

Environmental Enrichment in Kennels

Introduction

Environmental enrichment is the provision of stimuli, which promotes the expression of species- appropriate behaviour with stimulating activities. The dog is descended from the wolf, possibly the Southern wolf (*Canis lupus pallipes*). Wolves are social carnivores that can combine into packs, although there are three numerous plans for survival?:

- 1 Solitary predators.
- 2 Family pack hunters.
- 3 large pack hunters.

Thousands of years of domestication and artificial selection have produced breeds, with modified social repertoires. Many dogs have breed specific behaviours that are hard-wired such as the Springer Spaniel who is visually orientated and seems to be distracted by anything that moves in the air, such as a leaf falling from a tree. The Border Collie likes to herd and chase joggers, motor bikes, things that move across the ground. Owners of such dogs often wonder why their dog is not paying attention in an outdoor training class, despite having his favourite treat that he works so well for at home. For this dog food cannot compete with a field of birds or a herd of sheep on the move. So enrichment for this type of dog may have to be more specific to their needs.

Activity levels

Dogs spend a considerable portion of there time inactive (Hubrecht et al. 1992, Adams and Johnson 1993). However, as an opportunist, the dog is adapted to seeking a wide variety of reinforcers in unpredictable locations. The dog is therefore much more likely to be interested in novel items and circumstances than a more specialised feeder. On the other hand, a predictable and limiting environment may make these non-active periods boring and as such we see an overall decrease in interaction within the environment. The animals may lie down and sleep more, and spend significantly more time sitting. However, the dog is a very adaptable animal and a healthy adult can cope with a range of conditions, particularly if it has access to areas with different microclimates.

Housing

Today's modern Kennels are designed to give the animals security and provide them with a suitable habitat in a Temperate Zone. A good housing system should allow the dog to exercise an element of choice, to manipulate or chew safe objects, and provide opportunities for human and canine socialisation (Hubrecht 1993a). Dog kennels should be subdivided into separate sleeping and exercise areas which provide coolness (when body temperature is high), and warmth (when the body temperature is low), and allows the dog to defecate/urinate away from its sleeping area (Fox 1986). A good kennel design should allow the occupants to satisfy their natural curiosity about what is happening outside the enclosure. One solution is to provide platforms at a height that allows the dog to see over the partitions whilst lying down (Hubrecht 1993a). With the platform centred into the middle of the run, this can and should reduce any territorial behaviour at the fence. For a medium size dog, two to three foot off the ground is high enough and for larger breeds, the height should be matched to get the same elevation. There have been a number of studies on the effects of exercise, and pen size (e.g., Campbell et al. 1988, Hughes et al. 1989, Bebak and Beck 1993, Hetts et al. 1992). There is no evidence that providing extra exercise per se improves welfare (Clark et al. 1991), although walks outside the enclosure are undoubtedly enjoyed.

Things dogs like and will work for

Primary reinforcers are those which are immediately reinforcing and are simply reinforcing as a result of the dog's evolution as a species. These can include food, water, sexual stimulation, foraging, sniffing / scenting, attention, grooming, coolness (when body temperature is high), and warmth (when the body temperature is low). As these examples suggest, primary reinforcers often have to do with biological processes. Some primary reinforcers are not immediately obvious; for instance if you were a dog restrained in your home/kennel and cannot move about or get out,

the chance of freedom can be very reinforcing. Knowing what a dog likes and will work for is an important factor in having a stimulated dog; especially if the animal is kennelled and food is provided independent of its behaviour. Other behaviours might increase in the absence of the owner, to fill the free time. When undesirable behaviours tend to increase, boredom, anxiety and even aggression can be the result. The types of problems incurred by kennel owners are chewing/destructive, barking/howling, pacing/hyper-active. Introverted behaviour such as sucking, licking and biting oneself. Paws, wrists and flank areas seem to be favourite spots to work on, although sometimes the root of its tail, seem to be a target. Whether the kennel dog is bored, anxious or not, behavioural enrichment is required to keep the dog happy and healthy.

