Design, Planning and Management of Off-leash Dog Parks

A brief guide for local councils, dog owner/carer groups and others who may be involved with providing dog park facilities. Includes checklists to help with planning and design.

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Introduction

I have deliberately kept this manual short. This is because the people who will use it are busy. They are typically the council employees tasked with parks and animal management. Others who may find this manual useful are the various dog walking groups and others advocating for off-leash dog exercise areas.

The paramount consideration is the safety of both dogs and their human companions when visiting dog parks. Apart from the humanitarian considerations, authorities who ignore the safety of dogs and people are risking legal action for personal suffering (if the human is injured), veterinary costs or (if the dog is a valuable pedigree) even replacement costs.

What is a dog park? There several definitions of for dog parks. These include that in Unleashed: A Guide to Successful Dog Parks. “A dog park is a designated public area that’s been set aside for dog guardians to legally exercise, play and socialise with their dogs off-leash in a secure environment. The park is fully enclosed or fenced and has amenities that make it clear that dogs are invited, not just permitted.”

Off-leash dog parks were introduced in the USA in 1979, with the development of the Ohlone Dog Park in Berkeley, California to cater for the demand for the increasingly urban dog population to be exercised in safety, for both dogs and people.

More recently dog parks have been developed in Australia. Unfortunately the suitability of many dog parks, for dogs and people, leaves a lot to be desired. In some cases authorities have simply run a fence around an area for which there was no other demand. Such essentials as water, waste disposal, drainage, shelter and seating are sometimes over-looked.

Whilst researching this handbook I have consulted academic studies, looked at numerous internet sites and visited several dog parks in eastern Australia. Most of these parks have had both good and not so good features.

I have detailed the more useful resources at the end, just before the appendices. Speaking of which, the two appendices provide a suggested star rating system for dog parks and a dog park assessment form.
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Why we need dog parks

Australia has one of the highest populations of domestic dogs in relation to humans of any country. In my home state of Tasmania a survey of councils I did in 2015 found that there were 87,000 registered dogs and at least another 14,000 estimated to be unregistered. Tasmania’s human population is a bit over 500,000, so that is about one dog for every five people. Because these dogs are ‘attached’ to people, they live where people live – in the towns and suburbs. This is where the problem lies!

As dog carers, we have the responsibility to ensure that our doggy friends are able to get regular exercise, meet other dogs and enjoy the old and new smells they encounter during their walks. Note, dogs’ sense of smell is 1,000s of times more sensitive than that of humans. Smell is far more important to dogs than are hearing and vision, although these are still important.

Studies have shown that people who walk dogs regularly are healthier. This, along with the benefits of the love and affection we share with our dogs, reduces blood pressure and improves our mental health. In other words, dogs may reduce the cost of providing public health. Although there are issues regarding dog bites, trips and falls, road accidents caused by dogs and diseases transmitted to humans; these can in part be mitigated by better management of our doggy population.

These days many people travel with their dogs, and if an area is dog friendly, with a dog park, these travellers are more likely to visit an area and help the local economy by buying refreshments or staying locally.

Location

Where do we put dog parks? The simplistic answer is where they cause the least nuisance to other people through barking and unwanted dog waste. However, there are other important considerations. These include ease of access for dog carers, proximity to services such as toilets and consideration for native wildlife.

Because dogs are not permitted on public transport (except assistance dogs for sight or hearing impaired people) access is going to be either via car or on foot. The general rule seems to be that smaller off-leash areas may be closer to housing, to accommodate those who walk to the dog parks. Larger, regional, off-leash parks may be further away from domestic residences as there is more likelihood of barking and other disturbance.

A major consideration when siting dog parks is the environment. There needs to be a buffer zone between dog parks and water courses and drains. This is to prevent dog waste, including urine, from being washed into waterways when it rains. There are two reasons for this. Firstly, dog faeces and urine carry excessive amounts of nutrients which promote the growth of algae in waterways. These reduce the amount of available oxygen and may result in the area becoming unsuitable for aquatic life. Secondly, dog faeces carry diseases. There have been several cases in other parts of the world where marine mammals, such as seals and otters, have been infected with canine distemper and parvovirus. Potential ‘hosts’ for canine diseases in Australian coasts and estuaries include the platypus, porpoises, seals, and water rats.

