 93% of dog attacks occurred in or near the dog owner's home (Poderbercek and Blackshaw, 1990). Similarly, the Victoria Injury Surveillance System (VISS) has issued several reports on injuries caused by animals. As of May, 1989 the VISS database had recorded a total of 266 injuries. Forty percent of the bites occurred in the home or the home yard and another 22% occurred in the yard of another home. Sixteen percent occurred in public places and place of bite was not stated in 22% of cases. Attacks on private property frequently happen when a dominant, protective or injured dog is not adequately supervised with children and visitors. These triggers are not present when a dog is in the neutral territory of a public park.

“People are concerned about dog attacks but the extent to which the mass media amplifies isolated problems out of proportion needs to be questioned.”

Another concern is public liability. Undoubtedly, this is the most far reaching confrontation between park managers and the legal system today, e.g. for injuries or damage that occur on play equipment, from damaged park infrastructure, because of inadequate park maintenance etc. This is a fact of life with all public facilities and stems from a mentality of injured parties that "someone will pay".

In relation to dog attacks, it is the owner of the offending dog who is mostly liable for any injuries or damage. However the search for "who is responsible" often absorbs a great deal of energy and local au-

thorities are often seen as easy targets for legal action. For example it could be construed that a park management authority contributed to an attack by designating a park for off-leash free-running by dogs. The laws vary from state to state and are open to interpretation. Local authorities should obtain their own legal and insurance advice and accordingly make their own risk assessments. However the question of whether unleashed dogs are more prone to aggression than leashed dogs remains unresolved. Certainly owners have more control over their dogs when they are leashed but a greater relative incidence of attack in free-running areas has not been proven and was not necessarily raised as a concern in those municipalities we spoke to that already allow dogs off leash.

Absolute safety can never be attained. Safety can, however, be improved. Aggressive behaviour in dogs can be prevented or controlled by responsible breeding, socialisation, obedience training and careful management of the dog (Jennens 1992). Liability insurers can also advise on risk management strategies, e.g. appropriate signage etc. Naturally Councils have a moral responsibility to minimise risk as well and they should monitor all reported incidents. Dogs that are designated as 'dangerous' should be barred from off-leash areas.

4.1.3 Barking and other nuisance behaviour

Noise from barking can affect other park users and adjacent residents. The impacts depend on the number of dogs using a particular park.

It is important to recognise that noise level readings represent a composite of noise-generating sources located both inside and outside a park boundary including air and ground transportation, people in the park and children in play areas, park maintenance and so on. How seriously acoustic impact is viewed varies with different land uses as well as by time of the day and week, e.g. residential land use is more sensitive than commercial, evenings and early mornings are more sensitive than daylight hours and weekends are more sensitive than weekdays.

If required, a noise impact analysis can be conducted to measure the noise level contributions made by barking dogs against various environmental standards to determine their impact on ambient noise conditions.

Other nuisance behaviour that people associate with dogs is often behaviour associated with the home environment, e.g. digging caused by boredom, and aggression associated with defending home territory and asserting territorial rights. It is important to understand the reasons why dogs won't necessarily behave in the same way in the neutral territory of public open space - they are more likely to be engaged in 'joyful' behaviour which means they will explore rather than dig and will be intent on running, sniffing and playing.

Sustained dog use could adversely affect landscaping, e.g. accelerated erosion and trampling, possibly urine burns on turf. However this would depend on intensity of use. There is a case to exclude dogs from municipal gardens and environmentally sensitive parts of public parks. However in most cases wear and tear by dogs can be accommodated by normal park maintenance. If wear on planting is excessive it may reflect a lack of alternative opportunities for dogs which has led to a concentration of canine recreation in the park in question.

Another argument for restricting dogs' access to public open space is that their presence (behaviour and smell) frightens away native wildlife unrelated to any incidence of aggression. This argument falls down on two accounts. The most direct failing is that the scientific evidence to support this view is far from sufficient to constitute the basis of a management prescription. The second failing relates to the fact that dogs are not the only agents that may frighten wildlife. Humans, especially children and teenagers, park maintenance staff and their machinery are likely to have as much impact as dogs.

4.1.4 Compliance with leash laws

The problems described above are either eliminated or reduced if dogs are confined to a leash and this is a requirement of parks in at least some parts of most municipalities throughout Australia.

However leash laws of themselves raise another area of potential conflict - that of non-compliance. People don't comply for many reasons whether through protest, lack of awareness, laziness or because they think they can escape prosecution. It is obviously related to enforcement presence, education and compliance by other dog owners in the immediate vicinity. Section 3.2 documents the increasing disenchantment with enforcement in urban animal management

“It is important to understand the reasons why dogs won't necessarily behave in the same way in the neutral territory of public open space – they are more likely to be engaged in ‘joyful’ behaviour which means they will explore rather than dig and will be intent on running, sniffing and playing.”

circles. There is urgent need for more research into regulatory compliance as it applies to urban animal management, in particular the incentives for voluntary compliance.

4.1.5 Current Situation

Many people spoken to in the course of this study cited the greater relative intolerance of park users today. It is true; we live in a complaining society today and this tends to polarise viewpoints. However it would seem that the problems are, on the whole, being kept at a manageable level. There are of course incidences where the level of conflict is reported to be high, however we need to remember that these are issues that are easily inflamed by community, media and political interest - they require impartial consideration taking into account the needs of all park users.

Having said that, we don't want to underestimate or trivialise the seriousness of some problems nor do we want to diminish the constructive efforts being made to resolve the numerous practical issues that dogs' use of parks entails. However we do urge park authorities to critically appraise reported problems and keep them in perspective: they represent a challenge but they are not insurmountable.

4.2 WHY DOGS NEED ACCESS TO PUBLIC OPEN SPACE

The other side of the access equation are the reasons why we should continue to allow dogs access to public open space. It is crucial that we recognise the benefits and understand that they apply not only to dogs and their owners but also to the wider community as well as to those responsible for urban animal management.

4.2.1 The popularity of dog ownership

The most obvious reason is quite simply because of their popularity. On numbers alone dog owning households deserve consideration because they constitute a sizeable group within the community. Section 2 outlined the demographics: *42% of Australian households own one or more dogs*. If we truly aspire to catering for the diverse recreation needs of all members of the community (and this is fundamental to recreation planning), then we are obligated to plan for dog owners' needs as well.

Local authorities need to be aware that restricting access to public parks may disadvantage people, particularly the elderly who are less able to travel longer distances to use parks further afield.

4.2.2 Acceptable behaviour at home and in the public realm

The second reason for providing dogs with access to public open space has to do with its links with promoting acceptable behaviour from dogs. This not only benefits the dog and its owner but also neighbours who are affected by unacceptable behaviour by dogs at home, other park and street users and authorities responsible for urban animal management.

Some behavioural problems in dogs such as severe owner dependence, some types of aggression and barking can be traced back to lack of socialisation and a barren home environment. Dogs need to learn acceptable behaviour in the public realm and need to be socialised properly to prevent overt aggression. This is best achieved by owners training their dog while out of the home (Hart 1990) and through play with the owner and other dogs (Bradshaw and Brown 1990). Public parks are important contexts in which such socialisation occurs.

However dogs need more than just initial socialisation; they need on-going exposure to the public realm. Harlock Jackson Pty Ltd et al. (1993) recognise that daily exercise reduces boredom and pent-up energy while regular outings into the public realm give dogs a more enriched existence. All these measures may help to overcome some of the behavioural problems mentioned above. They also become more crucial with more pets being left at home alone during the day and as the effects of the government's urban consolidation policies begin to be felt (see below).

Access to a public park close to home is the safest and most effective way to ensure owners socialise their dogs and provide them with on-going experiences in the outside world.

4.2.3 Benefits for Humans

The third reason why dogs need access to public open space is for the positive effects it can have for their owners.

Owning a dog encourages people to exercise and visit their local park; a positive feature of pet ownership for all members of the community, especially those with limited access to social opportunities such as the elderly and parents isolated at home during the day with small children. In an era when people feel increasingly threatened in public areas, being accompanied by a dog can also improve actual and perceived safety.

Taking a dog out has been found to stimulate social interaction with other humans. There have been several studies of owners walking their dogs. Messent (1983, 1984) had volunteer dog owners do two similar walks through Hyde Park and some of the surrounding streets in London, once with their dog and once without.

A record was made of the responses of all people who passed within two metres of the walker or the dog. When walking their dog, owners spoke to strangers a total of three times. No interactions were observed when they were walking alone. A second study followed the dog owner on normal walks at three different sites; Chellaston, a semi-rural village in the Midlands, England, Nottingham, a medium sized city in the Midlands and Fulham, an inner London suburb. This study suggested that friendships developed with others using the same route and that on average, the conversations with this group lasted for longer than those with people without dogs.

Another study, in which observations of all park users were made in a small London park over 11 hours in March and August-September, showed that people with dogs had 42.7% of the spoken interactions in March and 33.6% in August-September. People with dogs and a child in a pram had 42.9% of the spoken interactions and 60% in August-September (Messent 1984).

“When walking their dog, owners spoke to strangers a total of three times. No interactions were observed when they were walking alone.”

These results demonstrate the role of dogs as social lubricants in a local park and are supported by a Swedish study in the City of Gotenburg (Adell-Bath, Krook, Sandqvist and Skantze 1979) where 83% of dog owners agreed fully or in part that "the dog gives me the opportunity of talking with other people". Another Swedish study using a similar question in the rural district of Harryda found 59% of dog owners agreed with the statement in the first study (Norling, Jagnert, Krusdopf, Lundahl and Nilsson 1981).

Given the demographic changes occurring throughout the western world, in particular the ageing of the population and increasing incidence of people living alone, the scope for dogs to facilitate social contact needs to be recognised and encouraged. For some, particularly the elderly who live alone, taking a dog to the park may stimulate the only human contact that person has for an entire day.

4.2.4 Urban consolidation means greater demand for public open space

All Australian governments are encouraging urban consolidation to make better use of existing infrastructure, to reduce the costs of servicing new suburbs and to better accommodate the changing housing needs of the community. Our cities are now experiencing the very visual effects of urban consolidation with more high and medium density housing developments occurring, especially in inner and middle ring suburbs. Even the new suburban house block on the urban fringe has been reduced in size to 400sqm in some cases through better design and siting.

As more people live in these compact types of housing it will place greater demands on public open space both for human needs and as an outlet for dogs; a fourth reason to provide for dogs' access to public open space.

4.2.5 Compliance with by-laws

A balanced approach to accommodating the needs of dog owners in public open space may lead to better outcomes for all public open space users through higher levels of compliance by dog owners with relevant by-laws.

The research on regulatory compliance is complex and there is scope for a lot more research in relation to dog owners. However it is clear from the literature that compliance with by-laws is related to both acceptance of its "fairness" and levels of enforcement.

Fairness

If dog owners perceive by-laws to be draconian or unfair, e.g. banning of dogs from all parks or nowhere for free-running off the leash in an area where there is a demonstrated need, it may elicit a defiant rather than a compliant response from dog owners - they may ignore the by-laws in protest. If, on the other hand, dog owners understand the reasons for restrictions relating to access and accept them as reasonable they will be more likely to voluntarily comply with associated by-laws.

Levels of Enforcement

Compliance is obviously linked to the extent to which local authorities are prepared to undertake enforcement. There are a number of reasons why the necessary levels of enforcement are not occurring.

First, there seems to be an emerging consensus amongst local authorities that the by-laws are not working, possibly because they are unenforceable.

