# CALVING/FAWNING MANAGEMENT



Calving/Fawning Management

The Deer Farming Handbook

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Calving/fawning management is closely linked to mating management and subsequently weaning management. If dams do not conceive when first joined with sires the period over which calving/fawning occurs can become extended and subsequent management of calves/fawns born at the end of the period is more difficult.

To increase the likelihood of pregnancy early in the mating period, adult dams need time to recover body condition after completing their lactation and first time breeders need to achieve at least 70% of mature adult weight before they are joined with sires.

Guide target weights for hinds and does are presented in the chapters related to feeding and nutrition.

If nutrition adequately meets the needs of the dam and its offspring, the dam should be able recover weight lost during lactation before mating and mating or post-rut weaning may be appropriate. However, if without pre-rut weaning the dam is unable to recover weight lost during lactation, pre-rut weaning should be considered, see the chapter on weaning.

# Season Length

One of the most influential management programs that can be implemented is one that reduces the length of calving/fawning season for breeding females managed on the property.

Most commonly, in well managed herds, the largest percentage of breeding females become pregnant within six weeks of exposure to fertile sires. It is only the smaller percentage that conceives after six weeks.

If all breeding females are pregnant after two heat cycles (six weeks) all offspring will be born within a six weeks period. Lactation and weaning management are simplified when the age range of the offspring is minimised.

Late born offspring, more than six weeks after the first animal is born, have less opportunity to benefit from the high quality pasture available to dams that calve/fawn early.

A common practice is to join 10 to 15% more breeding females than is required and remove the sires after six or seven weeks. All females in the mating group are pregnancy tested at about 12 weeks post mating and those animals not pregnant are culled.

# **Dam Preparation**

The primary management considerations for dams in the weeks before they give birth are to ensure:

- They have a minimal internal parasite (worm) burden
- That they receive their clostridial vaccine booster
- Available feed meets nutritional requirements
- Dams can be sorted into specific groups as necessary (sire groups, likely birth date, etc)

Ideally the dams should receive their booster vaccination three to four weeks before giving birth to ensure that sufficient antibodies will be present in colostrum to meet the needs of the new offspring.

Where required, dams should also be drenched to control internal parasites three to four weeks before giving birth.

Treatment three to four weeks before giving birth means the dams are easier to manage than would be the case if they were handled closer to giving birth and risks of injury to the dam and her young are minimal provided appropriate handling facilities are used with skilled stockmen.

# Paddocks

Those paddocks used for calving and fawning should:

- Provide enough feed (quality and quantity) for the stock until calving/ fawning is finished
- Provide sufficient clean, fresh water for the stock until calving/fawning is finished
- Provide cover (areas of long grass or low scrub) for offspring to hide for the first week after birth (for the first 3 to 5 days offspring will hide and are reluctant to move)

Paddocks must not be too small as high stocking density is the biggest cause of mismothering. New Zealand data suggests a maximum stocking density of eight Red hinds per hectare in appropriate pasture [70].

# Calving/Fawning

Most commercially managed deer species have single offspring although twinning does occur. Birth tends to occur more in the morning than in the afternoon and normally take two to three hours.

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Although birth problems are unusual, a worthwhile management consideration is to ensure easy access from the calving/fawning paddock (laneway) to the handling facilities so that veterinary assistance can be provided if necessary.

Dams usually leave their offspring hidden in cover and return several times during each day to allow the offspring to suck. After three to four weeks of age the frequency of suckling decreases.

# **Red Deer Calving**

As calving approaches, the hind becomes restless, and separates from the group, usually seeking a sheltered area. Calving is usually rapid and calves are able to stand and suck 30 to 45 minutes after birth. For first few days calves will "freeze" if disturbed and care should be taken when driving around calving paddocks. The dam will leave the newborn calf in cover and will return several times each day to suckle the calf.

Calf tagging and weighing should be undertaken within 24-48 hours of birth, as after that time most calves will be disturbed by an approach and will move quickly away. If calf handling is undertaken quietly and carefully, mismothering is minimised. Contamination of calves with human scent can be prevented if disposable plastic gloves are worn during calf handling. Where calves are not tagged, hinds are best supervised from a distance and any animal in obvious difficulty assisted.

The biggest single factor affecting calf mortality is birth weight. Calves below a birth weight of 5.5 kg are less likely to survive than calves of greater birth weight. Calf birth weight is directly influenced by hind nutrition.

## Fallow Deer Fawning

Fawning tends to occur over a short period of time and it is directly related to the high rate of conception at first oestrous and the high percentage of does in a population that show oestrous at the same time (usually occurring over a 12-14 day period).

Fallow does tend to become restless about 48 hours prior to parturition, they may move away from the herd, pace the fence line and as birth approaches frequently lick their vulval region. During birth does may lie on their side, however many will remain standing and may keep grazing. Following birth the doe may lie with the fawn for a number of hours.

Male Fallow fawns usually have birth weights between 3.8 and 4.2 kg and females between 3.6 and 4.0 kg.

Shelter is important during fawning with respect to minimising mortality. It provides shelter for the young from sunlight, and may also play a role in allowing the mother and young to hide, strengthening the maternal body and hence survival. Shelter sheds, windbreaks and long grass can all be used for this purpose.

Shelter areas should be checked for ants (see above).

# Wapiti/Elk Calving

Comments related to calving of Wapiti/Elk are similar to those comments provided for Red deer (see above).

Calf birth weight is directly influenced by cow nutrition and it is not uncommon for a Canadian Wapiti (Elk) calf to weight up to 19kg at birth.

# Rusa Deer Calving

Birth weights for Javan Rusa average approximately 4.7 kg for females and 5.1 kg for males, smaller Moluccan Rusa calves average approximately 3.5 kg for females and 4.0 kg for males. Twinning is rare.

High incidences of perinatal mortality (up to 20%) have been observed in farmed Rusa herds due to interactions of mismothering, predation, environmental stress and poor nutrition. Calving during the cooler winter months presents potential hypothermia and weather stress problems and should be avoided where possible. It is recommended that parturient (late pregnancy and due to calve) hinds are provided with:

- Access to shade and shelter to minimise environmental stresses such as heat and cold windy weather (important also for calves)
- The ability to isolate themselves from the main mob (i.e. adequate paddock size) with minimal human disturbance
- Grazing areas within predator-proof fencing and adequate nutrition through late pregnancy and during lactation.

Rusa hinds exhibit similar calving behaviour to other deer, they will hide their calves in the first week post-calving. Calves themselves are essentially immobile and hidden if approached within the first 3 to 4 days.

## Post Calving/Fawning Management

It is unusual for offspring in commercial herds to be tagged at birth. It is more likely in elite breeding herds where the exact identity of an offspring's parents must be known. The Deer Farming Handbook

If offspring are to be tagged and weighed at birth, it should be done within the first twenty-four to forty-eight hours when the offspring are unlikely to be disturbed by human approach. After about forty-eight hours calves and fawns are likely to run from an approaching human.

If handling is undertaken quickly, carefully and quietly the likelihood of mismothering is small. However, if there is no need to handle the animals at this time (tagging and weighing can be undertaken at weaning) it is best to observe animals from a distance.