Needless to say, dog parks should not be sited near reserves or areas near wildlife roosting, nesting or foraging areas.
How big should dog parks be?

Ideally a dog park should be large enough to permit dogs to run freely and play. If it becomes over-crowded with dogs there is more likelihood of fights. However, size may be limited by available space, construction (e.g. fences, ground cover and shelters) and maintenance costs. Those in America vary from a quarter acre to 40 acres. One study suggests a minimum of one acre and preferably four acres.

Separate large and small dog sections

Potential hazard – small dogs may be hurt in rough and tumble, large aggressive dogs injure smaller ones.

Unfortunately, there are times when small dogs have been killed or seriously injured by larger dogs. Whilst carers are asked not to bring aggressive dogs into parks, they don’t all do the right thing. There are also dogs which are normally well-behaved, but may become aggressive if they feel under threat.

The solution is for separate, fenced off, sections for large and small dogs. This can still lead to aggressive behaviour through the fence though.

Parking

There needs to be parking and it should be well drained. Gravel or a sealed surface, but ensure run-off from storms is dealt with appropriately. One dog park has placed the car park between the sections for large and small dogs.

Entry / exit design

Potential hazard – dog escapes whilst others are arriving or departing.

One of the most important features of a dog park is the design of entry and exit gates. The minimal requirement is for double-gates to prevent dogs escaping when others are arriving or departing. Some parks have separate entrances and exits. Because use is concentrated in the entrance areas, they should be concreted to prevent wear. They should not be placed at the corners of parks, as dogs may mob new comers and leave them unable to avoid their attention.

There also needs to be access for mowers and other maintenance equipment.

Park shape

The shape of a park can affect how it is used. A small, square shape is likely to result in dog carers standing around, talking. This may be good for human socialisation, but who’s watching out for the dogs? How will they know the dog has messed, so they can clean it up?

A longer, linear park will encourage people and their dogs to keep moving. However seating needs to be available along the way so that seniors (dogs and people) can have a break.
Fences

Potential hazards - dogs’ paws being caught in fence strands or escaping, and invading aggressive dogs from outside.

The current record for a jump by a dog is nearly three metres, that’s about nine feet. Small dogs, such as Jack Russell terriers, are adept at crawling under fences. This means that fences should be at least two metres high and that they must reach ground and preferably be embedded in it. Probably the best type of fence is chain-link.

There must be no wire strands or barbed wire. Dogs can get their legs entangled in fence strands when trying to jump a fence. I once had to help a fox hound that had caught its leg in a wire fence. It was in severe pain and struggled wildly.
This is what can happen when a dog tries to jump a wire strand fence. Note how the stick representing a dog’s leg has caught a strand of wire and twisted it over.

An example of one of the better fences – chain link and reasonable height.

Surface materials

Potential hazard – slips and trips.

Choice of surface materials depends upon the climate and the amount of wear by human and doggy feet. Grass is possibly the most common, but wears with heavy use and needs mowing and watering, depending upon the season. Some grass types wear better than others. Your local botanical garden or nursery may be able to advise regarding suitable hard wearing, climate appropriate grass varieties – and maybe even varieties that can resist dog urine!

Gravel may result in people falling over and hurting themselves, but it does allow rainwater to drain away.
Pine-bark may be a good idea, softer than gravel and does not need mowing or watering. Use the smaller sized pieces. However, bear in mind that it may burn if there is spotting from nearby bushfires.

Concrete is expensive for large areas and hard on the feet and joints. However, it is possibly the best material for areas next to the entry and exit gates.

Some American dog parks use an artificial turf, but this is very expensive.