“If dog owners perceive by-laws to be draconian or unfair, e.g. banning of dogs from all parks or nowhere for free-running off the leash in an area where there is a demonstrated need, it may elicit a defiant rather than compliant response from dog owners.”

Second, some Councils impose by-laws relating to dogs which they have little or no intention of enforcing. They would appear to be recognising their responsibility to dog owners while being seen to be "doing something about the problem". While credible in its intention and workable in difficult political circumstances, such a tacit policy is imperfect. It creates conflicting expectations in the community and greater levels of non-compliance by dog owners. A balanced and open approach which caters for everyone's needs is likely to be better accepted and cause fewer problems.

Third, given new fiscal realities in government, resources are no longer available to maintain an effective enforcement presence in local parks.

Finally, a new management culture is actively being sought in all levels of government which, in terms of public open space, would view members of the community as 'clients' rather than simply as park users who comply or don't comply with park by-laws. A new spirit of co-operation and encouragement is being fostered which relegates regulatory enforcement to a last resort measure.

As a result of these limitations there has been a proliferation of education programs to encourage voluntary compliance with park by-laws. These include dog training programs, school talks, appearances at local shows, information sessions, promotional

material in the local media and so on. These are very positive initiatives. However we must recognise their impact can only be limited without a park access policy that is perceived to be fair to dog owners.

4.3 SUMMARY

In summary, because conflict is inevitable we need to find ways to manage it in creative ways. Some dog owners cause problems in the public realm and there are also some basic incompatibilities with other recreation activities that need to be recognised. However unduly restrictive dog access policies are inequitable and likely to be counter-productive. We also need to be wary of accepting uncritically many assertions made against dogs' use of public open space. A balanced approach that caters to everyone's needs will not only benefit dogs and their owners as a group with legitimate needs but also the wider community as well as those charged with the responsibility of enforcing animal management by-laws.

“A balanced approach that caters to everyone's needs will not only benefit dogs and their owners as a group with legitimate needs but also the wider community as well as those charged with the responsibility of enforcing animal management by-laws.”

5.0 TOWARDS A MODEL FOR ACCESS TO PUBLIC OPEN SPACE BY DOGS: ESTABLISHING THE PRINCIPLES

The discussion to date has highlighted the dilemmas facing park management authorities in relation to dogs' use of public open space as well as the gaps that seem to have emerged between the planning and management processes. New ideas are being tried but often on the basis of old assumptions. What is needed is a new set of principles that challenge or at least clarify these old assumptions. In many ways the principles presented in this section represent a new paradigm for the way we approach the question of dogs using public open space. It is necessary to explore these principles before we look at more specific policy recommendations contained in Sections 6 and 7.

5.1 RECOGNITION OF THE LEGITIMACY OF DOGS AND THEIR OWNERS

The first step is formal recognition that dog owners are as legitimate as any other group of clients. This is an important step for two reasons. It affirms their legitimacy where disagreement exists but more importantly it frees decision-makers from a mindset that emphasises problems over the need to accommodate the needs of all park users.

But how does this mindset actually affect the decision-making process? In the first place it leads to a search for solutions that would eliminate conflict instead of finding ways of better managing it. This inevitably means separation from other park users (i.e. banning with or without free running) and we will show how this can be both inequitable and counter-productive. Any consideration that is given specifically to dogs under this approach tends to occur in a piecemeal, "add-on" fashion; dog owners are allocated whatever is left over after everyone else has been accommodated - often the least accessible and the least attractive parks that no one else wants and all because they are not credited with the same rights as other park users.

If, on the other hand, we treat them as a client group rather than as a problem generator, their needs are considered as an integral part of the decision-making process. We don't dismiss or underestimate the conflicts but use a multi-method approach to addressing both their needs and the problems generated (education, enforcement, consultation etc.), while simultaneously asking for more tolerance from the rest of the community. Section 4 clarified the benefits and assessed potential problems. Local authorities should use that section to affirm legitimacy where disagreement exists in their community.

5.2 EVALUATION OF NEEDS

The second principle is to understand more clearly the needs of both dogs and their owners. Management practice to date has been hampered by a lack of information - inaccurate in the case of dogs' needs and simplistic in the case of dog owners' needs.

5.2.1 Needs of dogs

The most fundamental need for dogs in relation to the public realm is that they be taken out with their owner as much as possible. This enables them to experience the full range of benefits - exercise, training, socialisation, relief of pent-up energy as well as time and fun with their owner and other dogs. They don't need to run freely off the leash as much as they need interaction with their owner and diversity of experience (sights, sounds, smells, textures, other dogs and humans). This is not achieved by forcing them into separate spaces like specially designed 'dog parks' and private back yards. Instead, the emphasis should be on maximising the number and range of opportunities available *both on and off leash*. There is a place for specially designated free-running areas that allow dogs to romp and play, that extend them and offer adventure and exploration but not at the expense of a wide range of opportunities to choose from on a daily basis.

The guidelines provide more specific suggestions for designing parks with dogs in mind.

5.2.2 Needs of Dog Owners

Dog owners are not all the same and they have different needs for access to the public realm. Among the potential users are:

- Children
- Teenagers
- Adults
- Family groups
- The elderly
- The disabled

Each group has varying characteristics in terms of age, mobility, time constraints, inclination, housing and family type and so on, for example:

- Non-family type households are more likely to live in high and medium density housing (i.e. flats and villa units) and may need access to public open space because of a lack of it at home.
- Families with children need access to a safe park close to home.
- The elderly experience declining mobility with advancing age but have more time on their hands. Some, especially those who live alone may be seeking social interaction - a park close to home that is bustling with a range of different activities will best suit their needs.

We need to be aware of these complexities and avoid defining dog owners' needs in terms of one universal set of prescriptions. The "add-on" approach described above is especially prone to a simplistic definition of dog owners' needs.

“We need to remember that it is the owner’s outing as much as the dog’s.”

So how do we plan in the face of these complexities? As yet our knowledge of the specific needs of different household and demographic groups is limited. However what is clear is that *a range of different opportunities should be provided to accommodate the varying needs of different dog owners*. This should be the prime objective of any strategy. It accommodates the varying needs of different groups and is consistent with the approach suggested for accommodating dogs' needs. The key principles aimed for should be *accessibility* and *diversity*. Overall it is the number of oppor-

tunities that is important not whether they are designated as leashed or unleashed.

A further consideration is the level of amenity (i.e. general attractiveness and comfort). As suggested in the previous section the areas set aside for dog owners are often those left over that no one else wants. But we need to remember that it is the owner's outing as much as the dog's. It therefore makes sense that to provide maximum use, these parks should be pleasant enough to attract dog owners on a regular basis. Doing so may also improve compliance with dog related by-laws in other parks.

Predicting demand for access to public open space is notoriously unreliable. There is as yet no accurate way to measure demand. Common mistakes are to equate demand with need and to extrapolate demand from existing behaviour. Thompson lists some of the concepts used in recreation planning that illustrate this complexity (Thompson, undated)

- *Effective* demand is present use of a park or a facility, i.e. existing behaviour.
- *Latent* demand is demand which exists but which is for some reason constrained (because of a lack of supply or inaccessibility etc.)
- *Potential* demand is unexpressed demand which may become effective demand in the future.
- *Induced* demand is demand created by the introduction of a new facility.
- *Normative* needs are needs expressed by experts, administrators or professionals as to how they perceive need in any situation.
- *Felt* needs are needs internalised by individuals due to exposure to society (i.e. need is equated with want).
- *Expressed* needs are needs that are expressed (i.e. felt needs that are turned into action).

Lipscombe (1986) adds two more concepts of demand:

- *Diverted* demand which is demand for a certain facility which is diverted from one source of supply to another.
- *Substitute* demand which is a shift in participation to other forms of recreational activity because of the provision of facilities for different purposes.

Lipscombe argues that despite attempts over many decades, none of the above conditions can be accurately or even satisfactorily determined. Nevertheless local authorities should use experience, observation and consultation to build up a knowledge and information base, learn about people's motivations, pre-occupations, interests and activities and inject this knowledge into the decision-making process. Assessing dog owners' needs thus becomes a matter of pragmatic, political and professional judgement.

5.3 INTEGRATION NOT SEPARATION

This leads us to the third principle: that we should aim for integration with other park users not separation (i.e. banning with or without specially designated free running areas). While separation is warranted in some instances, we don't believe it should be the basis for developing a strategy for dogs. The reasons set out below have mostly been stated elsewhere in this report but warrant repeating at this point.

- Separation means that few parks are inevitably made available for dogs because of scarcity of park resources. A park which is beyond walking distance from home is unlikely to be used by dog owners on a daily basis. It is also unavailable for anyone without regular access to a car.
- Separation means that dogs miss the benefits of a wide range of outings.
- Separation concentrates potential conflicts into isolated spots. Local authorities may also have less incentive to maintain parks designated for dogs.
- Crime in public parks (i.e. vandalism and attack by other humans) is a critical issue. The main tool for reducing crime is to attract more park activity. Dogs and their owners can play a part in reducing crime especially as workers tend to take their dogs out at non-peak times, i.e. in the evening and early morning.
- Integration means flexibility - it is amenable to changes in policy or emphasis in the future.
- Integration provides for a more efficient and equitable distribution of resources. The sheer diversity of recreation activities that open space planners and managers have to accommodate today means that integration as a general principle is a practical necessity.

- The cost imperative in government today means that all public facilities need to accommodate multiple uses. The days of elaborate single purpose facilities have long since passed.

5.4 ADOPT A STRATEGIC NEEDS BASED APPROACH

All of the above implies that Councils should apply a strategic approach that considers access on a comprehensive municipal-wide basis rather than on a piecemeal park-by-park basis. The latter is reactive and problem-oriented. It fails to adequately address needs. Under the strategic approach Councils undertake a systematic assessment of the municipality's open space resources to identify gaps for particular areas and groups of dog owners. It is a multi-disciplinary exercise with assistance drawn from all relevant departments. Councils liaise with adjacent Councils and other park management authorities in their area to ensure a consistent approach. Early consultation with the community is sought to enhance the quality of the final plan and to promote understanding and ownership.

Some Councils have attempted to strategically assess dog owners' needs using such a balanced area-wide approach. Many have done this well. Others have done a poor job due to lack of resources or commitment at the political level or because they adhere to outdated assumptions.

The strategic approach aims for a hierarchy of opportunities that provides for a diversity of opportunities for 'daily', 'regular' and 'occasional' access by dogs and their owners. The hierarchy approach is explained in greater depth in Section 6.3 following.

The assessment should then be incorporated into broader open space and recreation needs studies.

5.5 SUMMARY

The principles contained in this section advocate a new way of thinking about dogs and their use of public open space. In summary the principles are as follows:

- 1 Recognise that dog owners are as legitimate as any other group of park users.
- 2 Appreciate the different needs of dogs and their owners for access to public open space. In effect this means maximising the number and range of oppor-

tunities available both on and off the leash.

- 3 Aim for integration of dogs and their owners with other park users, not separation.
- 4 Adopt a strategic approach that considers needs on a systematic area-wide basis rather than reacting on a park by park basis as political demands dictate. Establish a hierarchy of opportunities that provide for daily, regular and occasional access.

These principles are based on a philosophy that says we should work together to accommodate everyone's needs and reduce conflict. It is important that the principles are understood and accepted because they affect the way problems are defined and policy is developed.

The following section shows how to put these principles in place. Section 7 then provides more specific design and management guidelines.

