



# RED DEER IN A FARM SYSTEM

## Five Freedoms

- **Freedom from hunger & thirst**

Most people would probably say that all Five Freedoms are fairly logical and the first freedom is perhaps the most obvious of them all. Fulfilling nutritional needs of animals is the most fundamental component of animal welfare and no producer needs to be told that animals should have access to clean water and an appropriate diet at all times to maintain full health, vigour and reach their production potential. Hinds and stags both have seasonal patterns of growth and feed intake. If deer are underfed or do not have access to water, they will show signs of distress, such as fence pacing and general restlessness and perhaps aggressions between herd mates. Unless an appropriate diet and fresh water is available, growth rates will be suppressed and the general well-being of the animals will be reduced.

- **Freedom from discomfort**

The second freedom refers to the provision of an appropriate environment including shelter and a comfortable resting area. The natural environment of the Red deer is woodland-edge habitats, so one would expect that access to shelters would be an important aspect of the normal life of a red deer. Deer will readily use shelter in bad weather. We do not know much about the effects of warm and cold weather on the production and welfare of deer, but as a general rule, most animals cope better with cold weather than warm weather, just as long as they are fed properly. If animals are outside their thermoneutral zone, they will use energy to warm up or cool down, energy that can otherwise be invested into production. As with most mammals, deer respond to warm weather with an increase in respiration rate (fast breathing, open mouth panting), body temperature and skin temperature. Animals will change their behaviour to seek for shade or shelter in unfavourable weather conditions and if they are provided with these resources, most of the time adult animals will cope just fine in most weather conditions. It is well-known that deer wallow in warm weather but it is unclear if wallowing has any potential benefits in terms of cooling or production. In warm weather deer will also chose bed sites that are cooler than the surrounding environments.

- **Freedom from pain, injury or disease**

The third freedom refers to freedom from pain, injury or disease by the prevention or rapid diagnosis and treatment. Obviously, if any sick or injured animals are detected they should be treated or, if necessary, culled as soon as possible to avoid unnecessary suffering. Routine management practices that require the animals to be handled may potentially cause injury to deer. Deer are still a relatively flighty species that see humans as potential predators and they can find it stressful to be restrained and handled. A stressed animal is more likely to panic and cause injury to themselves, other deer and humans. Stress in relation to handling can be reduced by designing "deer-friendly" handling systems that enable a good animal flow through the system. Good animal handling skills will also reduce the stress in relation to handling, where the handler "knows" the deer and understand their behavior. People who are good stockpersons understand the normal behavior of deer and why they react the way they do in different situations, and know how to behave in order to minimise stress. If handled in a good way, deer will more quickly get used to being handled.

Deer are susceptible to certain diseases (eg tuberculosis, yersiniosis and malignant catarrhal fever) and parasites (eg lungworm, nematodes, and tissue worm). Animals that are sick or have high parasites burdens will not eat or grow well, and will have impaired welfare. It is important to have an appropriate disease prevention program in place.

- **Freedom to express normal behavior**

The fourth freedom refers to the right all animals should have to perform normal or natural behaviors. However there will be compromises between an animal's behavior to express its natural behavior and the limitations of the farm environment, such as the extent of wallowing permissible. Freedom to express behaviors should be possible by providing sufficient space, proper facilities and company of the animal's own kind. Farmed deer are most commonly kept on pasture, and pasture based systems have many benefits both from a consumer and welfare perspective. People like to see grazing animals (on a sunny day!). Deer on pasture have the ability to express most natural behaviors, such as grazing, no sane person would ever keep deer on their own. (isolation is a major "stress factor" for a deer). When the time has come for hinds to give birth, in nature, they leave the herd and seek out a safe place to give birth and bond with the young. If a hind is kept in an enclosure that does not provide appropriate space and shelter, she can often be seen fence pacing, which can disturb other animals, and disrupt the birthing process. Any disruption from normal behavior may be an indicator that something is wrong in the environment, and it is important that farmers understand the natural behavior of deer.

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- **Freedom from fear or distress**

The fifth freedom states that animals should be free from fear and distress by ensuring conditions and treatment which avoid mental suffering. Although deer have been farmed since the 1970s and selective breed for temperaments that are better suited to the farm environments farmed deer still have a flighty nature, shaped by many years of evolution to escape predators. Flight reactions are still common, and humans or dogs can elicit a fear response. If the response is short-lived and the animal can escape the situation, no harm is done, but if the stressor is on-going, the animal will be chronically stressed and production and welfare will be reduced. Other stressful situations in a deer's life include situations such as handling, regrouping, mating, transport and weaning. The stress in many situations can be minimised by having trained people handling the deer and systems that are designed to have a good "animal flow" through them. People who understand deer behavior and how they react in certain situations, know how to handle them safely and efficiently to avoid unnecessary stress in both deer and humans.