**Shade and shelter**

**Potential hazard** – sunburn, dehydration.

Ample shade is important for both dogs and human companions. This may be provided by either natural growth or with artificial shelters. If the dog park is newly developed from an open area, it may be necessary to provide some temporary shelter until trees have become established.
Vegetation

Potential hazard – spines and poisoning

Some plants have long, sharp spines. African boxthorn is probably the worst example, but briar rose, hawthorn, etc. could also give dogs nasty injuries or even blind them. Other plants, such as Lily, may be toxic, either through ingestion or contact. My dog has a habit of sticking her nose into ivy, resulting in an inflamed muzzle. Another issue is buzzies or seeds on dogs’ coats, or human socks and trousers. Grass seeds have been known to get into dogs’ eyes or penetrate their skin. Grass should be regularly mown, to discourage snakes.

African boxthorn. These spines evolved to protect the plants from being eaten by Africa’s herbivores. They are vicious and could seriously injure a dog, including blinding it.
Seating

**Potential hazard** – *dogs catching tails or feet in gaps.*

Seating is usually designed for humans, rather than dogs. However, not all dogs have been told this and may jump onto seats or even picnic tables. Many of these have slats, with spaces between them, a nasty trap for feet.

*Note how the spaces between the slats get narrower. A dog’s tail got caught at the top, slipped down the gap and could not be removed without causing damage. This required a visit to a vet for emergency treatment.*

Water supply

**Potential hazard** – *dogs drink infected water (giardia?) or water with toxic substances rising up from a park being a former land fill or waste disposal site.*

Both humans and dogs need clean water, particularly in hot weather. This is likely to become even more so with climate change. Let’s face it, most dogs are quite happy to drink the dirtiest water they can find. Our job is to reduce the availability of unsuitable water and provide a clean supply. This is best done by installing a dual human/dog water dispenser. The human part is a standard fountain, but should be accessible from a wheel-chair. The dog section is at ground level and can be inverted to enable the removal of leaves and cigarette butts. One council I know of replaced a perfectly satisfactory bowl on a chain under a tap.
with a concrete lined hole in the ground. Within a couple of weeks it had cigarette butts and algae in it, and it was impossible to clean out.

![Concrete hole in the ground](image1.jpg)  ![Concrete bowl](image2.jpg)

Above, a concrete hole in the ground and an above ground concrete bowl. How does one clean these out?

![Water dispensers](image3.jpg)  ![Water dispenser](image4.jpg)

Two different water dispensers, to suit dogs and their carers. The one on the right enables wheelchair access. Note the dog bowls can be easily tipped for cleaning.

**Waste management**

**Potential hazards** – disease for wildlife or humans, slips, ‘yukky’ shoe soles.

I have already discussed the environmental hazards associated with dogs’ messes. But what can we do about it, in addition to keeping away from drains and water courses?

The most common response is to bag and bin the product. Most councils provide the bags next to the bins, although the supply of bags may not be replenished before they run out.

There are other options. These include composting and methane production.
Cambridge, Massachusetts, turns dog waste into energy through a publicly fed methane digester, the *Park Spark*. The methane produced lights a lamp post in the park.

A trial of composting waste at Notre-Dame-de-Grâce dog run in Montreal was considered a success.

Another option is dung beetles. Three species are known to target dog waste.

**Agility and exercise equipment**

**Potential hazards** – *dogs get injuries from sharp items, or equipment is unsuitable for ordinary dogs.*

Full blown agility equipment, with high jumps and elevated balance boards are probably not a good idea in an all-comers dog park. These are best kept to special areas for the agility club dogs. For others, keep balance bars close to the ground and not too narrow. Ideally all posts, jumping hoops and other items should be smooth, rounded and finished with powder coated paint.

Beware home-made items with, e.g. star droppers. The tops of star droppers are often a bit jagged from being driven into the ground. They should be capped, and regularly checked and have missing caps replaced. The droppers themselves have sharp, angular sides that stick out.

Items made from timber should be regularly checked for protruding nails or splinters.
An example from a piece of home-made agility equipment. The tops of these star droppers should be capped. Regular maintenance checks of such equipment are important.

These posts had to be removed after several dogs were injured when they ran into them. They were probably chasing balls or other flying objects. This also indicates their owners’ may not have been aware of the potential hazards.

An example of a relatively safe (i.e. wide and close to ground) agility item for dogs who are not trained for agility equipment. Note that the timber structure would need regular safety checks for loose planks or protruding nails, etc.
This agility equipment poses little danger to dogs. Note the smooth, rounded finish and powder-coated finish. Low maintenance would help to offset the initial costs.