6.0 ASSESSING THE OPTIONS AND ESTABLISHING THE FRAMEWORK

So far the case for continued access by dogs to public open space has been developed and four policy-making principles have been highlighted and explained. We now have a sound basis for assessing the options for dogs' access to public open space (as listed in Section 3) and for understanding the circumstances in which each option is most appropriately used. Section 6.1 highlights the advantages and disadvantages of each access option and then follows with management and design recommendations. Section 6.2 explains how to pull all the various strands together into a municipal wide strategy. Section 6.3 illustrates the arguments and recommendations

with a hypothetical municipality which we call "Anytown".

6.1 ASSESSING THE ACCESS OPTIONS

6.1.1 On-leash areas

The benefits of on-leash areas are misunderstood in Australia. The reasons for this are unclear. Perhaps it is because people think dogs can only be exercised off-leash or they think it is a dog's right to be able to run freely. Perhaps also, they are underrated because local authorities believe people won't comply with leash laws.

In fact on-leash areas provide an appropriate context for socialisation and some forms of training. They also expand the range and diversity of experience for the dog. Some animal behaviourists further believe that dogs don't need to be exercised off-leash, that they are perfectly happy to be on a lead and that they can be exercised just as well on the leash as they can off the leash. Councils should recognise the benefits of on-leash areas and educate their communities accordingly. In many areas the integration principle inevitably implies provision for on-leash access.

“It would seem that dog owners may be more likely to keep their dogs leashed in areas where they keep walking; once they stop they may be tempted to unleash their dog.”

Design recommendation

It would seem that dog owners may be more likely to keep their dogs leashed in areas where they keep walking; once they stop they may be tempted to unleash their dog. If this proposition is accepted a design measure that might encourage owners to keep their dog on a leash is the development of linear parks, i.e. along watercourses, roads, disused railway lines, electricity easements, firebreaks and between the rear of dwellings in new subdivisions (refer Figure 1). This is consistent with the current focus of open space planning in all

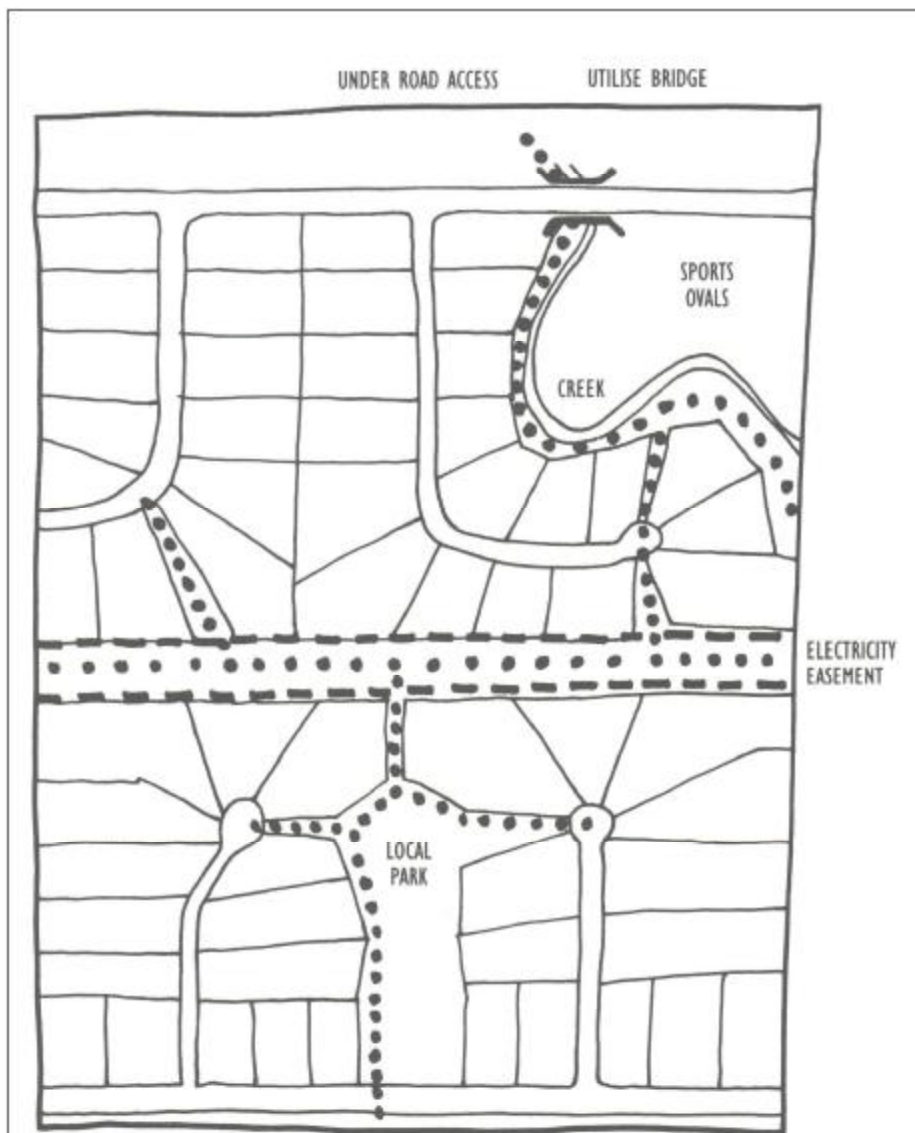


Figure 1. Continuous linear parks with multiple access points are ideal for walking dogs

Australian cities. Even existing parks can be provided with meandering paths that emphasise distance rather than the shortest line between two points. If well designed, walking tracks provide interest and diversity for dogs and a sense of purpose for dog owners.

6.1.2 Free running areas

Also known as off-leash areas, exercise areas for dogs, dog parks, dog zones etc., they allow dogs access to parks off-leash.

Free-running areas have been designated in many parts of Australia. In most cases dogs are required to remain "under the effective control of the owner" (or some variation thereof) under either the relevant legislation or an accompanying by-law. Some municipalities define "under effective control" precisely while others leave it to the discretion of individual ACOs. Usually, it is taken to mean voice control - the dog is under effective control if it responds to the owner's command by the second call, or if it is anyway behaving in an orderly manner.

Free-running areas provide the opportunity for unstructured and 'joyful' play without the restrictions of a leash. They allow for a form of interaction with their owner that is not possible when they remain leashed, e.g. some forms of training and play such as 'fetch', as well as play with other dogs. Dogs also benefit from exercise and relief of pent-up energy although this is possible in on-leash areas as well.

Problems commonly attributed to free-running areas include a greater potential for risk of injury to person or animal from attack and a greater potential for damage to plants. However the risks need to be assessed critically on the basis of correct information. Section 4 highlighted these complexities.

There is an infinite variety of ways in which free-running areas can be provided. We present three approaches here but the distinctions are actually blurred. It is probably more appropriate to view them as positions on a spectrum which vary depending on the priority given to dogs.

On the question of terminology we prefer the term 'free-running area'. The term 'exercise area' is unsuitable because it implies first that dogs can only be exercised off-leash and second that such areas are only provided for the dog's exercise and not for the important reasons of play, interaction and learning. The term 'dog park' is also not favoured because it suggests that it is unsuitable for anyone else. In the follow



Figure 2. Well-designed walking tracks provide interest and diversity for dogs and a sense of purpose for dog owners.

ing discussion we use the terminology commonly used by municipalities in their description of the free-running areas provided by their Council.

The *first* approach allows unleashed dogs in all parks in a region or municipality (perhaps with a few exceptions where they are banned or required to be restrained on a leash). It could almost be called a policy of no response and reflects the situation that existed prior to leash laws being enacted. The emphasis here is on integration with other open space users rather than separation. This approach is reasonably common where it has been in place over a longer period of time.

“Free-running areas provide the opportunity for unstructured and ‘joyful’ play without the restrictions of a leash.”

Its advantages are that it is easy to understand and is inherently fair to dog owners irrespective of where they live. ACO's can concentrate on encouraging and enforcing acceptable behaviour rather than enforcing leash laws and explaining and justifying Council's policy. It also spreads the effects of potential conflicts over a wider area.

The *second* approach is to aim for a fairly equal distribution of free-running areas across the municipality in accordance

with the distribution of residents. The aim here is that each dog owner would have a free-running area within a reasonable distance of home. This approach is equitable for dog owners providing on-leash areas are also provided. The main problem is finding sufficient parks to designate for free-running especially where residents are used to dogs remaining leashed. It also tends to be confusing unless careful attention is paid to information requirements. Signs are often not provided at each entry point or leaflets are distributed that list the parks available by name - most people don't know the formal name of parks. The greatest confusion lies where the access policy varies within a particular park or area, i.e. 'that part of the beach between x and y' or 'excluding the playing area'. The instructions are often confusing and open to interpretation. This makes enforcement difficult.

The *third* approach is the specially designated or designed dog park or dog zone. The distinguishing characteristic from the previous two approaches is that it is designated specifically for dogs and their owners. It might be purpose-designed or simply set aside for dogs. It implies the greatest degree of separation from other recreation activities. This approach has the advantage of being clear but is not advocated if:

- dogs are accordingly banned in all or most other parks;
- it is poorly located or inaccessible to residents; or
- it presents hostile conditions for dogs or humans, e.g. because the park attracts vandals or vagrants, the micro-climate (e.g. wind) makes conditions unpleasant, the terrain is too steep, it is unsafe

due to the presence of snakes or the layout and design is simply not appealing or conducive for use.

Poorly designed and/or located 'dog parks' are usually the result of limited opportunities - there is just no where else to put them because of established interests in other parks.

We would encourage specially designated dog parks to be provided as part of an overall package *but not at the expense of other opportunities*. Councils should also be aware of the access and safety characteristics in their choice. A park is not likely to be well-used if it is poorly located or laid out.

Design and management recommendations

What to look for in selection of free running areas:

- Parks that can withstand free-running by dogs including utility easements (drainage, electricity etc.)
- Parks that are already fenced to park boundaries, that have natural boundaries or which require only minimal fencing (refer figures 3 and 4).
- Parks that meet the needs of dogs and their owners (refer Section 5)
- Parks that are not associated with established recreation interests.
- Unique local conditions or opportunities, e.g. derelict land, old railways, a piece of land that suddenly becomes available - such opportunities should not be lost.

What to avoid in selection of free running areas:

- Areas in the immediate vicinity of children's playgrounds (the situation here is different from private back yards because of the relative unpredictability of children in unfamiliar situations)
- Areas that attract high concentrations of people, e.g. popular beaches and tourist facilities
- Picnic areas - the presence of food may provoke annoying behaviour for other park users
- Sports ovals, although ideal for dogs they are unsuitable unless dog owners demonstrate compliance with defecation removal laws or faeces are removed by maintenance staff on the day of play
- Botanical gardens



Figure 3. Topography would provide a natural barrier to free running dogs.



Figure 4. Select park areas that are already fenced at park boundaries for free running

- Environmental protection areas
- Parks where horses, bicycles and motor bikes are likely to be present (although free-running dogs are perfectly compatible on a time-share arrangement)

Signs should be erected to alert all park users to expect unleashed dogs in free running areas.

6.1.3 Banning dogs from parks

Leather (1994) points out that dog bans are spreading in Europe because of enforcement difficulties and because of lack of co-operation from dogs owners in acknowledging their responsibilities. The same trend would seem to be occurring here, although unevenly. It is this response which is of most concern - not if it is

imposed with good reason in a particular park - but if it is imposed in all or most of the public spaces available at the local level or if it is imposed for no apparent good reason.

