



RED DEER IN A FARM SYSTEM

Artificial Breeding

Artificial Insemination (AI) and Embryo Transfer (ET) are well-established, viable and practical tools to improve rates of genetic gain within the deer farming industry, as clearly demonstrated by considerable production gains to date in antler size and high growth rate animals. While the success rates in red deer are comparable to, or better than, other farm animal species, careful planning and execution are required to optimise success.

Artificial insemination

Artificial Insemination (AI) is used by deer farmers to acquire top stag genetics. Clearly, the use of a sire for natural mating is limited by the inability of the stag to mate with many hinds and the physical restriction to one farm for the mating season. However, AI overcomes these limitations by distributing a stag's semen over a wider number of hinds and across multiple farms.

However, the use of AI is not limited to stud farms....commercial breeders can acquire top genetics by AI. This is an alternative option to buying high quality stags, especially in closed herds concerned about introduction of disease through outside animal purchases. Semen has a very low risk of disease introduction.

AI is not something to be embarked upon lightly...it involves considerable planning, the use of skilled people, and a time investment. However, if done well AI is a very successful genetic tool. Success rates of 70-80% pregnancy are commonly achieved at a single-time insemination...this is considerably better than achieved in other livestock industries.

Genetics

Genetics is one of the fundamental drivers of improving industry productivity. The industry is well served by a variety of commercial stud breeders and artificial breeding companies.

Stud Breeders

Stud breeders are collectively responsible for effecting genetic change in the commercial (producer) herds. To do this stud breeders record animal performance and sell (primarily) male progeny to commercial herds to generate the next crop of offspring.

Commercial herds

What do we mean by 'commercial herds'?

Commercial herds are producer farms, which breed offspring for product end points such as venison production. Commercial producers cover a very large range of operations sizes and relative intensities of farming operations, this is generally dictated by the farm environment (e.g. location, topography, soils, rainfall, growing season, pasture types/improvement, etc). Commercial producers run a hind herd to breed progeny. Generally a proportion of the hind herd is used to breed replacement hinds for its own breeding herd. Commercial venison breeders may not necessarily 'finish' (grow to the point of slaughter) any or all of the progeny they breed and instead may sell these animals post-weaning for finishing elsewhere. Commercial herds do not generally sell live animals for the genetic improvement of other farms, which is a role of the specialist stud breeder.

Why is genetics relevant to a commercial herd?

Commercial herds need to consider capitalising on the genetic progress made by stud breeders in order to continually improve their own production. This involves the strategic acquisition of improved genetics from the stud breeders in accordance with the commercial herd's breeding plan. As well as breeding replacement breeding hinds, many commercial herds will often breed a proportion of their own sire stags, using purchased sire genetics.