**Splashing pool**

**Potential hazard**- small children accessing.

I am not sure about this feature in an all-comers dog park. It would likely attract small children. It should certainly not be too deep, just enough to let dogs cool off. Water would require frequent changing to avoid diseases building up.

**Digging area**

**Potential hazard** – probably only if someone falls into a hole dug by a dog.

Even if there is no specified digging area, some dogs may dig holes. Ask carers to fill in any holes made by their dog.

*Hole left in a dog park. Potential for a twisted ankle or worse. The dog carer or maintenance crew should have filled this in.*
Washing facilities

Hazards – coats covered in mud if wet.

Most dogs like nothing better than to roll in something smellier – the smellier the better. My girl (collie cross hound) usually chooses rabbit poo. This is not too bad, solid lumps, not runny. However, she once decided that another dog’s droppings would make an excellent perfume. Well, maybe for her — certainly not for me! It took me nearly half an hour with a hose and an industrial strength scrubbing brush before I considered her acceptable to be allowed inside.

Signs

Some dog carers could well be described as being ‘responsibility averse’. They need to be reminded of appropriate behaviour for both themselves and their dogs. There should be signs at all park entrances to remind people of their responsibilities. These should be well maintained and regularly cleared of graffiti. The example below illustrates how not to do things!

Who is going to read this, particularly when they are with an excited dog?
Entrance signs need to remind carers of their responsibilities and are an opportunity to educate new dog owners. These are some of the key points to consider:

Please do not bring your dog if it is:

- Aggressive towards other dogs or people,
- A bitch in season,
- Has not been vaccinated for canine distemper, parvovirus or kennel cough,
- A young puppy.

Please keep your dog under effective control:

- Either on leash, or
- Within view,
- Nearby, and
- Immediately responds to your commands.

Please clean up after your dog when it messes.

Please bring no more than two dogs with you – you need to be able to manage them.

Please do not bring very young children, and please closely supervise any children you do bring in. They are over-represented in dog bite statistics.

Some councils also ask carers not to bring in food or toys, as these may cause fights or at least stress. My dog is very good at soliciting treats from people, whether they are being offered or not!

At left is an example of a reasonably comprehensive sign. The one below is far too authoritarian and will likely annoy carers. ‘Effective control’ needs defining.
Further Information

These are the main sources I have used when researching this guide.

The internet has heaps of material, some excellent, other rather questionable. The problem is that absolutely anyone can write a blog, paste to social media or have their own website – and we can’t really assess their qualifications or expertise. If someone has had a bad experience in a dog park, was it their fault?


- Park Spark Project http://parksparkproject.com/home.html (Lighting from methane in dog faeces.)


Dog Park User Interview

File ref. (use for assessment forms and photo id.): ____________________________

Dog park name: ____________________________________________________________

Location: __________________________________________________________________

Date visited: ___________________________ Time: ____________________________

Weather: Temp [ ] Clouds [ ] Wind [ ] Rain [ ]

Dog A: Breed ___________________________ Large/small: ______________

Dog B: Breed ___________________________ Large/small: ______________

Dog C: Breed ___________________________ Large/small: ______________

Carer: Gender [ ] Age decade [ ] (i.e. teens/20s/30s/40s/50s/60s/70s/80s/90s)

How often do they visit this park?

Daily [ ] ______ x week Monthly [ ] Other (state): __________________________

Why this particular park? ________________________________________________________________________________________

________________________________________________________________________________________

Length of average visit: _________________

Preferred time of day: ____________________________

Best features: ____________________________

________________________________________________________________________________________

________________________________________________________________________________________

Worst features: ____________________________

________________________________________________________________________________________

________________________________________________________________________________________

Please see the next page
Please take a couple of minutes to tell us how you feel about the following features of this dog park:

**Your safety:**  
- Very poor [ ]  
- Poor [ ]  
- Adequate [ ]  
- Good [ ]  
- Excellent [ ]

**Your dog’s safety:**  
- Very poor [ ]  
- Poor [ ]  
- Adequate [ ]  
- Good [ ]  
- Excellent [ ]

**Other dog carers:**  
- Very poor [ ]  
- Poor [ ]  
- Adequate [ ]  
- Good [ ]  
- Excellent [ ]

**Other dogs:**  
- Very poor [ ]  
- Poor [ ]  
- Adequate [ ]  
- Good [ ]  
- Excellent [ ]

**Shelter:**  
- Very poor [ ]  
- Poor [ ]  
- Adequate [ ]  
- Good [ ]  
- Excellent [ ]

**Agility equipment:**  
- Very poor [ ]  
- Poor [ ]  
- Adequate [ ]  
- Good [ ]  
- Excellent [ ]

**Digging areas:**  
- Very poor [ ]  
- Poor [ ]  
- Adequate [ ]  
- Good [ ]  
- Excellent [ ]

**Swimming areas:**  
- Very poor [ ]  
- Poor [ ]  
- Adequate [ ]  
- Good [ ]  
- Excellent [ ]

**Water supply:**  
- Very poor [ ]  
- Poor [ ]  
- Adequate [ ]  
- Good [ ]  
- Excellent [ ]

**Fencing design:**  
- Very poor [ ]  
- Poor [ ]  
- Adequate [ ]  
- Good [ ]  
- Excellent [ ]

**Fencing height:**  
- Very poor [ ]  
- Poor [ ]  
- Adequate [ ]  
- Good [ ]  
- Excellent [ ]

**Entrances/exits:**  
- Very poor [ ]  
- Poor [ ]  
- Adequate [ ]  
- Good [ ]  
- Excellent [ ]

**Ground cover:**  
- Very poor [ ]  
- Poor [ ]  
- Adequate [ ]  
- Good [ ]  
- Excellent [ ]

**Vegetation:**  
- Very poor [ ]  
- Poor [ ]  
- Adequate [ ]  
- Good [ ]  
- Excellent [ ]

**Waste disposal:**  
- Very poor [ ]  
- Poor [ ]  
- Adequate [ ]  
- Good [ ]  
- Excellent [ ]

**Access:**  
- Very poor [ ]  
- Poor [ ]  
- Adequate [ ]  
- Good [ ]  
- Excellent [ ]

**Parking:**  
- Very poor [ ]  
- Poor [ ]  
- Adequate [ ]  
- Good [ ]  
- Excellent [ ]

How does this park compare with others you have visited? :

- Very poor [ ]  
- Poor [ ]  
- Adequate [ ]  
- Good [ ]  
- Excellent [ ]

**Further comments:**

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
Dog Park Star Ratings

This *draft* star rating for dog parks is based upon:

1. Safety of both dogs and their human carers,
2. Extension for dogs’ physical and mental fitness, and
3. Convenience for users.

**One Star ★**
- A basic park, only partial fencing.
- No water on tap.
- No supplied waste bags.
- Dangerous aspects, such as spiky plants, sharp metal and unrounded timber corners on furniture.
- No instructions for users.

**Two Stars ★★**
- Fully fenced, chain link, etc. No strands or barbed wire. Fence height sufficient to reduce risk of escapes, recommend at least two metres. Down to ground level, to reduce risk of burrowing under fence.
- Water on tap for dogs and carers.
- Waste disposal bags supplied.
- Instructions at entrances, detailing safety, etc.
- No dangerous aspects. All furniture edges rounded.
- Safe walking/play surfaces.
- Shelter for people, either natural or artificial.
- Car parking.
- Located away from sensitive wildlife areas, including waterways.

**Three stars ★★★**
As for two star rating, plus:
- Double gate entry system.
- Separate enclosures for large and small dogs OR different time allocations for large and small dogs.
- Public toilets nearby.
**Four stars ★★★★**

As for three stars, plus:

- Basic gym equipment; low jumps, low balance bar, etc. All edges rounded.

**Five stars ★★★★★**

As for four star, plus:

- Dog digging area.
- Dog swimming area.

**Five stars ★★★★★ plus**

As for five stars, but with café etc. for carers and other luxury aspects.