Management recommendations

Individual authorities have the right to ban dogs from parks. This is as it should be. However it should be used as a last resort measure and only after a careful and impartial assessment of the following:

- 1 What conflicts presently exist and how are they being measured or assessed? Who presently has an established interest in the park and how are they affected by the proposed ban? Is sufficient information available on which to make a decision?

- 2 Is the proposed ban necessary? Are there ways that the conflict could be reduced through better design and/or management? (see the design suggestion below)
- 3 If the ban is deemed appropriate, it should be decided in recognition of the need to cater for displaced dog owners elsewhere in the immediate vicinity. There may already be ample opportunities for dog owners in the surrounding area, however if there isn't they should either be provided immediately or the proposed ban should be reassessed.

Creative management solutions should be sought as alternatives to banning. For example, a case could be mounted to ban dogs from sports ovals. An alternative (which is used by several municipalities we spoke to) is to ban dogs on sports days only. In effect this becomes a type of time share arrangement (as explained below).

We do not recommend that Councils try to solve defecation problems by banning dogs (or separating them to specially designated dog zones). We have already shown how unduly restrictive access policies can be counter-productive as a management tool. In particular it may concentrate droppings in reduced areas such as streets and nature strips and lead to non-compliance with the ban.

Design recommendations

Fencing is increasingly used to protect sensitive activities or parts of parks from human use. For example walking tracks that are fenced on both sides are provided within areas of regeneration or wildlife habitat. This allows the public (and accompanying leashed dogs) to continue to enjoy the park environment without threat to the sensitive parts of the park. Topography and distance can also be used to separate incompatible uses.

Similarly children's play equipment is now commonly fenced. If the presence of play equipment is the rationale for banning dogs from a park, fencing the play equipment should be considered as an alternative to banning.

“Walking tracks that are fenced on both sides are provided within areas of regeneration or wildlife habitat.”



Figure 5. Fenced playground.

6.1.4 Different zones in one park

Sometimes the access policy for dogs varies within one park, i.e. there are some parts where dogs are allowed and some where they are not (or alternatively some parts where they are allowed off leash and others where they are required to remain leashed). The advantages of this approach are:

- It maintains an access opportunity that would be removed if dogs were banned from the park entirely, or it allows owners to take their leashed dog to a park and later visit the free-running area as part of the same outing.
- It is more practical in today's political environment that emphasises

efficiency and multiple use of park facilities.

There are also several disadvantages:

- The policy can be confusing to park users if careful attention is not paid to park layout and accompanying information. The transition between zones needs to be legible to park users.
- A multi-zone park may encourage non-compliance, e.g. people letting their dogs off the leash before they get to the free-running area.
- It may require expensive and unattractive fencing within the park. A distinction here should be made between fencing that is required for legibility and fencing required as a physical barrier.

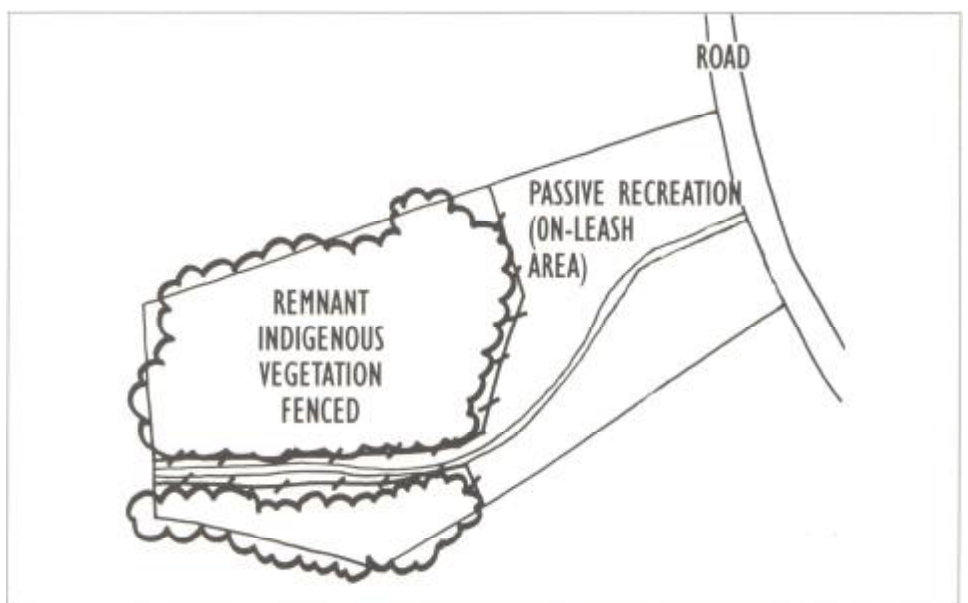


Figure 5. Fence sensitive parts of parks from human activities

On balance, we favour the provision of multi-zone parks, especially if they can be improved with some of the design suggestions below.

“Obvious features should be sought to define zones such as internal park roads and paths, fences, hedges, rows of trees, wide planting strips, marked changes in topography.”

Design recommendations

Some principles for solving common problems in multi-zone parks include the following:

- Every effort should be made to make it clear *on the ground* where one zone stops and another starts rather than relying on explanatory maps or brochures. This is called 'design legibility' and it aims to minimise confusion. Obvious features should be sought to define zones such as internal park roads and paths, fences, hedges, rows of trees, wide planting strips, marked changes in topography. Legibility can also be reinforced with changes in paving, landscape type etc. This minimises the costs of fencing where a physical barrier is not required (refer Figures 6 and 7).
- Appropriate signage should be provided at each entry point to the park. It should be specific, clear and consistent throughout the municipality. Care should be taken to accommodate likely language requirements (refer Figure 8).
- Each zone should preferably have direct access to the street or a park to minimise the requirement for people to walk through one zone to access another.
- Consideration should be given to the provision of buffer or transition zones between different parts of the park to minimise any spill-over effects of one zone on another.

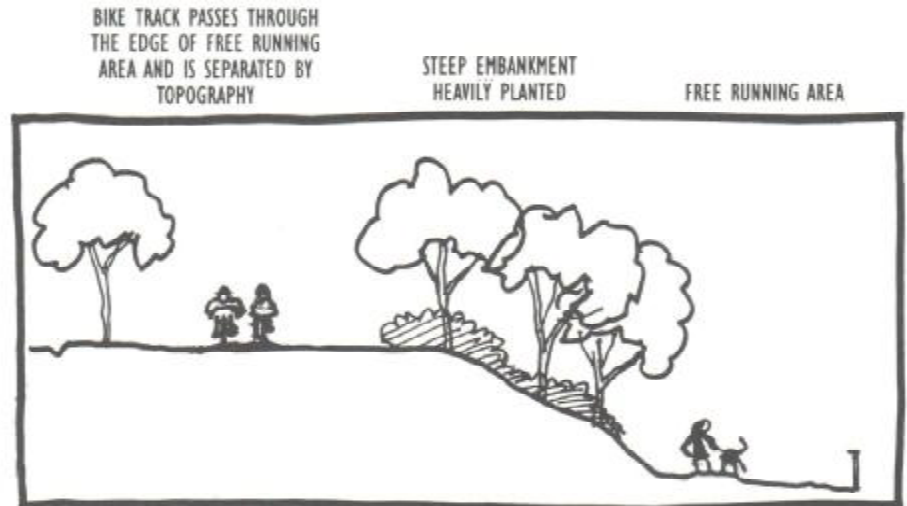


Figure 6. ZONING: Use the natural topography to separate uses.

6.1.5 Time share arrangements

A time-share arrangement can be used to provide free-running access to dogs at particular times of the day, say in non-peak times such as the early morning and late afternoon. It is more commonly used in North America than in this country. Time sharing is a workable arrangement that accommodates everyone's needs in areas where the number of opportunities is limited. It provides the same effect as separation, only temporally. However:

- It concentrates potential problems into a restricted number of hours.
- Faecal deposits that are not responsibly removed may be a problem at other times.
- Some dog owners may be disadvantaged if they work irregular hours or have small children. Time-share may not suit retired people wanting to use time available during the day.



Figure 7. MULTIPLE ZONE PARK: Use subtle changes to create design legibility, e.g. material, planting styles, park furniture, to delineate zones.

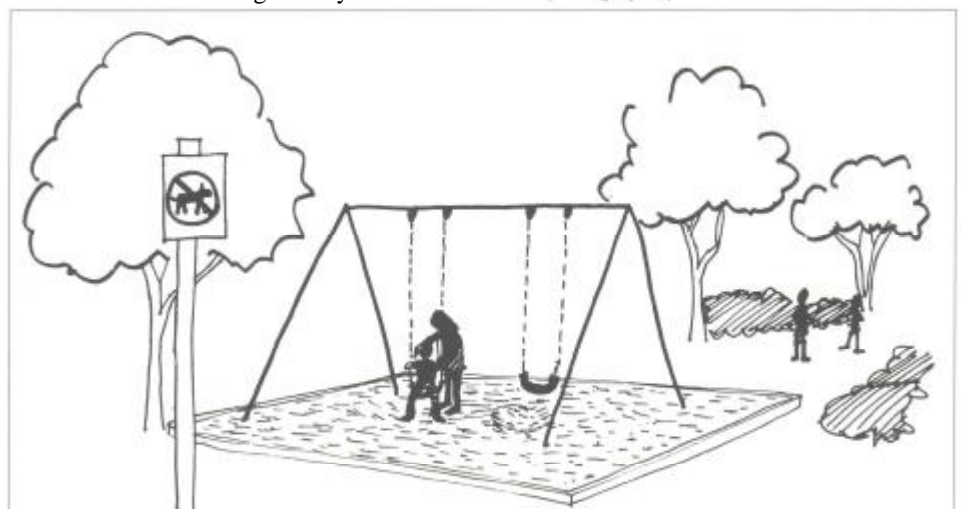


Figure 8. This sign is not clear – are dogs banned in the whole park or only in the vicinity of the play equipment?

Management recommendation

This option is probably most suitable in areas where there are a high proportion of dog owners who are employed or where available opportunities are very limited.

Extensive consultation should be carried out to gauge likely demand before this option is implemented.

6.2 ESTABLISHING A MUNICIPAL-WIDE FRAMEWORK

The above options have been used in many different ways throughout Australia. It is important to understand the strengths and weaknesses of each option and ensure they are used appropriately. However it is the combination of options overall that is most important, not the policy affecting a particular park. It is this task that we now turn to.

In too many municipalities we found an over-reliance on free running in combination with banning. This reflects a fundamental misconception about accommodating dogs that relies on a separation rather than an integration philosophy as well as a misunderstanding about the benefits of on-leash areas. On the face of it, this combination would seem to be an easy way to "solve" the problem of conflicting needs. We consider it inequitable and probably counter-productive.

Instead the *starting point for any dog access policy should be to allow dogs in all parks in a municipality*. In many cases this will mean access on a leash, although we found many successful examples where unleashed dogs were allowed in nearly all parks of a municipality. *Areas where they are banned and/or allowed off leash can then be designated after a thorough and impartial assessment*. This provides for a package of different opportunities while accounting for any incompatibilities.