Why do it?

The purpose of environmental enrichment is to allow the dog to burn off calories in a safe and natural way, which in turn allows it to behave more naturally in a restricted environment. The animal learns to cope with unexpected changes in the environment, and is less likely to be stressed by handling, restraint, and change in environment. A decrease in emotional behaviours furthermore indicates a decrease in physiological and psychological stress.

Dog activity puzzles

Feral dogs, wolves, coyote's, foxes, hyenas, and many more species are hunter-scavengers, born opportunists who would spend a large proportion of their daily energy looking for food. In contrast we place all their food in a bowl and its gone in seconds and we wonder why the dog is bored or under stimulated and now has extra time to devote to those misbehaviours! The food dispenser and there are quite a few on the market, offers several advantages over conventional feeding methods:

1. The food is distributed over a longer period of time. A food dispenser filled with 30 pieces of kibble lasts about 1/2 hour, whereas the same amount of food is consumed within thirty seconds to three minutes when the food is freely available. That means that the time spent foraging (= looking for food) increases.
2. The food is not permanently available but instead is available randomly. This unpredictability may raise the vigilance of the animals.
3. Maintenance is easy and does not require any additional time. The food dispenser itself is given to the dog to play with and can be refilled any time.
4. Even small amounts of food delivered by the dispenser have a strong effect on the behaviour of the animals. This is important, because all enrichment activities related to food have to be incorporated into the feeding schedule; this is much easier when the amount of food needed for enrichment is low.
5. It is inexpensive. This is also important, because high additional costs are often used as an argument against behavioural enrichment. This rather simple apparatus can help to enrich the dog's foraging experience and thus reduce boredom and monotony. Any food or drink enrichment that requires extra manipulation and prolongs consumption time is a good thing, thus providing mental stimulation.

Scenting, tracking and foraging

As part of the dog's behavioural enrichment program scenting and tracking should be encouraged. Most good kennels have a grassy enclosed exercise area where a dog can be let off the lead for a free run. Kennel staff should give every dog an opportunity to search using their nose. Searching and tracking exercises have proved an excellent remedy for under stimulated and over active dogs. To find food or a toy the dog uses its foraging and olfactory canids senses.

Olfaction is an important canid sense. Dogs can and do track as they follow where another dog or animal has been. As part of the dog's evolution as a species, if the dog could not hunt, track and catch up to its quarry for most of the time, he would have starved to death. The dog will use its nose to pick up particles in the air or some of the time; track ground scent and uses a combination depending on the wind direction.

How do I do it?

Walk across the field, pressing firmly your shoe or boots to make prints. Place the toy or a bowl with some food in it and walk back to where you have the dog tied up. This is a "free" track, no harness or long line is necessary, just let the dog off the lead to find the reward. Another tracking game to play is called "hansel & gretall". You walk to a point (ten yards), drop the dog's favourite toy in the grass and slightly cover it over with grass. As you walk back drop small amounts of food where you are walking. Drop some food just in front of your dog and release him to find the food on the track with his nose, when he gets to the end, he gets the surprise of his toy. Scattering food around the exercise area and letting the dog go find it is also another great way to allow him to use his nose. There is one stipulation with behavioural enrichment programs, that is, that they are an individual exercise to do with each dog separately. To use a food dispensing puzzle if there two dogs could have the potential for one to take advantage of the other and even if there was not a fight, you may find the one dog gets much the fatter. It would be better to have one dog within the enclosed exercise area and the other with a food dispensing puzzle.

Digging

The enclosed exercise area should also have a digging area, three-ft square with sand added to the soil to make digging easier! Bury titbits, toys, bones and chews in the pit and let him find them.

Grooming

Regular grooming each day promotes mutual trust and affection and allows us to check the dog for signs of health, which shapes a calm contented dog. Breed differences and husbandry requirements should be kept in mind when considering enrichment options. It is also important to remember that dogs vary in temperament (Cattell and Korth 1973) and perhaps also in they're housing requirements and ability to cope with a particular kennelling system.