The question is where do you draw the line. We cannot answer that question - it can only be decided at the local level taking into account levels and distribution of dog ownership, housing type, existing opportunities, local opinion so on. A community that is used to widespread off-leash areas will have different expectations to a community used to more stringent access policies. In practice where standards of any sort are used, they inevitably end up being a wish list and create unrealistic expectations. What is acceptable in the inner suburbs is likely to be inappropriate in the outer sub

“the starting point for any dog access policy should be to allow dogs in all parks in a municipality.”

urbs. Alternatively the funding may not be available even though potential opportunities exist. Inevitably it will be a give and take process taking into account needs, opportunities and constraints in accordance with the views of all members of the local community.

The most effective way to accommodate dog owners' needs taking into account existing constraints and incompatibilities is to aim for a hierarchy of opportunities throughout the municipality that provide dogs and their owners with daily, regular and occasional opportunities; i.e.:

'Daily' opportunities would be scattered throughout the municipality. It is envisaged that everyone would have an opportunity for daily use within walking distance of home.

'Regular' opportunities would be spaced more widely apart, perhaps within a 30 minute walk or short drive from home. Some dog owners will use them on a daily basis either because they are favourably disposed to do so or because their dogs require more exercise and stimulation.

'Occasional' opportunities have a municipal or sub-regional catchment. Usually only 1 or 2 such parks would be provided in any one municipality.

The higher up the hierarchy the greater the priority given to dogs in planning, design and management. In practice of course the location and spacing of opportunities will vary widely according to local circumstances. Defining daily, regular and occasional opportunities should be an objective to work towards and a tool for assessing needs. In practice, the process will be fluid. The hypothetical example of "Anytown" following should make the hierarchy approach clearer.

6.3 A HYPOTHETICAL EXAMPLE: "ANYTOWN"

Anytown is a rapidly developing municipality on the outskirts of a major metropolitan area. Parts of it have been established for many years as a self contained town but it is now being engulfed by metropolitan development. Around 15 years ago the Council "solved the dog problem" by banning dogs from all parks except 2 where they are allowed off-leash. They were also allowed off-leash at "Long Beach" which is in the industrial part of town. As no one ever goes to Long Beach, it was thought free-running dogs couldn't annoy or harm anyone. Also, it didn't matter if owners didn't pick up after their dog as no one else used the beach. Council has emphasised enforcement as the main policy tool to achieve compliance with these regulations.

However the 'dog problem' wasn't solved. Most dog owners just ignored the by-laws and went to the park nearest their home. Vast amounts of the dog control budget were spent on enforcement but each year ACO's requested more resources just to maintain an effective enforcement presence. It seemed that the "problem" was getting worse and that new population pressures would only aggravate the problem.

Staff became disillusioned with regulation and enforcement but it took changes at a recent Council election before alternatives were looked at seriously. During this time a change in attitude and approach emerged. It was realised that dog owners deserved and warranted a greater number and range of access opportunities and that everyone could benefit from a situation that considers everyone's needs. (The local Press later labelled it a classic "Win-Win" solution) After an extensive consultation process that systematically assessed dog owners' needs in the context of existing opportunities, constraints and expectations, a range of opportunities are now provided according to the hierarchy approach, i.e.:

- Each dog owning household has at least one park available for daily use within walking distance of home (a five minute walk is around 400 metres). This accommodates the needs of those without a car and/or driving licence as well as providing dogs with a short walk to and from the park. The daily opportunities emphasise integration with other park activities and mostly require dogs to remain leashed.
- Additional opportunities are located within a 30 minute walk or short drive from home. They are spaced more widely apart than the daily opportunities. They provide dog owners with additional

choice. Most use them on a regular basis, say twice a week or on a daily basis if they prefer. There is slightly more priority given to dog owners although management still favours integration with other park activities. Most are zones designated for free running within existing parks.

- Three free-running opportunities are provided in the municipality where dog owners are given priority in planning, layout, landscaping and design features. They are used by many people daily and by others for a 'big run' once a week (i.e. an occasional opportunity). They have pleasant surroundings for dog owners and good access by car and foot. One is a purpose-designed park for dogs while the other is a large area set aside for free-running within an existing community park. They have developed as an important community resource for dog owners and help to foster goodwill and information sharing. The Council also uses the parks as venues for animal management education and promotion. Long Beach was retained as a free running area and improved with a well lit car park and steps leading down to the beach. During the consultation process more people became aware of its existence as a free-running area and its use has accordingly risen.

"Anytown's" hierarchy of opportunities is illustrated conceptually in Map 1.

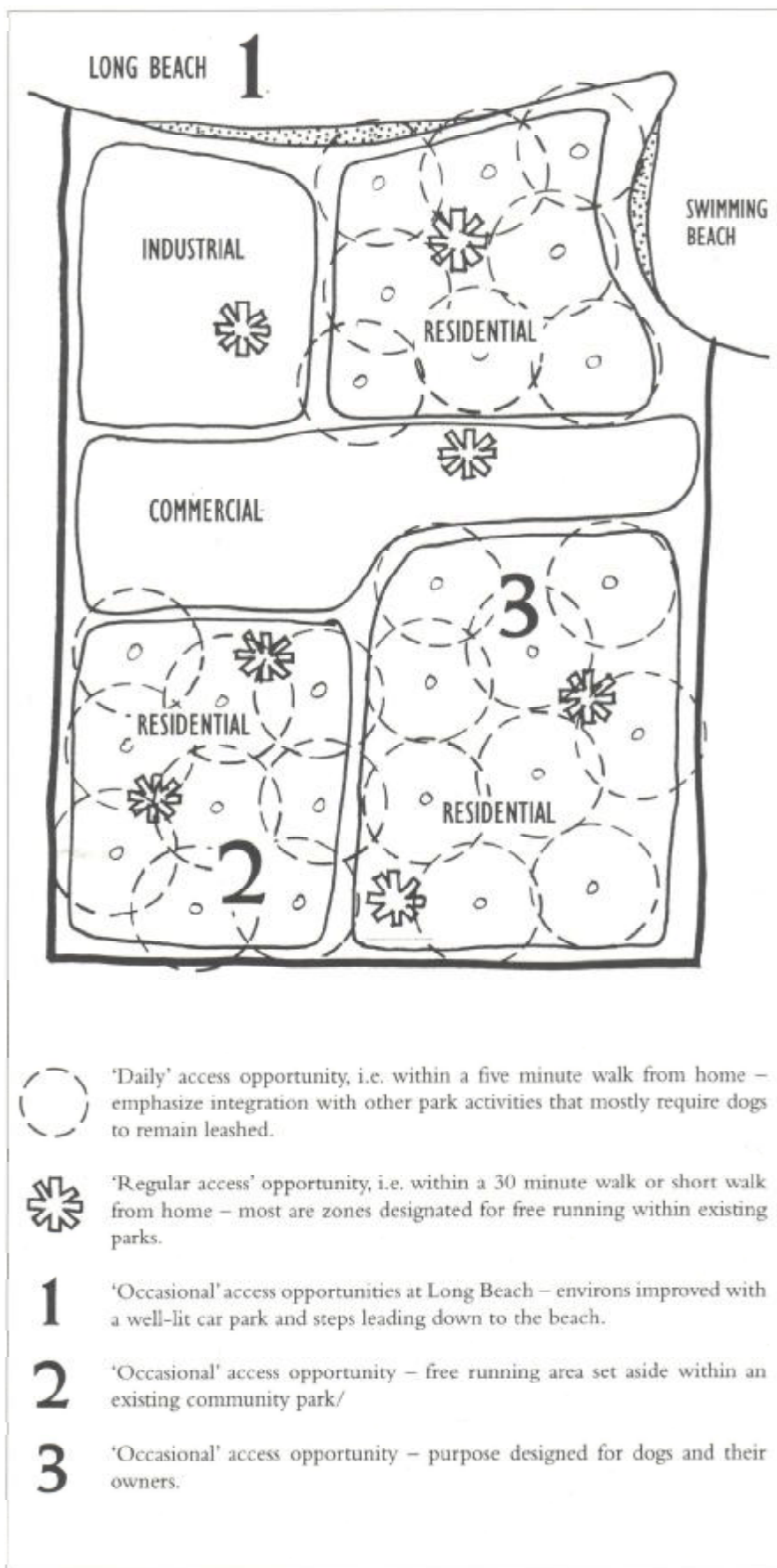
This approach successfully melded everyone's needs and started to break down the adversarial positions that were forming between the pro-dog and anti-dog lobbies. As a consequence the number of reported problems associated with dogs has declined and is expected to decline further over the next few years. It was therefore a successful political outcome as well. Council's town planners have been instructed to accommodate dog owners' needs in the development of new subdivisions.

6.4 IMPLEMENTATION

There is a variety of ways by which local authorities can strategically assess the needs of dog owners for access to public open space. Councils should devise their own process according to local circumstances and issues and following established practice. A simplified version of the sequential steps involved is described below.

Background Information

1. Identify characteristics of dog-ownership in the municipality:



Map 1. 'Anytown': A hypothetical municipality conceptual illustration of hierarchy of access opportunities for dogs.

- the number of dog owning households and, if available their demographic characteristics, i.e. age, household type, housing type etc.
- types of dogs kept
- the spatial distribution of dog owners in the municipality (where available)

2. Identify population growth and change dynamics to gauge future trends and demand:

- new subdivision and population trends
- proposed public open space reservations and future residential zones

Consult census data, local zoning maps and urban planning strategies.

3. Compile an inventory of existing public open space:

- inventory of public open space including parks managed by other authorities in the municipality and resources available in adjoining or nearby municipalities
- description of activities that presently occur in parks including identification of main stakeholders

4. Identify relevant legislation, by-laws and related strategies which may be relevant to the investigations and which may need to be modified.

Problem Evaluation

5. Assess how well dog owners needs are presently being accommodated:
- the 'walking distance' catchment should be identified for each park that is available for use by dogs with their owners (refer *Location and Accessibility* in Section 6); it should then be relatively easy to identify residential areas that are not well provided with daily opportunities
 - consultation with dog owners will generate additional insights on problems and potential options.
6. Identify the main issues, if any, associated with dogs' use of public open space as well as any trouble spots (obtain from registered complaints, observation and public consultation). Bearing in mind the capacity of these issues to be blown out of proportion, they then need careful assessment as to their significance and extent.

Strategy Preparation

7. Prepare a strategy or plan that incorporates those components on which there is consensus and that presents alternatives for political decision on matters where there are differences.
8. Final preparation of strategy.

Implementation

9. Disseminate and enact the strategy or plan in terms that are easily understood.
10. Ensure that ACO's are consulted by other departments in preparing plans for new subdivisions, recreation and public open space. Valuable opportunities may be lost if appropriate input is not made at the planning stage.
11. Monitor, evaluate and review the strategy or plan. This should be on-going.

This should be seen as an inter-departmental exercise and is probably best co-ordinated by the town planning or recreation departments of local authorities with input from ACO's, park managers and engineers. Even better would be the formation of a steering committee comprising relevant staff, Councillors, representatives of other government departments and community stakeholders.

6.5 CONCLUSION

There is a range of policy responses to the question of dogs' access to public open space. Each has its place in a needs based strategy. However it is the combination of options overall that is most important not the provisions that may exist in any one park.

The starting point for any municipal wide strategy should be to allow dogs in all parks. Areas where they are banned and/or allowed off leash can then be designated following impartial assessment of conflicts and alternatives to banning.

The best way to plan for dog owners' needs is to aim for a hierarchy of opportunities that provides daily, regular and occasional opportunities. This satisfies the key criteria of accessibility and diversity outlined in Section 5.2.

It is not the purpose of this guide to prescribe standards - that can only be done at the local level using an implementation process as suggested in Section 6.4.

“It is the combination of options overall that is most important not the provisions that may exist in any one park.”

7.0 SPECIFIC GUIDELINES FOR THE SELECTION, DESIGN AND MANAGEMENT OF INDIVIDUAL PARKS

As stated repeatedly in this report there is no one right way to accommodate dogs' needs for public open space. It will depend on local conditions and pressures. The fact is that opportunities will need to be used wherever they are available, especially in existing built-up areas. The secret is to select the right combination of components to suit local needs and constraints.

The following guidelines list some of the features to be considered when planning to accommodate the needs of dogs and their owners.

LOCATION AND ACCESSIBILITY

Dog owners should have a public park available within walking distance of home. Walking distance has been established at around 400 metres (and up to 800 metres) although there are no hard and fast rules. It is a fairly simple exercise to work out the catchments for parks and identify any gaps in provision for dogs.

Accessibility is not determined by radius but by walking distance which is in turn determined by the nature of the street network.

Accessibility is reduced by barriers such as major road crossings and railways. Park use can be enhanced by selecting parks along street routes that are already popular as walking routes for dog owners or that are located en-route to the main generators of pedestrian traffic, e.g. local shops, community facilities.

FORM AND LAYOUT

Size: The size of park is generally less important than its location and suitability for dogs' use. In reality, authorities will need to make the best use of what is available.

Shape and configuration: Similarly, there is no ideal shape and configuration although linear parks are ideal for walking dogs. In selecting linear parks Councils should be wary of possible conflicts with other parks users such as cyclists and horse riders. It may be possible to create two parallel tracks, one for pedestrians and dogs

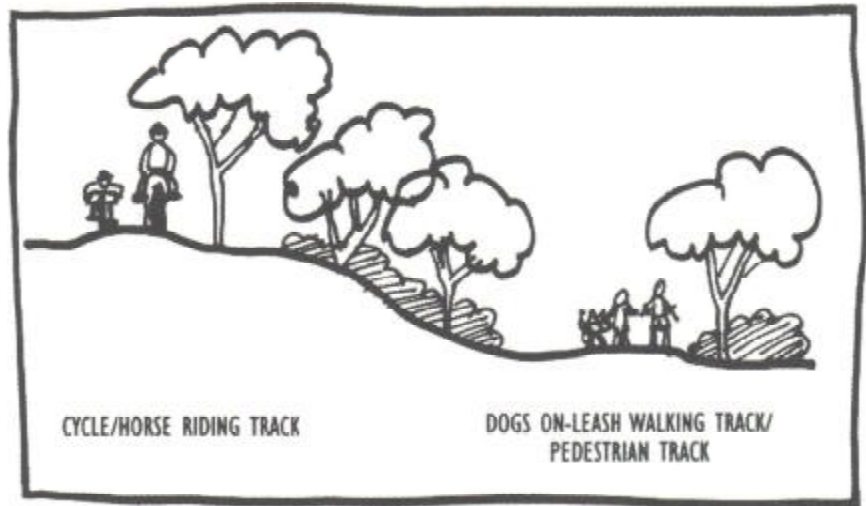


Figure 9. TRACK SEPARATION

and the other for cyclists and horse riders. This is becoming increasingly common in linear parks anyway (refer Figure 9).

Entrances: The location of park entrances is crucial to its level of use. Accessibility can be reduced significantly if entrances are remote from car parks and the main directions of pedestrian flow (refer Figure 10).

Site Layout and Design: Sites should be able to be accessed and used by people with limited or restricted mobility (i.e. level walks, entrances without steps, nearby parking etc.).

Treatment of boundaries: In most cases park boundaries need to be fenced where free-running is permitted and where natural barriers are not available to prevent dogs straying, being injured or creating a traffic hazard.

Sites that are already fenced to roads, that require only minimal fencing or that share boundaries with other land uses should be favoured in site selection for free-running areas.

The section following on fencing should be consulted for further guidance.

Traffic and Car Parking: Any proposal should be examined for potential traffic and parking impacts on the surrounding area. Significant impacts are more likely where only a few access opportunities are provided for dogs

Many parks already have off-street car parks and they should be favoured where dog owners are likely to be drawn from a wide catchment (i.e. beyond walking distance from home) and if there is limited availability of on-street parking (refer Figure 11).



Figure 10. ZONING



Figure 11. Additional gates are needed to improve pedestrian accessibility from nearby residential areas.

A road running parallel to a park boundary will usually provide plenty of accommodation for on-street parking but this boundary may need to be fenced if it is designated for free-running. The adjacent road may not be suitable for car parking if it is an arterial road or car parking availability is already limited.

A park with a several entry points from different streets will improve accessibility and increase the capacity of the existing road system to accommodate the demand for car parking. It will also reduce the concentration of activity in the park.

Access from courts and dead-end streets can create parking and circulation congestion although the effects might not be discernible where several access points to the park are available (refer Figures 12 and 13).

Advice should be sought from traffic engineering and town planning departments about the likely traffic and parking impacts of any proposals. These departments can also suggest suitable mitigation options.

SURROUNDING LAND USE

The problems of providing barriers to park boundaries are overcome where parks are abutted by other land uses that are fenced along the park boundary. However this raises prospective objections from immediate neighbours.

Adjacent residents: Adjacent residents may oppose a proposal especially where it involves a substantial increase in use. Common objections include traffic and car parking, safety, noise, smell, lighting glare, disruption to residential amenity and park ambience etc.

Proposals need to be considered on a case-by-case basis and it is important to note that the validity of objections will vary depending on conditions in the park and the design and siting of residences in question. Early advice and guidance should be sought from Council town planners who are experienced in the impartial assessment of objections. They can also assist with site selection and consultation with neighbours.

Sites should be selected where adjacent residents are well screened from activities in the park either because of distance, topography, landscaping, design and siting and so on (refer Figure 14).

A street that separates a park and nearby residences will substantially reduce the effects of park users although it may raise traffic and parking objections.

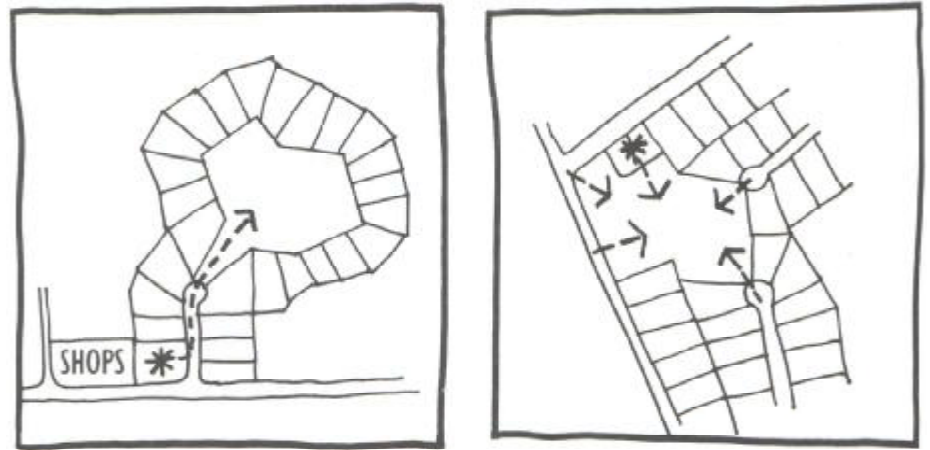


Figure 12. ENTRANCES: More access points means improved accessibility and less impact on neighbours from all park activities.

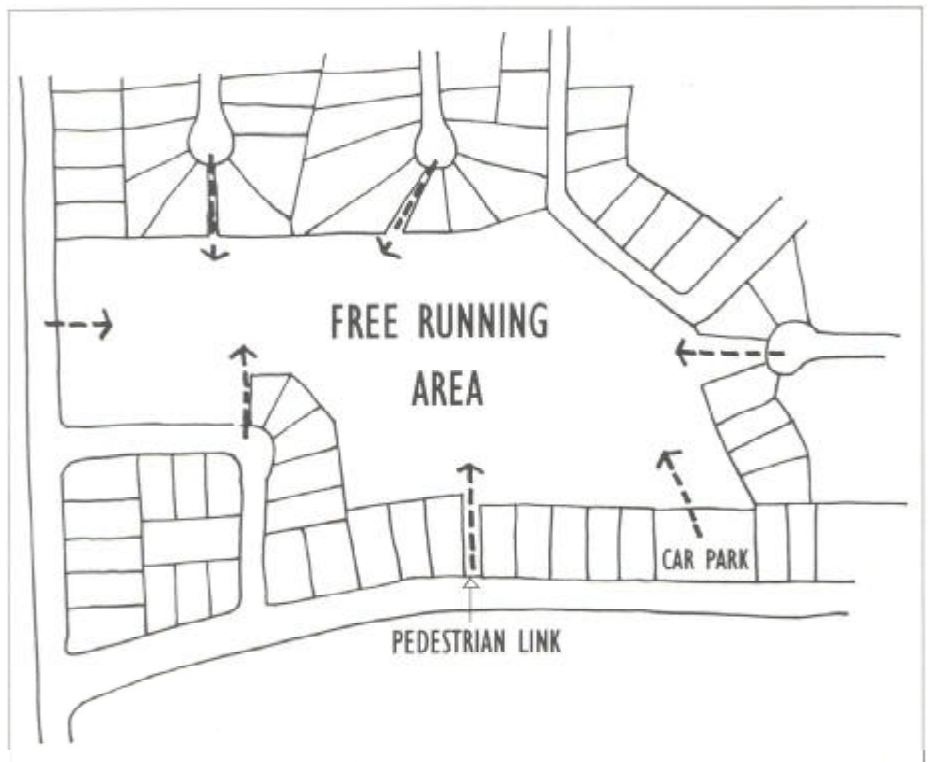


Figure 13. MULTIPLE ACCESS POINTS

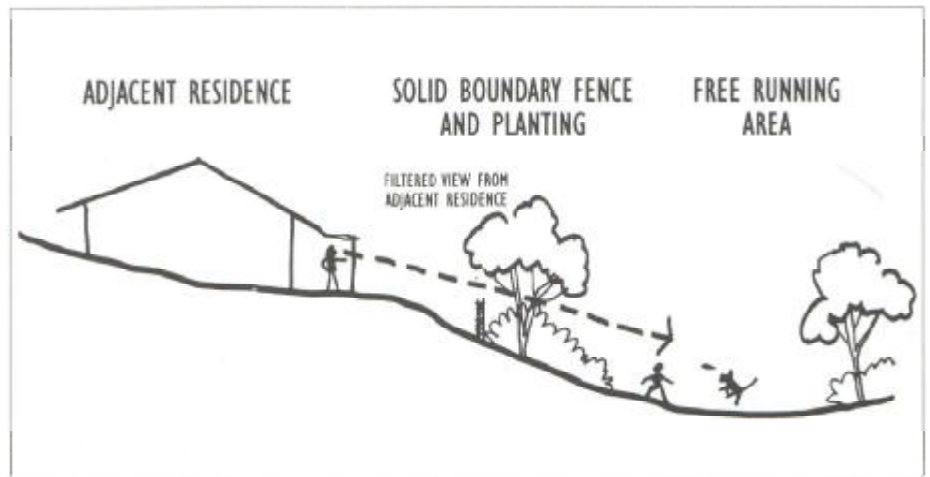


Figure 14. NEIGHBOURS: Use topography, planting, fencing and distance to screen effects on neighbours.

It should be recognised that as the number of access opportunities increases any impacts from dogs will be dissipated.

Other neighbours: Other land uses abutting parks may also be affected by a proposal so consultation with all neighbours should be undertaken, e.g. schools, community facilities, shops etc. and the likely effects examined impartially.

Very often parks are abutted by semi-institutional uses such as Council depots and these could be favoured for intensive use by dogs and their owners. The boundaries are usually securely fenced already. However Councils need to be careful that access to the park is still convenient to dog owners and residents.

DESIGNING PARKS WITH DOGS IN MIND

Paying attention to the needs of dogs is a positive statement of support to dog owners in the community. Improving the quality of the recreation experience for dogs is not so different from designing for play by humans. The design psychology should emphasise the interplay of movement, texture, form and line. The key principles are variety, stimulation and challenge, unpredictability and interest with a view to providing a rich and varied sensory experience. A combination of open spaces for running and smaller spaces with detail should be sought. All natural and existing elements should be retained.

A manicured park environment is not necessary and in fact a 'rougher' setting should be sought where possible. Demands for neatness should be resisted (refer Figure 15).

Dogs will be attracted to areas with longer grass for defecating. Areas can be set aside that are mowed less frequently to allow faeces to disintegrate naturally. Grass of say 10cm would be appropriate and have the added advantage of reduced maintenance.

Contouring: Varying contours greatly adds to the appeal of a park for dogs. It can also act as a sound barrier making it more acceptable to neighbouring residents.

Sites with varying slope should be sought, although not so steep that they are inaccessible for humans.

Earth mounds, hills and gullies should be retained if existing already or created artificially to give the park some atmosphere. Obviously careful consideration needs to be given to potential drainage



Figure 15. A manicured park environment is not necessary for dogs and, in fact, a 'rougher' setting should be sought.

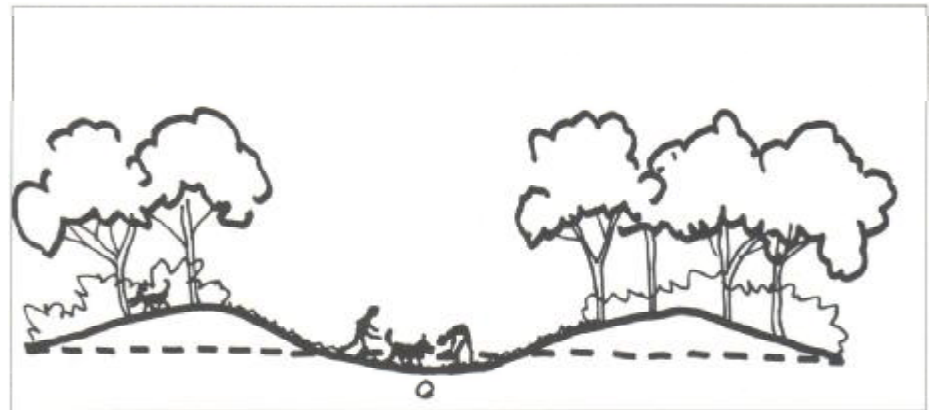


Figure 16. Undulating land and informal planting provides stimulation and challenge, unpredictability and interest.

problems but the concept is quite feasible and worthy of consideration. Ideally earth mounds should be formed as a new site is developed. On developed sites good clean fill would have to be brought in and mounds formed from the excavated soil.

Landscaping: Planting adds to the interest and diversity in a park especially where the terrain is not able to be modified. It can provide a textural and visual contrast to mown tracts. Plants and shrubs are relatively cheap and can always be replanted and easily moved. A reduced emphasis on park maintenance could also help, e.g. retain some unmown areas and facilitation of a 'rougher' setting as described above. A balance obviously needs to be struck between creating interesting spatial arrangements of plants and providing so much planting that owners lose sight of their dog in free running areas.

Planting can be used to help define different access zones in a park. A hedge

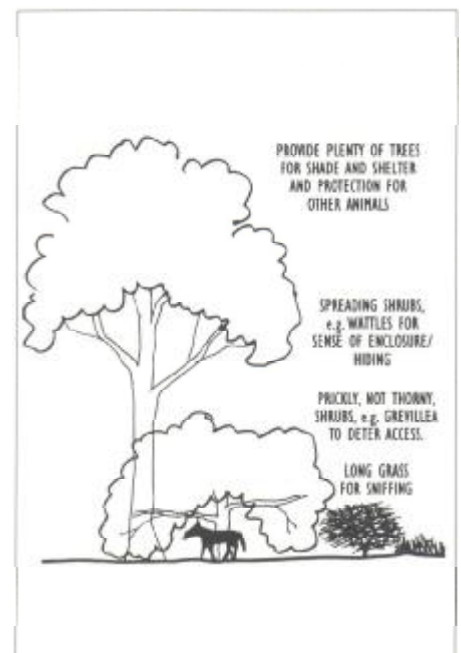


Figure 17. PLANTING: Use the amazing variety of plants – they provide seasonal change and different smells.

provides some restraint and signals the end of one zone and the start of another (i.e. the visual legibility described earlier).

Planting is also useful as a screening device and for shade and shelter.

Plant selection should emphasise durable plant materials. A variety of scented plants could also be considered to improve the dog's sensory experience (refer Figures 16 and 17).

Other design features: Features that add to the sense of interest and challenge include ramps, hurdles, tyres, tipped logs, boulders and other agility exercises. These can usually be provided at minimal expense.

Movement should be sought wherever possible to enhance the dog's enjoyment of the park by provision of moving objects and choice of vegetation that moves in the wind.

Sandpits, while ideal for dogs are not encouraged because of their inevitable attraction to children.

FENCING

Fencing can be used for restraint, as a slowing down mechanism for free-running dogs and for visual legibility in a multiple access zone park. The following considerations are relevant to fencing.

Where are fences required?

- Free-running areas should be fenced to park boundaries where a natural barrier does not exist or where unleashed dogs may stray into other parts of a park where they shouldn't.
- Fencing can be used to provide visual definition to different parts of a multiple zone park, i.e. to minimise confusion about where one zone stops and another starts although plenty of other design mechanisms are available and fencing should only be used as a last resort.
- Fencing may not be required if a transition zone is provided between a free-running area and other parts of the park.
- Parks that pass under roads often create the natural barrier required to busy roads. This is commonly used in new parks and should be favoured for free-running areas (refer Figure 18).
- In on-leash areas fencing can provide extra protection for sensitive park activities. This is consistent with current practice anyway - it is now common to fence play equipment and environmental protection zones.

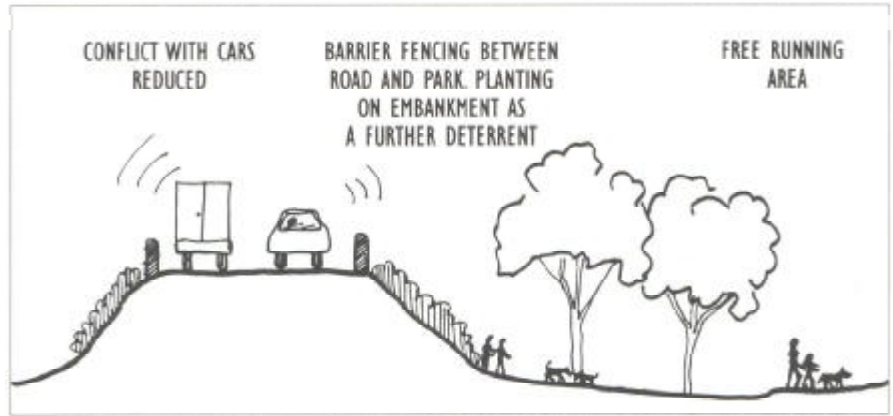


Figure 18. Use natural barriers where possible as boundaries to free running areas.

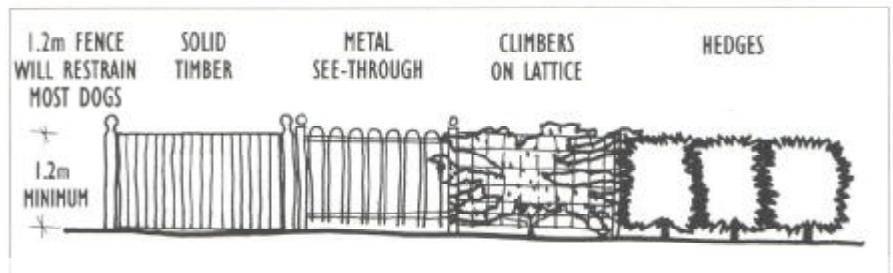


Figure 19. FENCING: An enormous variety is possible.

Height and fencing type

- A fence of 1.2 metres will restrain most dogs and will slow down others. Higher fences may be needed in some places, i.e. adjacent to busy public roads and neighbouring residential properties that are concerned about straying dogs (refer Figure 19).
- Care needs to be taken to ensure that dogs can't get under or through a fence and that gates are properly fitted with return spring self closing locks.
- Fences should be designed to blend in with the natural surroundings in the park and planting, e.g. climbers should be used where possible to obscure any unsightly effects. Hedges are often an ideal alternative to fencing.
- In on-leash areas fences should be designed so people can tie their dog for short periods although not alongside entrances or paths where the dog may become excited by passers-by. Facilities for tying up dogs should also be provided as appropriate in other locations such as outside public toilets.

Cost is a major factor involved with fencing. It may be possible to have fencing donated by local companies particularly if a proposed free-running area is being driven by local dog owners.

PAVING AND SURFACES

Where possible paving should be kept to a minimum. Dogs enjoy smelling their surroundings so soft surfaces that retain odours are preferable to hard surfaces (refer Figure 20).

Individual state and local government authorities will have a preference for particular types of paving based on experience in using local materials and with local soils. Use of local materials should be made to minimise costs and to blend with the local environment.

REMOVING FAECES

Where necessary programs to assist owners remove their dog's faeces should be provided in accordance with local circumstances. At this stage, there is insufficient empirical evidence to support the use of any one mechanism and it is likely that a combination of options will be most appropriate. The following list is not necessarily exhaustive but highlights some of the options.

Owner-based options

Owner-based options place responsibility for retrieval of faeces with dog owners. Their advantage is that people can select the option that best suits their needs, there is little cost to local authorities and no vandalism. However, owners need to remember to bring their chosen option with them.

The following are the two most popular options although any container is potentially suitable. Many Councils send out favoured options with rate or registration notices.

If owner-based options are favoured separate bins should still be provided for faeces disposal as many owners will not take faeces home with them.

Pooper-scooper: A hand held device that scoops up faeces. It is usually re-useable and humans need not come in contact with deposits. Maintenance is easier because deposits are not encumbered by plastic bags or other containers. Pooper scoopers may be cumbersome to carry although they will fit into a large pocket.

Plastic bags: An easy and inexpensive method that doesn't require washing after use. Bags fit easily into pockets or can be tucked into a waistband/belt. Humans need not come in contact with deposits although some people may still find this method distasteful. An environmental concern if new bags are used but otherwise a way to reuse bags.

Management-based options

Management based options are those provided by the Council or park management authority. They are a positive statement of assistance to dog owners to help them be responsible. They also aid maintenance by providing a uniform disposal method (usually special collections from separate bins). Deodorisers can be placed under lids to help minimise odours although regular collection should keep any odours to a minimum.

Management based options are potentially less effective than individual based options -the latter enable owners to retrieve deposits immediately. They are also prone to vandalism and/or theft. If management based options are used they should be clearly evident to park users and convenient to use.

Doggy loos: Pet faeces disposal units installed in the ground. Decomposition occurs within the unit and is said to proceed rapidly. All that is visible above the ground is the foot operated lid and its surround. Minimal maintenance is required (no refuse collection).

Pooper scoopers: A steel pusher and pan provided for use by park users. Because of its long handle, it is amenable for use by the frail and those with bad backs.

Pooch patch: Originally the idea of Warringah Council (Sydney) but now copied in



Gravel paths with mulched planting beds on edges for extra interest.



Figure 20. Mown grass path in areas of less intense usage.

other areas, pooch patches simulate dogs' attraction to telegraph poles. A 'telegraph pole' is placed in the park surrounded by a light scattering of sand. Owners are encouraged to introduce their dog to the pole on entry to the park (they are attracted by other dogs' scents anyway). It would seem that dogs then return to the patch to defecate. Special bins are provided along side the patch in which owners then place the deposit.

Dung Beetles: Introduced into the soil dung beetles help to break down faeces. At the time of writing they are largely untried by park management authorities.

The 'Long Grass Principle': As dogs are attracted to long grass for defecating there is no reason why areas that are mowed less frequently cannot be provided for faeces to disintegrate naturally. A height of around 10cm is appropriate.

Other options: park management authorities have provided a range of other options on-site such as disposable bags and con-

tainers with similar advantages and disadvantages.

OTHER SUPPORT FACILITIES

Lighting: Lighting requirements are no different than for any other public place. Lighting should be considered where heavy night use is anticipated. Specific locations, such as car parks and entrances, should be lit as a matter of course.

Shelter: All park users including dog owners need areas where there is shelter and protection from sharp winds, rain and sun whether by trees and clumps of bushes or purpose built shelter

Other: Other facilities should be provided as required, i.e. public toilets, seating, drinking water for both dogs and humans, shelter and bins (both for ordinary refuse and faecal deposits).

SIGNAGE

- There are three types of signs that may be required: regulatory, advisory and warning signs. The choice of sign, its location and size is dependent on the information to be presented and the uses for which it is designed.
- Advisory signs should not be a substitute for good park layout and design. As a general guide - less is better to avoid visual clutter from signage. Too many signs are generally not noticed or read.
- Signs are necessary at every entry point to the park and between one access zone and another.
- Maps should be provided in all suitable locations where the access policy varies in a particular park.
- It is important that appropriate and easily recognised symbols are used to convey the desired message.
- Many signs are terse in tone, detailing relevant regulations and corresponding fines for non-compliance. Councils can improve relations with their local community by emphasising instead more positive messages to encourage responsible behaviours by dog owners.
- Information should be clearly visible in different languages as appropriate.
- Signs should provide a contact name and address for people to report any damage or make a complaint.

8.0 CONCLUSION

Dogs and their owners deserve consideration in public open space management - not only for their own benefit but also for the benefit of the rest of the community. Providing a range of access opportunities is actually a credible tool for managing conflicts and problems that reportedly exist.

The challenge facing park managers is not only to accept that taking dogs into parks is a legitimate activity but to work, in a practical sense, towards addressing their needs and those of their owners within a philosophy that seeks to accommodate the needs of all members of the community for access to public open space. What is needed is a change from reacting to problems as they arise to one of systematically addressing needs and problems to achieve a net benefit for everyone. It is not an easy task and is fraught with problems but the difficulties are not insurmountable.

This study emphasises a new approach to the way we consider these issues. We don't provide prescriptive answers - that is not possible. What we do provide is a framework and the supporting background for Councils to undertake a strategic assessment of the issues as they exist in their own localities.

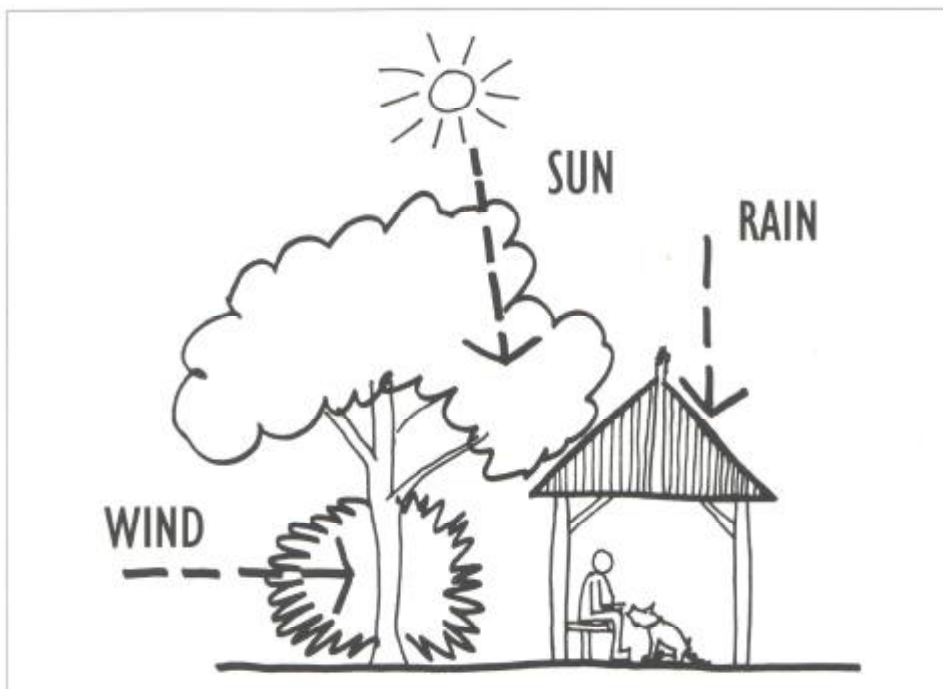


Figure 21. SHELTER: Provide shelter as appropriate.

REFERENCES

- AdellBath, M., Krook, A., Sandelvist, G. and Skantze, K. (1979) *Do We Need Dogs? A Study of Dogs' Social Significance to Man*, School of Social Sciences, University of Gotenburg Press.
- Albert, A. and Bulcroft, K. (1986) 'Pets and Urban Life' *Anthrozoos*, 1(1), 923.
- Anderson, W.P. with Reid, C.M. and Jennings, G.L. (1992) 'Is Pet Ownership Good for Your Heart? The Results of a Survey of Risk Factors for Cardiovascular Disease in Melbourne, Australia' Murray R.W.(ed.) *Urban Animal Management, Proceedings of the First National Conference on Urban Animal Management in Australia*, Brisbane, 1992,
- Anon. (1992) 'Park Liebrecht: Green Space Designed for City People and Pets', *Inter-Actions*, 10(3), 2223.
- Beck, A.M. (1983) 'Animals in the City', Katcher, A.H. and Beck, A.M. (eds.) *New Perspectives on our Lives with Companion Animals* University of Pennsylvania Press.
- Bradshaw, J.W and Brown, S.L. (1990) *Behavioural Adaptations of Dogs to Domestication* in Burger, I.H (ed) *Pets, Benefits and Practice*, Waltham Symposium 20, 18-24, BVA pub.
- Harlock Jackson Pty Ltd, Goad Fink and Holmes R. (1992) *Pets in Urban Areas: A Guide to integrating pets into new urban areas*, Petcare Information and Advisory Service, Melbourne, Australia.
- Hart, B.L (1990) 'Pets and Behavior: Problems and Solutions' in Burger, I.H. (ed) *Pets Benefits and Practice*, Waltham Symposium 20, 18-24, BVA pub.
- Jennes, G.W. (1992) 'The Role of Research and Behaviour in Legislation and Community Attitudes' in Murray R.W., (ed) *Urban Animal Management, Proceedings of the First National Conference on Urban Animal Management in Australia*, Brisbane, 1992,
- Just, D. (1989) 'Appropriate Amounts and Design of Open Spaces' *Australian Parks and Recreation* 25,(2) 33-40
- Leather, K. L. (1994) 'Legislation for Urban Animal Management : Experience in the Formulation and Implementation of Scoop Law' in Paxton, D.W (ed.) *Urban Animal Management, Proceedings of the Third National Conference on Urban Animal Management in Australia*, Canberra, 1994, Australian Veterinary Association
- Lipscombe, N (1986) 'Supply and Demand in Outdoor Recreation: Which should concern us most?', *Australian Parks and Recreation* 23,(1) 16-19
- Marriot, K.L (1990) *Recreation Planning: A manual for local government* (2nd edition) Prepared for the South Australian Recreation Institute.
- McCallum Research Pty. Ltd in association with High Mackay (1992) *A Study of Our Attitudes to Cat and Dog Ownership. Motivations and Benefits of Ownership; the Personal, Familial and Social Context* Petcare Information and Advisory Service, Melbourne, Australia.
- McHarg, M; Baldock, C; Heady, B and Robinson, A, (1995) *National People and Pets Survey, A Report to the Urban Animal Management Coalition*, Sydney, Australia.
- Messent, P. (1983) (1984) 'Correlates and Effects of Pet Ownership' in Anderson, R.K/, Hart, B.L., and Hart, L/a/ (eds) *The Pet Connection, Proceedings on Conference on the Human-Animal Bond*, Centre for the Study of Human-Animal Relationships and Environments, University of Minnesota.
- Ministry for Planning and Environment (1989) *Planning Guide for Urban Open Space*, State Government of Victoria, Australia.
- Morgan Research (1988) *Dog and Cat Population Data*, Unpublished Report.
- Norling, I., Jagnett, C., Krusdopf, B., Lundahl, B and Nillson ,A. (1981) *Manniskans basta van*, School of Social Sciences, University of Gotenburg Press.
- Podbercek, A.L and Blackshaw, J.K (1990) 'Dog Bites: Why, When and Where', *Australian Veterinary Practitioner*, 20(4), 182-187.
- Reark Research (1995) *Report: Pet Care Industry Statistics, 1994*, Petcare Information and Advisory Service, Melbourne, Australia.
- Salmon, I.M and Salmon, P.w (1983) 'Who owns who?' in Katcher, A.H and Beck, A.M. (eds) *New Perspective on our lives with Companion Animals*. University of Pennsylvania Press, Philadelphia.
- Sherif, M and Sherif, C.W (1956) *An Outline of Social Psychology*, Harper, N.Y
- Shivers, J and Hjelte, G (1971) *Planning Recreational Places*, Associated University Press, New York.
- Smith, S. L (1990) *Dictionary of Concepts that Affect Recreation Planning*, Department of Youth, Sport and Recreation, Victoria, Australia.
- Thompson, G (undated) *Some Concepts that Affect Recreation Planning*, Department of Youth, Sport and Recreation, Victoria, Australia.
- Thompson, G (1990) *Dog Attacks, Injury Surveillance Monthly Bulletin*, Adelaide, South Australia Health Commission.
- Torkildsen, G (1986) *Leisure and Recreation Management (2nd Edition)*, E & F.N Spon, London
- Veal, A.J (1982) *Planning for Leisure, Alternative Approaches*, Papers in Leisure Studies No.5, The Polytechnic of North London.
- Whittaker, D and Shelby, B (1988) 'Types of Norms for Recreation Impacts: Extending the Social Norms Concept' *Journal of Leisure Research* 20 (4) 261-273.
- Wolch J and Rowe, S (1992) *Companions in the park: Laurel Canyon Dog Park* Landscape 31(3) 16-48.
- Wright J.C. (1985) 'Severe Attacks by Dogs: Characteristics of the Dogs, the Victims and the Attack Settings' *Public Health Reports*, Vol 100 55-61.